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California Public Utilities Commission

Home Broadband Adoption Report

4/16/2025

Executive Summary

The number of Californians that cannot afford quality home broadband service for themselves and for their families is substantial and growing. "Home broadband" is distinct from internet service provided by cellphone networks in its ability to provide a high quantity of data (i.e., 100s of gigabytes) and support multiple devices in a home through a Wi-Fi connection. Individual families depend on these services to participate in education, work, health care, public safety, and civic engagement. Because many households cannot afford broadband service, California has a gap in broadband adoption. This report details the extent of the home broadband adoption gap, surveys the initiatives past and present to meaningfully bridge this gap, and highlights where these programs have fallen short.

Part 1: User Needs

American households have a voracious appetite for data, consuming between 400 gigabytes to 700 gigabytes on average each month.[1] Each Californian household has 2.8 people on average, and 5 connected devices (e.g., smartphones, laptops, tablets, etc.).[2] While cellphone connections are a vital communications service, a fixed broadband connection with a Wi-Fi gateway – or "home broadband" service – is necessary to meet average broadband usage needs.

Part 2: The Broadband Adoption Gap

Despite the importance of the internet in everyday life, a substantial number of households in California do not have subscriptions to high-speed and high-capacity internet services.

The cost of internet service is prohibitive for many. Recent studies have found the average cell phone bill per household is around $141 per month, and the average cost of home internet service is about $65 per month.[3]

Low-income households are disproportionately disconnected. In California, nearly 1 in 5 households – 19 percent – with income less than $20,000 do not subscribe to internet

[1] OpenVault. "Broadband Insights Report (OVBI) 4Q23." Available at: https://openvault.com/wp-content/uploads/2024/02/OVBI_4Q23_Report_v3.pdf. See also, Xfinity. "What is the median usage of people on your network today?" Available at: https://www.xfinity.com/support/articles/data-usage-average-network-usage.

[2] Pew Research Center. "A third of Americans live in a household with three or more smartphones." Available at:https://www.pewresearch.org/short-reads/2017/05/25/a-third-of-americans-live-in-a-household-with-three-or-more-smartphones/. See also, Statista. "Average number of connected devices residents have access to in U.S. households in 2020, by device," Available at: https://www.statista.com/statistics/1107206/average-number-of-connected-devices-us-house/

[3] J.D. Power. "Wireless Purchases Through Apps Increase, Leading to Increase of Value and Affordability Perceptions, J.D. Power Finds." Available at: https://www.jdpower.com/business/press-releases/2024-us-wireless-retail-experience-study-volume-1; Forbes. "How Much Does Internet Cost Per Month?" Available at: https://www.forbes.com/home-improvement/internet/internet-cost-per-month/.

service, whereas only 2.4 percent of households with incomes more than $75,000 do not subscribe to internet service.[4]

Part 3: Overview of the State and Federal LifeLine Programs

The California LifeLine and federal Lifeline programs are well-established. They have broad eligibility and effective administration. The programs have established rules for mitigating waste fraud and abuse, and for reimbursing participating providers. Each of these programs has made efforts to make communications services available and accessible to people with low incomes. As customers' needs evolve, the programs must also evolve to support affordable broadband service. Ultimately, the success of these programs hinges on internet service provider participation, which continues to be lacking in these programs, especially in the offering of fixed broadband service. Where service provider participation is robust, it has either been compelled – as with the traditional wireline voice segment of the California LifeLine program – or incentivized, as with the federal Affordable Connectivity Program (ACP).

Part 4: Review of Alternative Affordability Strategies

The federal ACP launched in December 2021, and by February 2024, over 23 million households relied on the program to access affordable internet service.[5] By June 2024, the program ended due to a lack of additional funding by Congress. Californians participated significantly in the program, with 2,945,282 enrolled at its peak – approximately 49 percent of the households eligible for the program.[6]

The end of the ACP has left a significant gap in the ability of low-income households to afford internet service. The data shows a steep reduction in subscribership when ACP ended. Just four months after the last fully funded month of ACP support, internet service providers reported a 25 percent drop in low-income household subscribership in California. As of December 31, 2023, these providers reported 1,319,448 subscribers participating in the ACP, and by August 31, 2024, four months after the end of ACP, this figure dropped to 992,035 subscribers remaining.[7] This trend has continued, as evidenced by reports that California's largest internet service providers (ISPs) continue to experience drops in subscribership, in part, due to the end of the ACP.[8]

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[4] U.S. Census Bureau, U.S. Department of Commerce. "Types of Computers and Internet Subscriptions." *American Community Survey, ACS 1-Year Estimates Subject Tables, Table S2801*, 2023, https://data.census.gov/table/ACSST1Y2023.S2801?q=broadband&g=040XX00US06.

[5] USAC. "Additional ACP Data." Available at: https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/additional-acp-data/.

[6] USAC. "Enrollment by State." Available at: https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state.

[7] CPUC data request to internet service providers participating in the ACP, issued November 1, 2024.

[8] "Comcast Reports 2nd Quarter 2024 Results," available at: https://www.cmcsa.com/static-files/68abe434-80f7-437e-8e7a-fa457e43e63b; "Comcast Reports 3rd Quarter 2024 Results," available at:

Without the ACP, consumers increased their reliance on income-qualified low-cost internet service plans offered by ISPs. These plans typically cost $10-$30 per month. The plans offer a lower service tier than what providers make available to the general public, typically in the 50 to 100 Mbps download range. ISPs reported 980,587 subscriptions to these plans in California as of September 2024, up 15 percent from 9 months prior. Using the LifeLine program's estimated eligible population of 4,325,849 for reference, this is about a 22.7 percent participation rate.[9] Yet only 8.6 percent of subscriptions were to plans that met or exceeded the federal definition of "broadband" set by the Federal Communications Commission (FCC). The FCC's benchmark for high-speed fixed broadband is download speeds of 100 megabits per second and upload speeds of 20 megabits per second.

Part 5: The Future of Home Broadband Affordability

This report lays a foundation for stakeholders to provide their positions on these issues. Ultimately, piloting reforms to the California LifeLine Program that support home broadband service will inform policy strategies and solutions for meeting the state's Broadband For All objectives.

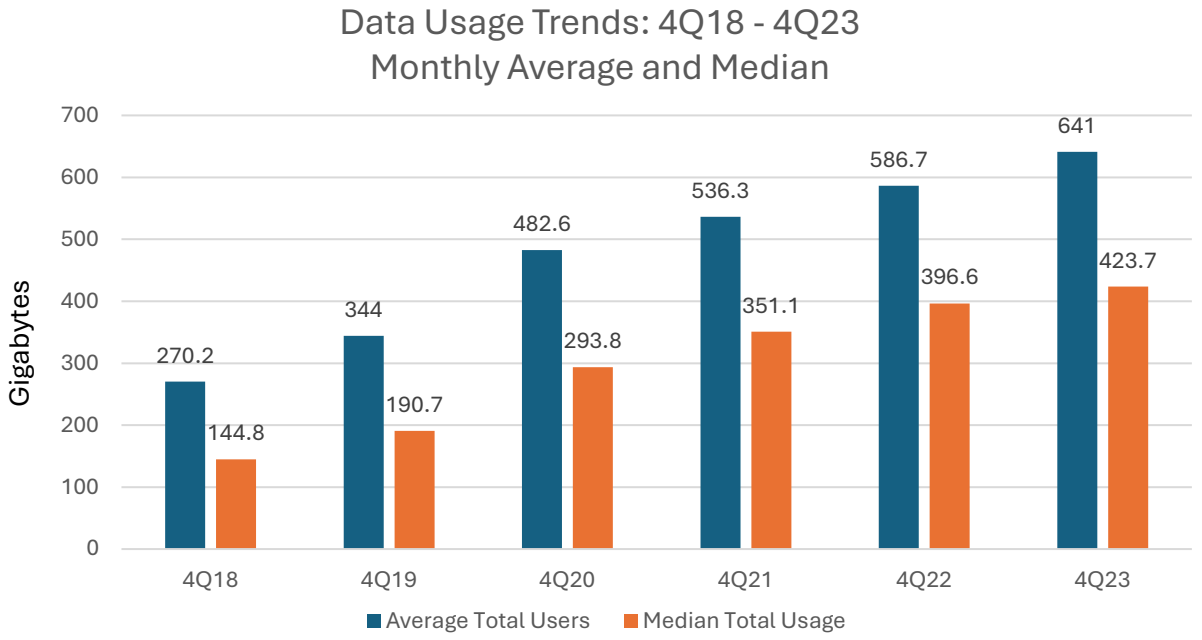
https://www.cmcsa.com/static-files/3fac14b3-42f9-44ac-ac77-d9b5fdada211; 'Comcast Reports 3rd Quarter 2024 Results," available at: https://www.cmcsa.com/static-files/3fac14b3-42f9-44ac-ac77-d9b5fdada211. See also, Charter Communications. "Charter Announces Second Quarter 2024 Results," available at: https://corporate.charter.com/newsroom/charter-announces-second-quarter-2024-results; "Charter Announces Third Quarter 2024 Results," available at: https://corporate.charter.com/newsroom/charter-communications-announces-third-quarter-2024-results; and "Charter Announces Fourth Quarter and Full Year 2024 Results," available at: https://corporate.charter.com/newsroom/charter-announces-fourth-quarter-and-full-year-2024-results.

[9] There are 4,325,849 households eligible for the California LifeLine program based on the 2023 U.S. Census Bureau American Community Survey. See also, https://www.usac.org/lifeline/resources/program-data/#Participation

Part 1: User Needs

Household Needs:

Assessing the communications needs of households in California requires understanding what the average California household requires to be fully and meaningfully connected. There are 2.8 people per household on average in California.[10] Each household has numerous connected devices and connections, with the median household having two smartphones, a computer, a tablet, and other connected devices.[11] These devices require subscriptions to telephone and internet services to function, specifically, two cellphone subscriptions and a broadband connection providing in-home Wi-Fi access. The most recent U.S. Census Bureau American Community Survey results indicate that 97.2 percent of California households have one or more types of computing devices.[12]



Source: OpenVault Broadband Insights Report 4Q23

[10] U.S. Census Bureau. "Selected Housing Characteristics." *American Community Survey, ACS 1-Year Estimates Data Profiles, Table DP04*, 2022, https://data.census.gov/table/ACSDP1Y2022.DP04?q=household size&g=040XX00US06.

[11] Pew Research Center. "A third of Americans live in a household with three or more smartphones." Available at:https://www.pewresearch.org/short-reads/2017/05/25/a-third-of-americans-live-in-a-household-with-three-or-more-smartphones/. See also, Statista. "Average number of connected devices residents have access to in U.S. households in 2020, by device," Available at: https://www.statista.com/statistics/1107206/average-number-of-connected-devices-us-house/

[12] U.S. Census Bureau, U.S. Department of Commerce. "Types of Computers and Internet Subscriptions." *American Community Survey, ACS 1-Year Estimates Subject Tables, Table S2801*, 2023, https://data.census.gov/table/ACSST1Y2023.S2801?q=broadband&g=040XX00US06,10.

The average American household currently consumes between 400 gigabytes to 700 gigabytes on average each month, and average data consumption is increasing steadily year after year.[13] This amount of data is necessary to support the website browsing, telework, telelearning, telehealth, social media, and streaming activities that Californians perform on a daily basis. For example, the popular videocall platform Zoom requires between 270 Megabytes (MB) to as much as 1.8 gigabytes (GB) per hour.[14] This amount of data adds up quickly; at these rates, 10.8 GB to 72 GB would be used over a 40-hour work week, and 43.2 GB to 288 GB would be used over a typical 160-hour work month per individual user.

Home Broadband vs. Mobile Broadband

There is a significant difference between the amount of data provided by cellphone subscriptions and home broadband subscriptions. Both services are vital to modern life but serve different purposes. Home broadband services (e.g., DSL, cable, and fiber-optic networks) provide abundant data and bandwidth, and through a Wi-Fi router, enable numerous users and devices to connect to the internet. Mobile broadband connections enable a single user to access messaging, streaming, social media, GPS navigation, video calls, and more. However, the amount of bandwidth and data provided is typically limited.[15] In fact, according to the FCC's 2024 Communications Marketplace Report, the monthly data usage per smartphone subscriber rose to an average of 15.5 GB per subscriber per month in 2023.[16] In addition, according to the major networking and telecommunications company Ericsson, the average North American cellphone data usage is 19 GB per month, as of 2023.[17] Even with data usage forecasted for 2025 at 30 GB (see Figure 7), it is clear that the average household is relying on home broadband networks to meet their substantial data needs.

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[13] OpenVault. "Broadband Insights Report (OVBI) 4Q23." Available at: https://openvault.com/wp-content/uploads/2024/02/OVBI_4Q23_Report_v3.pdf. See also, Xfinity. "What is the median usage of people on your network today?" Available at: https://www.xfinity.com/support/articles/data-usage-average-network-usage.

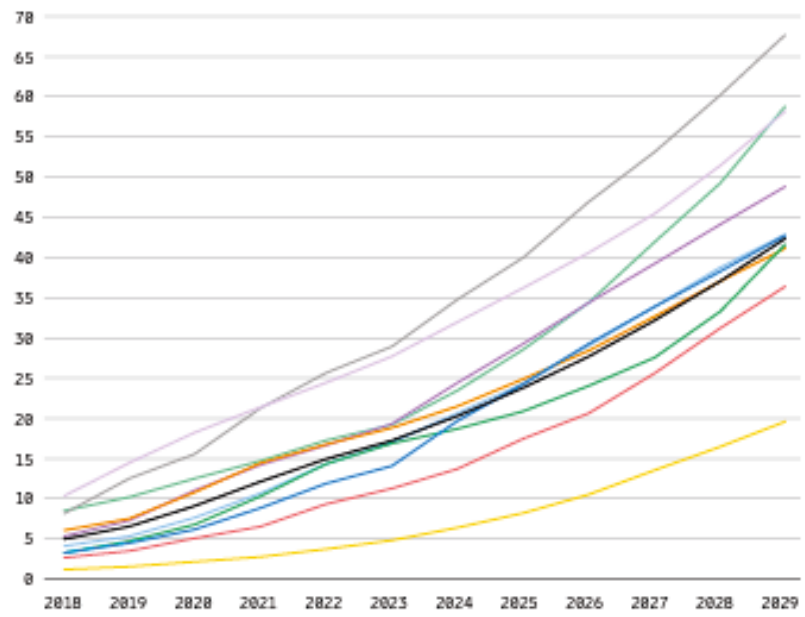
[14] Zoom. " Zoom system requirements: Windows, macOS, Linux." Available at: https://support.zoom.com/hc/en/article?id=zm_kb&sysparm_article=KB0060748#h_d278c327-e03d-4896-b19a-96a8f3c0c69c ; 600kpbs for 1:1 video calling x 3,600 seconds in an hour = 270 Megabytes (MB) per hour. 4 Mbps for highest quality group video calling x 3,600 seconds in an hour = 1.8 gigabytes (GB) per hour.

[15] Note, this is not necessarily the case with fixed wireless service offered by mobile providers (e.g., 5G fixed wireless services).

[16] FCC. "FCC Releases 2024 Communications Marketplace Report;" page 55. Available at: https://www.fcc.gov/document/fcc-releases-2024-communications-marketplace-report.

[17] Ericsson. Ericsson Mobility Report, June 2024, page 12. Available at: https://www.ericsson.com/49ed78/assets/local/reports-papers/mobility-report/documents/2024/ericsson-mobility-report-june-2024.pdf.

Mobile Data Traffic per Active Smartphone (GB per month)



Regions	2023	2029	CAGR 2023–2029
India, Nepal, Bhutan	29	68	15%
North America	19	59	21%
GCC	28	58	13%
Western Europe	19	49	17%
Middle East and North Africa[1]	14	43	20%
Central and Eastern Europe	17	43	17%
South East Asia and Oceania	17	42	16%
Global average	17	42	16%
North East Asia	19	41	14%
Latin America	11	36	22%
Sub-Saharan Africa	5	28	26%

Source: Ericsson Mobility Report, June 2024

Part 2: The Broadband Adoption Gap

Adoption Gap

Despite the importance of the internet in everyday life, a substantial number of households in California do not have high-speed and high-capacity broadband subscriptions. There are many reasons that can be grouped into the following categories:

- **Households without Access to Broadband Infrastructure:** Approximately 4.5 percent of households in California do not have infrastructure (e.g., wired or wireless connections to their homes) that provides access to the internet at broadband speeds, as defined by the FCC.[18] In addition, many Californians may rely on outdated or low-quality infrastructure that does not meet needs, such as

[18] FCC. National Broadband Map, California, All Terrestrial Technologies ≥ 100/20. Available at: https://broadbandmap.fcc.gov/area-summary/fixed?version=dec2023&geoid=06&type=state&zoom=5.67&vlon=-119.306607&vlat=37.418961&br=r&speed=100_20&tech=1_2_3_6_7

the 0.1 percent that rely on Dial-up connections and 8.2 percent that rely on satellite internet service as reported by the U.S. Census Bureau.[19]

- **Households without Broadband Subscriptions:** The U.S. Census Bureau also estimates that 5.7 percent of households do not have an internet subscription of any kind, regardless of speed, capacity, or technology.[20] These households may lack the digital literacy necessary to meaningfully utilize the internet, or may be unable to afford an internet subscription.
- **Households without Adequate Broadband Services:** Many more households are not subscribing to broadband that meets the needs of average households: 11.2 percent of households only have subscribe to cellular data plans with no other type of internet subscription. Cellular data plans do not provide enough speed or capacity to meet the needs of entire households, as described above. Further, not all internet plans are meeting subscriber needs, or are even fast enough to be considered "broadband," as defined by the FCC.[21]

Broadband Prices are High

The average household has two cellphone subscriptions and a home internet subscription. While costs vary significantly by provider and service tier, the average household pays hundreds of dollars a month – thousands per year – to stay connected. According to JD Power, the average cell phone bill per household is around $141 per month.[22] A recent Forbes survey found an average cost of about $65 per month for a home internet connection, with plans ranging from $25 to as much as $300 a month.[23]

A recent CNET survey of 150 broadband plans from 27 communications service providers found that the median price for internet in the US is $78 per month for all service tiers, when including the cost of renting equipment.[24] Broadband service pricing is also highly variable. It is common for ISPs to offer "promotional rates" for six months to two years, after which, the price increases as much as 50 percent to 100 percent more.

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[19] U.S. Census Bureau, U.S. Department of Commerce. "Types of Computers and Internet Subscriptions." *American Community Survey, ACS 1-Year Estimates Subject Tables, Table S2801*, 2023, https://data.census.gov/table/ACSST1Y2023.S2801?q=broadband&g=040XX00US06.

[20] U.S. Census Bureau, U.S. Department of Commerce. "Types of Computers and Internet Subscriptions." *American Community Survey, ACS 1-Year Estimates Subject Tables, Table S2801*, 2023, https://data.census.gov/table/ACSST1Y2023.S2801?q=broadband&g=040XX00US06.

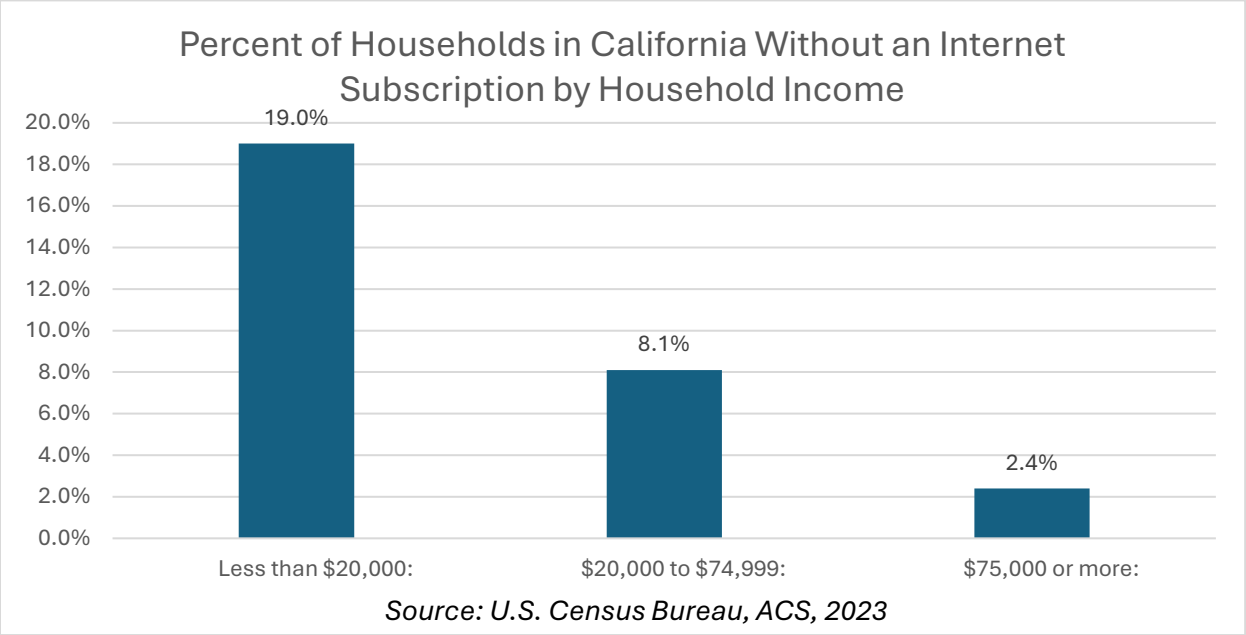
[21] FCC. "FCC Increases Broadband Speed Benchmark." Available at: https://docs.fcc.gov/public/attachments/DOC-401205A1.pdf.

[22] J.D. Power. "Wireless Purchases Through Apps Increase, Leading to Increase of Value and Affordability Perceptions, J.D. Power Finds." Available at: https://www.jdpower.com/business/press-releases/2024-us-wireless-retail-experience-study-volume-1.

[23] Forbes. "How Much Does Internet Cost Per Month?" Available at: https://www.forbes.com/home-improvement/internet/internet-cost-per-month/.

[24] CNET. "The Average Internet Bill in the US Is $63 a Month. Here's How You Can Lower It." Available at: https://www.cnet.com/home/internet/average-internet-bill-in-the-us-is-63-monthly-heres-how-you-can-lower-it/

The cost of internet service is prohibitive for many. The Pew Research Center indicates that 21 percent of U.S. households with income below $30,000 do not have a smartphone/mobile subscription (compared to 10% of all adults) and 43 percent of U.S. households with income below $30,000 do not subscribe to home broadband (compared to 20% of all adults).[25] In California, the U.S. Census Bureau estimates that nearly 1 in 5 households – 19 percent – with income less than $20,000 do not subscribe to internet service, whereas only 2.4 percent of households with incomes more than $75,000 do not subscribe to internet service.[26]



Source: U.S. Census Bureau, ACS, 2023

As noted above, these figures do not consider whether the service being subscribed to is sufficient. Low-income households may be subscribing to home internet services that are not capable of meeting the data needs of their families.

What Speed is Sufficient?

Not all internet plans are meeting subscriber needs or are even fast enough to be considered "broadband," as defined by the FCC.[27] The most recent California Advanced Services Fund (CASF) Annual Report estimates that 29 percent of housing units and businesses are not subscribing to broadband plans offering at least 25/3 Mbps.[28] In contrast to the U.S. Census

[25] Pew Research Center. "Americans' Use of Mobile Technology and Home Broadband." Available at: https://www.pewresearch.org/wp-content/uploads/sites/20/2024/01/PI_2024.01.31_Home-Broadband-Mobile-Use_FINAL.pdf.

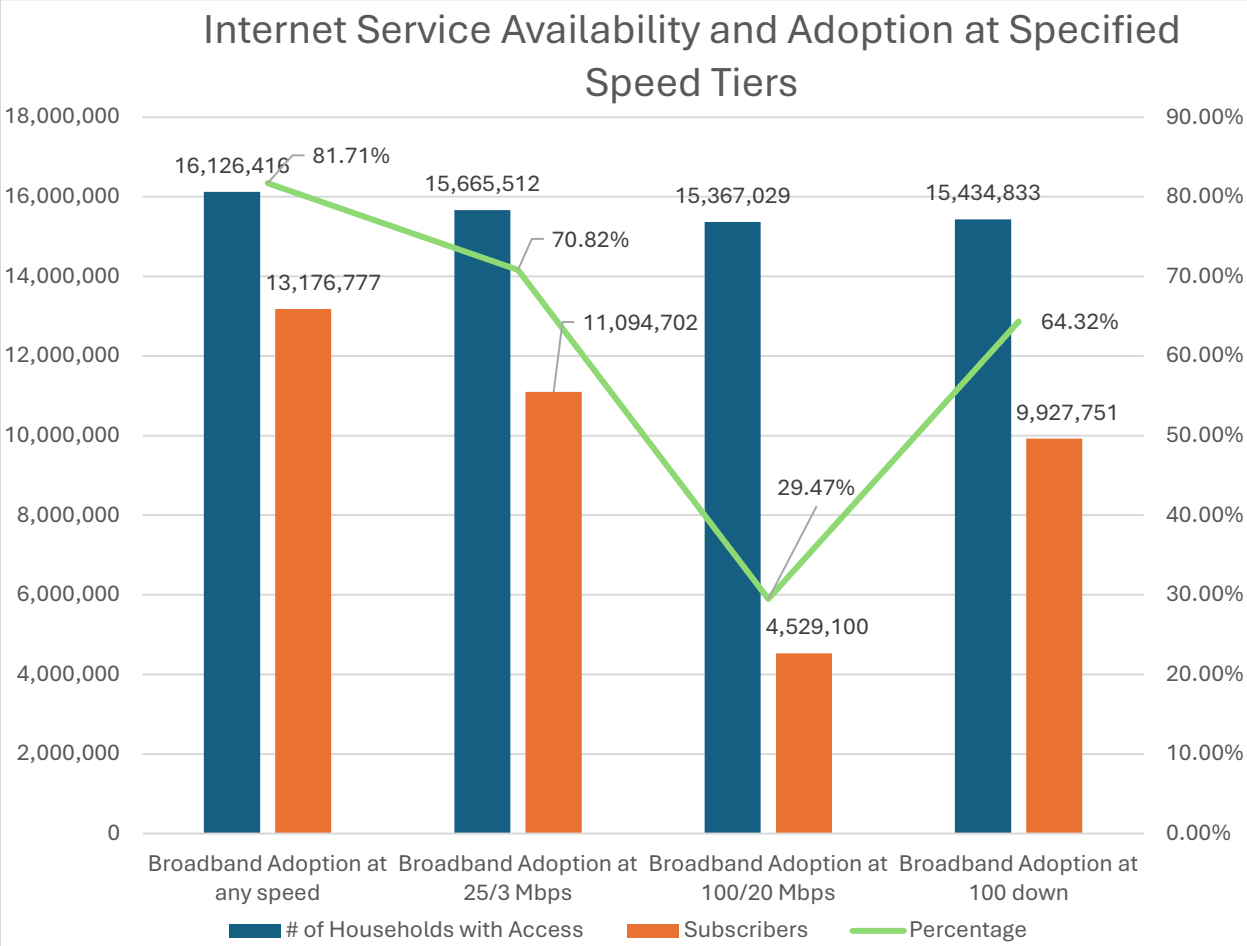
[26] U.S. Census Bureau, U.S. Department of Commerce. "Types of Computers and Internet Subscriptions." *American Community Survey, ACS 1-Year Estimates Subject Tables, Table S2801*, 2023, https://data.census.gov/table/ACSST1Y2023.S2801?q=broadband&g=040XX00US06.

[27] FCC. "FCC Increases Broadband Speed Benchmark." Available at: https://docs.fcc.gov/public/attachments/DOC-401205A1.pdf.

[28] CPUC. "2023 Annual Report: California Advanced Services Fund." Available at: https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/reports/casf-2023-annual-report-43024.pdf.

Bureau data, which relies on statistical surveys to estimate the adoption rate, the CASF program compiles data on actual subscriptions submitted by ISPs. This adoption rate percentage is the number of fixed broadband subscriptions divided by the total number of locations offered broadband Internet service.

Determining whether households are subscribing to broadband services at speeds that are "sufficient" has evolved. The FCC sets the speed benchmark for what is considered to be internet service at "broadband" speeds – speeds sufficient to meaningfully utilize the internet. In March 2024, the FCC raised its benchmark for high-speed fixed broadband to download speeds of 100 Mbps and upload speeds of 20 Mbps. This was a substantial increase from the 25 Mbps download and 3 Mbps upload benchmark set by the FCC in 2015.[29]



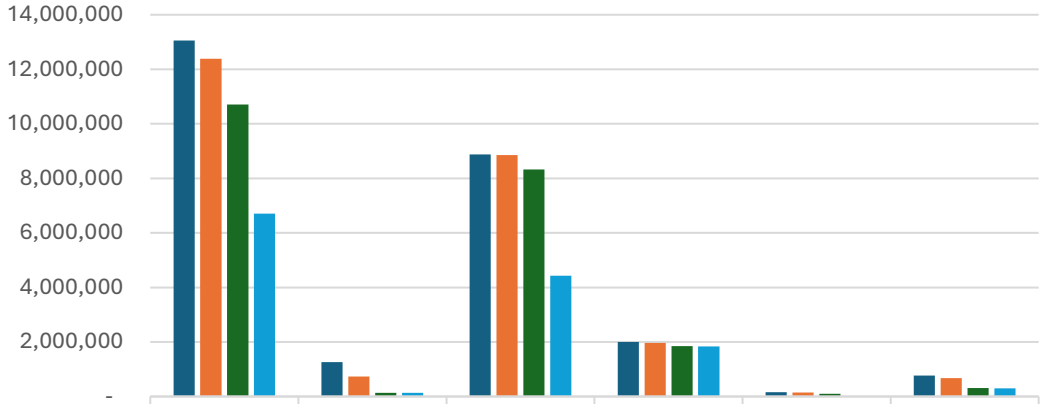
Source: CPUC Annual Broadband Data Request

Looking at the internet services that Californians subscribe to is also instructive. The CPUC collects subscription data from ISPs in California as part of its annual broadband data

[29] FCC. "2024 Section 706 Report." Available at: https://docs.fcc.gov/public/attachments/FCC-24-27A1.pdf.

collection.[30] This data indicates that 29 percent of households and businesses in the state are not subscribing to broadband plans offering at least 25/3 Mbps, and 70 percent are not subscribing to broadband plans offering speeds that meet or exceed the new FCC benchmark of 100/20 Mbps. When looking at the download speed of 100 Mbps alone, without considering upload speed, the subscribership rate jumps back up to 64 percent. This illustrates that there is an issue with the ability of internet service providers to meet the 20 Mbps upload standard.

Breaking subscriber data out by technology type reveals the reason there is such a large drop off in subscribership at the 100/20 Mbps broadband standard. The FCC's Fixed Broadband Deployment Data, shows that 1) the vast majority of Californians rely on cable networks for their internet connections, and 2) cable network customers are subscribed to plans with limited upload speeds. This is representative of the plans that cable ISPs offer, and the current limitations of cable networks to provide symmetrical download and upload speeds.



	All Technologies	DSL	Cable	Fiber	Satellite	Fixed Wireless
Total Subscriptions	13,060,600	1,262,350	8,874,627	1,997,719	161,091	764,813
≥ 25/3 Mbps	12,382,752	735,274	8,859,484	1,965,989	147,752	674,253
≥ 100 Mbps	10,705,175	135,767	8,322,282	1,843,493	97,433	306,200
≥ 100/20 Mbps	6,709,549	134,893	4,432,295	1,838,642	50	303,669

Source: FCC Form 477 Data

Internet infrastructure technology continues to evolve. Deployment of newer generations of cable technology will increase the ability of cable networks to provide higher upload

[30] CPUC. "CPUC Annual Collected Broadband Data." Available at: https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-mapping-program/cpuc-annual-collected-broadband-data.

speeds and exceed the FCC's new definition of what constitutes "broadband."[31] Additionally, new fixed wireless and satellite technologies are increasing the ability of these networks to provide broadband speeds.[32] While fiber-optic technology can readily provide gigabit symmetrical service, its availability is relatively limited, though deployment of these networks is rapidly increasing.[33]

These datasets are instructive in understanding what broadband speeds Californians are actually utilizing, as well as monitoring how these needs – and the ability of networks to provide them – will evolve over time. The data illustrates there are additional barriers to broadband adoption due to limitations in the ability of older technologies to provide service that meets the FCC's new definition of broadband. Indeed, nearly half of Californians are subscribing to services that are not considered "broadband," even if the infrastructure is capable of providing service that exceeds the 100/20 Mbps standard. This is also likely to change rapidly over the next few years, requiring continuous reassessment of what speeds Californians need.

Part 3: Overview of the State and Federal LifeLine Programs

For nearly 40 years, two programs have kept low-income households connected: the California LifeLine and federal Lifeline programs. As the communications industry has evolved, these programs have endured and adapted.

Federal Lifeline Overview

Since 1985, the federal Lifeline program provides a discount on wireline voice, wireless voice and data, and home broadband service for qualifying low-income consumers. The Lifeline program is available to eligible low-income consumers in every state, territory, commonwealth, and on Tribal lands. The program is overseen by the FCC and is administered by the Universal Service Administrative Company (USAC). USAC is responsible for data collection and maintenance, support calculation, and disbursements to service providers.

California LifeLine Overview

The California Public Utilities Commission (CPUC or Commission) administers the California LifeLine Program (California LifeLine or Program), which provides discounts on wireline voice, wireless voice and data, and bundled voice and home broadband service for qualifying low-income consumers. The CPUC administers the program in accordance with the

[31] Cablelabs. "DOCSIS® 4.0 Technology." Available at: https://www.cablelabs.com/technologies/docsis-4-0-technology.
[32] WISPA. "BITAG Report: Overview of Broadband Technologies." Available at: https://www.wispa.org/blog/bitag-report-overview-of-broadband-technologies/.
[33] Fiber Broadband Association. "Fiber Broadband Association Reports Record Fiber-To-The-Home Deployment in 2024." Available at: https://fiberbroadband.org/2025/01/23/fiber-broadband-association-reports-record-fiber-to-the-home-deployment-in-2024/.

Moore Universal Telephone Service Act (Moore Act)[34] and FCC Lifeline program regulations.[35]

In 1983, the Legislature enacted what would later become known as the Moore Act to provide low-income households with affordable basic residential telephone service. The Commission created and implemented the California LifeLine Program in 1984 with Decision (D.) 84-04-053.

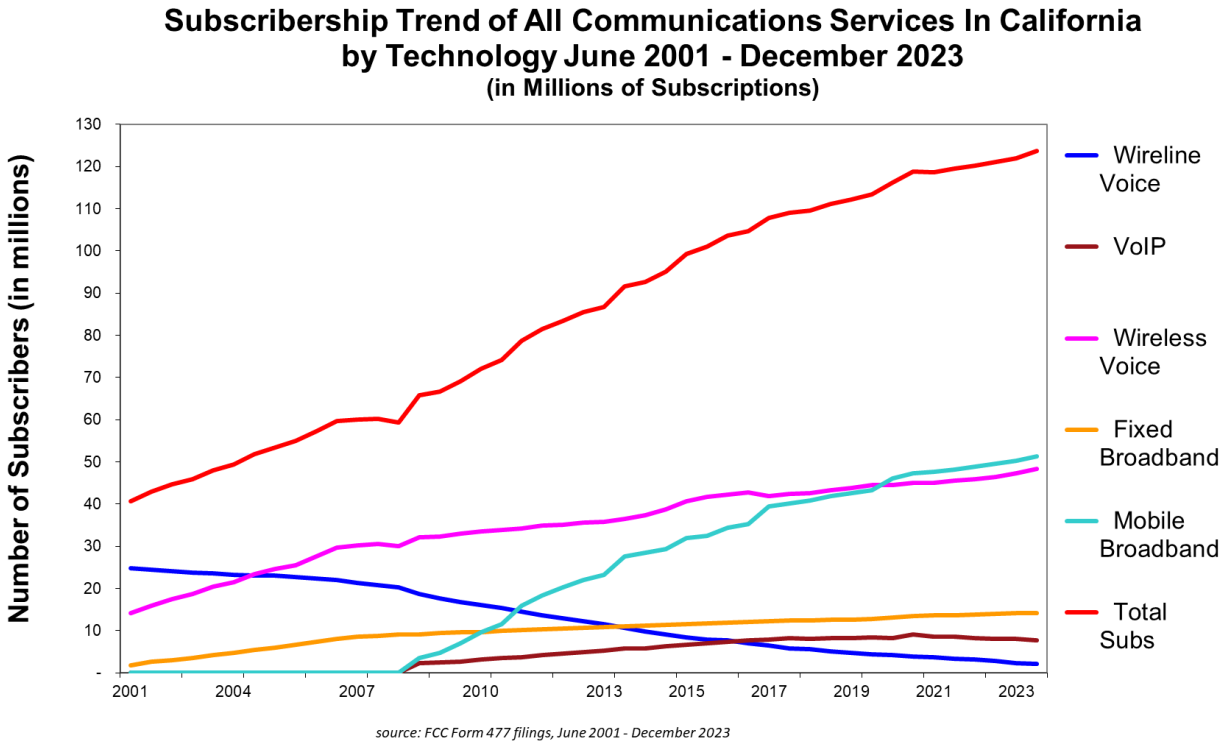
Funding Mechanisms

The federal Lifeline program is funded through the federal Universal Service Fund (USF). Telecommunications providers pay into this fund through assessments on their interstate and international end-user revenues. This assessment is referred to as the "contribution factor." Due to changes in how telecommunications companies report revenue, the FCC has had to continually increase the contribution factor to maintain a relatively constant funding stream. For the fourth quarter of 2024, the FCC set the contribution factor at 35.8 percent, which is more than double what it was 10 years prior.[36] How to address this issue has long been a topic of debate in FCC proceedings, with proposals to make assessments on broadband services, "edge providers" (e.g., streaming video providers, digital advertising firms, and cloud services), or through the federal budget.[37] In addition to the growing contribution rate to sustain the universal service programs, in July 2024, the United States Fifth Circuit Court of Appeals ruled that the FCC's method of establishing the funding mechanism for the USF is unconstitutional.[38] The Fifth Circuit decision conflicted with prior decisions by the Sixth and Eleventh Circuits. In September 2024, the FCC filed a petition for writ of certiorari with the U.S. Supreme Court, seeking review of the Fifth Circuit decision.[39] In November 2024, the U.S. Supreme Court granted the FCC's petition and heard oral arguments on March 26, 2025.[40]

The California LifeLine program is funded by a flat rate surcharge of $0.60 on each of the approximately 55 million telephone lines in California.[41] This surcharge applies to all telephone corporations including wireline, wireless (prepaid and postpaid), and Voice Over Internet Protocol (VoIP). The CPUC transitioned from a revenue-based surcharge to a flat

[34] Pub. Util. Code §§ 871 - 879.
[35] 47 C.F.R. §§ 54.400 - 54.424.
[36] FCC. "Contribution Factor & Quarterly Filings - Universal Service Fund (USF) Management Support." Available at: https://www.fcc.gov/general/contribution-factor-quarterly-filings-universal-service-fund-usf-management-support. The contribution factor for the fourth quarter of 2014 was set at 16.1%.
[37] FCC. "In the Matter of Report on the Future of the Universal Service Fund." Available at: https://docs.fcc.gov/public/attachments/FCC-22-67A1.pdf
[38] Consumers' Research. v. FCC, 109 F.4th 743, *743 (5th Cir. 2024).
[39] FCC v Consumers' Research, et al. Available at https://www.supremecourt.gov/search.aspx?filename=/docket/docketfiles/html/public/24-354.html.
[40] *Id.*
[41] CPUC. "Surcharge Rates." Available at: https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/telecommunications-surcharges-and-user-fees/surcharge-rates

access-line-based surcharge mechanism to address the issues with declining revenues.[42] Funding has since stabilized. As evidence of this, Draft Resolution T-17818 proposes to reduce the $1.11 surcharge to $0.90 effective May 1, 2025.[43]



Budget

The 2023 California State Budget Act adopted a total appropriation of $419,618,000 for the California LifeLine Program. The 2024-25 California LifeLine Program budget is estimated to total $345,961,000. The $0.60 surcharge on 55 million access lines is projected to collect $396,000,000 in revenue over a year.

The FCC announced that the budget for federal universal service support for the Lifeline program for calendar year 2025 will be $2,892,617,627 nationwide.[44]

Participation Rate

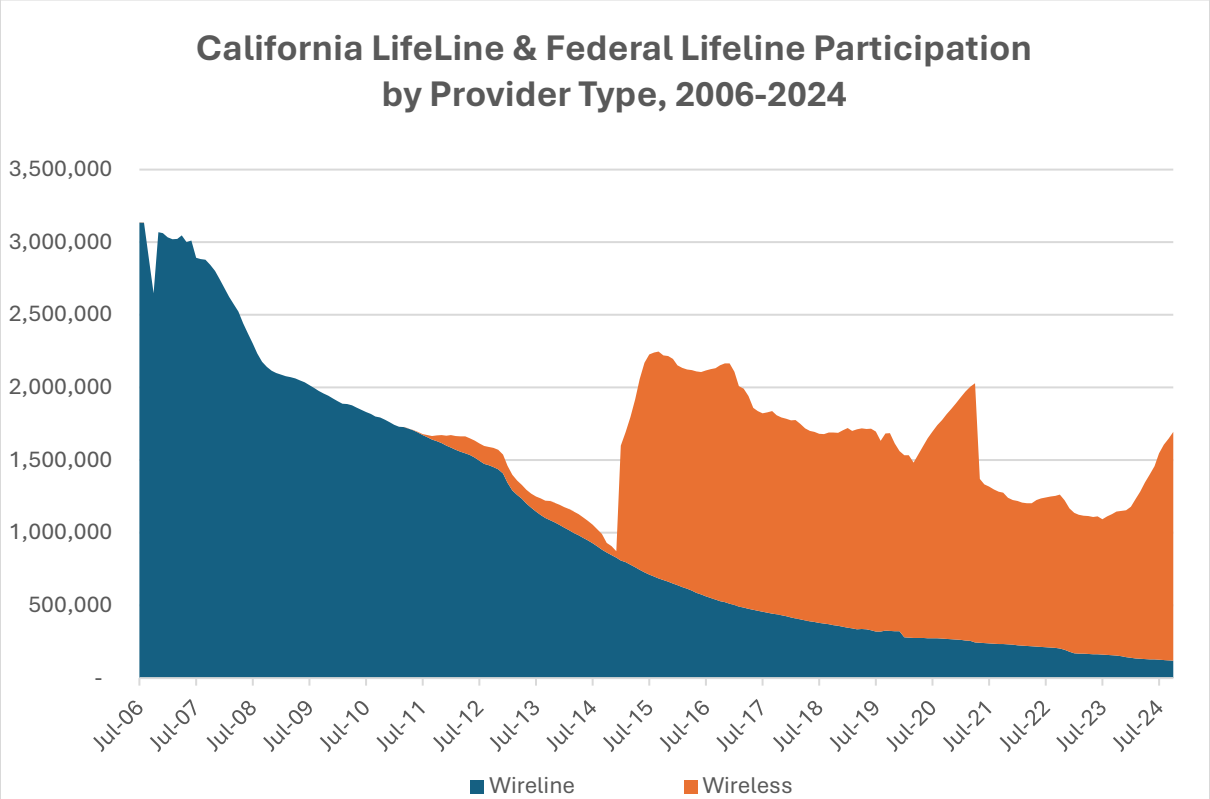
Program participation has varied over the years. Approximately 1.7 million households

[42] CPUC. Decision 22-20-021. "Decision Updating The Mechanism For Surcharges To Support Public Purpose Programs." Available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M497/K868/497868303.PDF

[43] CPUC. Resolution T-17818. Adopts Universal Service Public Purpose Programs Surcharge Rate of $0.90 per Access Line, effective May 1, 2025. Available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M556/K600/556600429.PDF.

[44] FCC. "Wireline Competition Bureau Announces Updated Lifeline Minimum Service Standards And Indexed Budget Amount." Available at: https://docs.fcc.gov/public/attachments/DA-24-740A1.pdf.

participated in California LifeLine as of December 2024.[45] Historically, participation in the state peaked in 2006 with 3.1 million subscribers and was at an all-time low of 1.1 million subscribers in 2014.



Source: Third-Party Administrator Subscriber Counts

As of September 2024, the FCC estimates that only 22 percent of those eligible for the federal Lifeline program participate nationwide. California's participation rate is above average, and the second highest in the nation at 36 percent, behind only Puerto Rico's 58 percent participation rate.[46]

Eligible Services and Minimum Services Standards

From 1984 to 2013, California LifeLine discounted only home (wireline) phone service. In January 2014, the CPUC issued D.14-01-036 to expand and modernize the California LifeLine program and authorized the voluntary participation of wireless service providers in the program. The introduction of wireless service in 2014 has increased service providers and participants in the Program. In October 2020, the CPUC issued D.20-10-006 to establish specific support amounts and minimum service standards for California LifeLine. The CPUC in D.20-10-006 also allows carriers to receive subsidies for providing Voice over Internet Protocol (VoIP) and broadband packages if they meet the standards of E-911, the system

[45] CPUC. "Third Party Administrator LifeLine Subscriber Counts." Available at: https://www.cpuc.ca.gov/consumer-support/financial-assistance-savings-and-discounts/lifeline/lifeline-related-forms-and-notices-for-service-providers.

[46] USAC. "Program Data." Available at: https://www.usac.org/lifeline/resources/program-data/.

used in North America to provide a caller's location to 911 dispatchers automatically.

California LifeLine Eligible Services			
Service	**Traditional Wireline Voice**	**Wireless Voice & Wireless Broadband**	**Wireline Voice & Broadband Bundle**
Year Added	1984	2014	2020
Decision	D. 84-04-053	D. 14-01-036	D. 20-10-006
Minimum Service Requirement	Unlimited local calls	Unlimited Voice and Texting, and 6 GB of data	Unlimited local calls and 25/3 Mbps internet service with 1230 GB of data
Number of Subscribers as of October 2024[47]	106,710	1,574,913	13,383[48]

In 2016, the FCC revised the federal Lifeline program to enable Lifeline providers to deliver modern broadband services, phase out support for voice-only services,[49] and support standalone fixed and mobile broadband services, with continued support for bundled voice and broadband services. The FCC also established minimum service standards for broadband and mobile voice services to ensure consumer needs are met. The FCC provided an exception for fixed broadband providers with networks that are not capable of providing service at minimum standards. The FCC also established annual increases in the minimum service standards for broadband service, and gradually decreased voice support levels. The FCC continues to support voice-only services despite an initial phase out scheduled for December 2021.[50]

[47] CPUC. "Third Party Administrator LifeLine Subscriber Counts." Available at: https://www.cpuc.ca.gov/consumer-support/financial-assistance-savings-and-discounts/lifeline/lifeline-related-forms-and-notices-for-service-providers

[48] CPUC. California LifeLine Program Third-Party Administrator Active End of Month Report.

[49] FCC. "FCC Modernizes Lifeline Program for Low-Income Consumers." Available at: https://www.fcc.gov/document/fcc-modernizes-lifeline-program-low-income-consumers.

[50] FCC. "Wireline Competition Bureau Announces Updated Lifeline Minimum Service Standards and Indexed Budget Amount." Available at: https://docs.fcc.gov/public/attachments/DA-24-740A1.pdf.

Federal Lifeline Eligible Services				
Service	**Traditional Wireline Voice**	**Wireless Voice & Wireless Broadband**	**Wireline Voice & Broadband Bundle**	**Fixed Broadband**
Year Added	1985	2016	2012	2016
Decision	FCC 84-637	FCC-16-38	FCC-12-11	FCC-16-38
Minimum Service Requirement[51]	None	1000 Minutes; Speed: 3G or better; Usage Allowance: 4.5 GB	Speed: 25/3 Mbps Usage Allowance: 1230 GB	Speed: 25/3 Mbps Usage Allowance: 1230 GB
Number of Subscribers as of 11/1/24	20,014	1,495,151	7,531	1,410

It is worth noting that the bundling rules of the Lifeline programs were developed with traditional service bundles in mind, such as the combination of wireline voice service with internet service. With consumers adopting cellphones , wireline companies are adopting a new type of bundled service: pairing resold cellphone service with their internet service offerings. In fact, 4 out of the 5 major ISPs in California offer a cellphone + internet bundle: Comcast's "Xfinity Mobile," Charter's "Spectrum Mobile," Cox's "Cox Mobile," and AT&T Wireless. This is a new and quickly growing sector in the communications marketplace.[52]

Eligible Telecommunications Carrier Designation

To participate in the federal Lifeline program, a service provider must be designated as an "eligible telecommunications carrier" or "ETC."[53] State commissions and the FCC share the responsibility for monitoring ETCs. Under federal law, state commissions have the chief responsibility for designating service providers as ETCs. State commissions are authorized

[51] USAC. "Minimum Service Standards." Available at: https://www.usac.org/lifeline/rules-and-requirements/minimum-service-standards/.

[52] Fierce Network. "Comcast, Charter add subs; survey finds consumers very open to MVNOs." Available at: https://www.fierce-network.com/wireless/comcast-charter-add-subs-survey-finds-consumers-very-open-mvnos ; See also, "Comcast, Charter and Altice USA add nearly 700K mobile subs in Q1" Available at: https://www.fierce-network.com/wireless/comcast-charter-and-altice-usa-add-nearly-700k-mobile-subs-q1.

[53] 47 U.S.C. § 214(e)(1) states: "A common carrier designated as an eligible telecommunications carrier . . . shall be eligible to receive universal service support in accordance with section 254. . ." 47 U.S.C. § 153(51) defines the term "telecommunications carrier" as "any provider of telecommunications services, except that such term does not include aggregators of telecommunications services (as defined in section 226 of this title). A telecommunications carrier shall be treated as a common carrier under this chapter only to the extent that it is engaged in providing telecommunications services, except that the Commission shall determine whether the provision of fixed and mobile satellite service shall be treated as common carriage."

to designate service providers as ETCs upon request.[54] The FCC has adopted additional eligibility and reporting requirements for communications service providers seeking ETC designation and carriers already designated as ETCs, as well as guidance for state ETC authorities.[55] States may adopt requirements beyond those suggested by the FCC, as long as they do not rely on or burden the federal support mechanism.[56]

The CPUC is responsible for designating ETCs in California and has established procedures for designating service providers as ETCs.[57] The CPUC has designated numerous ETCs in California, ranging from the state's largest service providers (e.g., AT&T, Cox, Charter, Frontier, etc.), smaller providers (e.g., Anza Electric Cooperative, Cal.Net, the Small LECs, etc.) and wireless resellers and affiliates (e.g., Assurance, Tracfone, TruConnect, etc.).[58] Communications service providers may elect to participate in both the state and federal lifeline programs, or just one of the programs.

Provider Participation

Communications service provider participation in the lifeline programs is limited, creating significant challenges for the programs. Without universal participation by service providers in the lifeline programs, there is limited ability for these programs to support affordability and universal service.

There are 48 companies actively participating in California LifeLine, with 33 providers offering wireline service and 15 providers offering wireless service only.[59] There are 35 providers participating in the federal Lifeline program, with 23 providers offering wireline

[54] 47 U.S.C. § 214(e)(2) states: "A state commission shall upon its own motion or upon request designate a common carrier that meets the requirements of paragraph (1) as an eligible telecommunications carrier for a service area designated by the State commission. . ." 47 U.S.C. Section § 214 (e)(3) further states: "If no common carrier will provide the services that are supported by Federal universal service support mechanisms... to an unserved community... a State commission, with respect to intrastate services, shall determine which common carrier or carriers are best able to provide such service to the requesting unserved community or portion thereof and shall order such carrier or carriers to provide such service for that unserved community or portion thereof. Any carrier or carriers ordered to provide such service... shall be designated as an eligible telecommunications carrier for that community or portion thereof."

[55] FCC. "In the Matter of Federal-State Joint Board on Universal Service." CC Docket No. 96-45 Available at: https://docs.fcc.gov/public/attachments/FCC-05-46A1.pdf.

[56] 47 U.S.C. § 254(f).

[57] CPUC. "Resolution T-17002. Adopting Comprehensive Procedures and Guidelines for Eligible Telecommunications Carrier Designation and Requirements for Eligible Telecommunications Carriers." Available at: https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_RESOLUTION/56844.PDF.

[58] CPUC. "Eligible Telecommunications Carrier (ETC)." Available at: https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/network-performance-and-public-safety/eligible-telecommunications-carrier.

[59] CPUC. "Third Party Administrator LifeLine Subscriber Counts." Available at: https://www.cpuc.ca.gov/consumer-support/financial-assistance-savings-and-discounts/lifeline/lifeline-related-forms-and-notices-for-service-providers. Note: these figures include providers with multiple affiliates.

service, and 12 providers offering wireless service.[60] However, this makes up a fraction of the total communications service providers within California. In California, the CPUC identifies there are 151 wireless providers, 204 exchange carriers, 455 VoIP carriers, 25 video franchise holders, and 245 ISPs.

Nearly every major wireline provider participates in the voice segment of the California LifeLine program. However, there is limited participation from the major wireline providers in the broadband segments of either Lifeline programs. The high participation rate of wireline providers in the voice-only segment of the California LifeLine program is the result of state law and Commission rules which mandate wireline telephone service providers' participation.[61] However, major wireline providers participation in the bundled or broadband only segment of the federal Lifeline program is limited to Consolidated Communications, Frontier Communications, and small regional providers.[62] The largest wireline ISPs in California – AT&T, Charter, Comcast, and Cox – do not offer the lifeline subsidies to their low-income broadband customers.[63]

Largest Fixed Broadband ISPs in California: LifeLine Participation					
	AT&T	**Charter**	**Comcast**	**Cox**	**Frontier**
Wireline Voice Provider	✓	✓	✓	✓	✓
Offers Wireline Voice LifeLine	✓	✓	X	✓	✓
Fixed Broadband Provider	✓	✓	✓	✓	✓
Offers Fixed Broadband LifeLine	X	X	X	X	✓

Wireless is the largest segment of lifeline subscribers, accounting for 93 percent of total subscribers. Despite this success, none of the three major facilities-based wireless providers – AT&T, T-Mobile, or Verizon – participates directly in the program. The 15 wireless providers participating in the California LifeLine program are either affiliates of the major wireless providers or resellers of service provided by the facilities-based networks. T-Mobile's affiliate Assurance Wireless and Verizon's affiliate Tracfone participate in the program, but AT&T does not have an affiliate participating in the program.

[60] USAC. "Lifeline Disbursements Tool." Available at: https://opendata.usac.org/Lifeline/Lifeline-Disbursements-Tool/rink-mije. Note: these figures include providers with multiple affiliates.
[61] PUC Section 876, and GO 153.
[62] A full listing of wireline service provider participation in the broadband segments of the lifeline programs is available in Appendix 1.
[63] It should be noted that Charter and Cox are obligated to provide lifeline service in the small number of locations in California where they received funding to deploy broadband service from the FCC's Rural Digital Opportunity Fund program. More information is available at: https://www.fcc.gov/auction/904.

Largest Wireless Providers in California: LifeLine Participation			
	AT&T	**T-Mobile**	**Verizon**
Wireless Provider	✓	✓	✓
Wireless Provider Participates in LifeLine	X	X	X
Has Wireless Affiliate(s)	✓	✓	✓
Wireless Provider Affiliate(s) Participate in LifeLine	X	✓	✓

Procedure for Determining State Subsidy Amount

The monthly subsidy amount is updated annually and currently capped at $19.00 per household. General Order 153, section 8.5.3, authorizes the Commission's Communications Division to reset the Specific Support Amount (SSA) subsidy annually, effective January 1 of each year, at 55 percent of the highest Carrier of Last Resort (COLR) basic residential rate effective July 31st of the previous year.[64] The Commission applies $19.00 per customer to compute claim reimbursements based on the highest COLR basic residential rate of $34.50 effective July 2023 (0.55 *$34.50). On December 5, 2024, the CPUC temporarily froze the SSA at $19.00 per month through December 31, 2026, or until the Commission establishes a new methodology for calculating the SSA, whichever occurs first.[65]

Lifeline Service Standards

In 2016, the FCC adopted rules to set minimum service standards for both fixed and mobile Lifeline providers.[66] The broadband minimum service standards were set to gradually increase, according to a defined formula for calculating annual increases in broadband data capacity for fixed and mobile Lifeline offerings and for increases in speed offered by fixed Lifeline providers. The *2016 Lifeline Order* also sought to phase out support for voice-only service. The *Order* also included a report to assess the state of the Lifeline marketplace to enable further refinement of the minimum service standards.[67] Ultimately, the FCC waived the requirement to automatically increase the minimum service standard for mobile

[64] CPUC. D. 10-11-033, "Decision Adopting Forward Looking Modifications to California Lifeline In Compliance With the Moore Universal Telephone Service Act." Available at: https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/127062.PDF. Adopted the subsidy methodology and claim system that calculated 55% of the highest basic flat rate of the COLRs.
[65] CPUC. Decision 24-12-006, "Decision Freezing Specific Support Amount." Available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M549/K181/549181856.PDF.
[66] FCC *Lifeline and Link Up Reform and Modernization et al.*, Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Rcd 3962 (2016) (*2016 Lifeline Order*). Available at: https://docs.fcc.gov/public/attachments/FCC-16-38A1_Rcd.pdf.
[67] FCC. "Report On The State Of The Lifeline Marketplace," June 2021. Available at: https://docs.fcc.gov/public/attachments/DOC-373779A1.pdf.

broadband data capacity and continues to support voice-only service. [68]

Eligibility and California-Only Participants

Applicants may qualify for the California LifeLine Program in two ways: (1) by enrolling in a qualifying assistance program (program-based eligibility)[69] or (2) by meeting the income threshold (income-based eligibility).[70] Under program-based eligibility, households may qualify for the California LifeLine discounts if they provide documentation that at least one household member is enrolled in one or more qualifying assistance programs. The majority of participants – 94.3 percent as of December 2024 – qualify through program-based eligibility, and 98.3 percent of these participants qualify based on their participation in CalFresh or Medi-Cal.[71]

The California LifeLine Program makes up for lost federal subsidy for participants who do not qualify for the federal Lifeline program.[72] This is due to the more restrictive eligibility rules adopted by the FCC. These "California-Only" subscribers receive the same level of support as those who meet the federal eligibility requirements. As of July 2023, approximately 37,519 participants out of 1 million total California LifeLine participants did not qualify for the federal Lifeline program. Making up for the loss in federal support totaled approximately $3,089,295 during fiscal year (FY) 2023-24. By making up these funds, this provides parity among all program participants in California.

Non-usage Rule

Effective December 2, 2016, the FCC adopted a 30-day non-usage rule. Under the rule, if a participant does not use their service for 30 days, their service provider must notify them that they are at risk of losing their service/discount.[73] If the participant does not use the service in the 15 days after the notification, they will be removed from the Program.[74] The California LifeLine program's non-usage rule mirrors the FCC's rule.[75] This is an

[68] FCC. "Wireline Competition Bureau Announces Updated Lifeline Minimum Service Standards And Indexed Budget Amount." Available at: https://docs.fcc.gov/public/attachments/DA-24-740A1.pdf.

[69] These programs include: Medicaid/Medi-Cal, Low Income Home Energy Assistance Program (LIHEAP), Supplemental Security Income (SSI), Federal Public Housing Assistance or Section 8, CalFresh, Food Stamps or Supplemental Nutrition Assistance Program (SNAP), Women, Infants and Children Program (WIC), National School Lunch Program (NSL), Temporary Assistance for Needy Families (TANF), Tribal TANF, Bureau of Indian Affairs General Assistance, Head Start Income Eligible (Tribal Only), Food Distribution Program on Indian Reservations, and Federal Veterans and Survivors Pension Benefit Program.

[70] Under income-based eligibility, a household may qualify for the California LifeLine Program if the household's total annual gross income is at or less than approximately 150 percent of the Federal Poverty Level.

[71] CPUC Third-Party Administrator Presentation to Universal Lifeline Telephone Service Trust Administrative Committee (ULTSAC), December 10, 2024. Slides 32 and 33, available at: https://www.cpuc.ca.gov/consumer-support/financial-assistance-savings-and-discounts/lifeline/universal-lifeline-telephone-service-trust-administrative-committee/third-party-administrator-presentation.

[72] Specifically, LIHEAP, TANF, NSLP and subscribers whose Total Household Income is greater than 135% of the Federal Poverty Guidelines but less than or equal to 150% of the Federal Poverty Guidelines.

[73] 47 C.F.R. § 54.405(e)(3)

[74] *Id.*

[75] General Order 153, Sections 5.7.1 and 5.7.2

accountability measure to reduce program waste in instances where users no longer use or have access to their services.

Connection/Activation Charges for California LifeLine

The California LifeLine Program provides a subsidy to participating service providers to reduce connection charges assessed upon participants at the time-of-service initiation or transfers between service providers. These subsidies are available to California LifeLine wireline and wireless services plans that meet program requirements outlined in General Order 153, Section 8. For California LifeLine wireless telephone services, the connection subsidy is capped at $39 and is limited to no more than two per year per eligible household.[76]

Administrative Support Subsidies for California LifeLine

Service providers offering California LifeLine service are eligible to collect an administrative support subsidy from the program to recover actual administrative costs related to California LifeLine. The maximum administrative support subsidy is $0.03 monthly per participant for claims filed without cost information and $0.50 monthly per participant for those with cost information.[77]

Applicable Surcharges/Taxes

There are several surcharges and taxes assessed on telecommunications services by the State of California, city and county governments, and federal agencies. Telecommunications service providers collect surcharges from consumers and remit the surcharge monies to a financial institution to manage and fund government/public programs, among others. However, California LifeLine participants are exempt from paying surcharges and taxes; therefore, California LifeLine service providers pay the surcharges and taxes on behalf of the participants. Service providers offering California LifeLine service are eligible to collect a surcharges and taxes subsidy such that these costs are covered by the LifeLine program.[78]

Enrollment and Renewal Processes

From 1984 to 2004, the telephone corporations that were California LifeLine service providers performed the enrollment responsibilities. In 2005, the Commission transferred the enrollment functions from the telephone corporations to a Third-Party Administrator (TPA). Under the Commission's oversight and supervision, the TPA handles the application, enrollment, and renewal processes, and it determines applicant's eligibility for the California LifeLine Program.

California LifeLine participants must annually renew their participation in the Program to confirm continued eligibility and intent to receive discounted phone services. For participants enrolled in CalFresh, an automated database check is conducted using the Department of Social Services CalFresh Confirm Hub to verify ongoing eligibility. If a subscriber's eligibility cannot be verified through the CalFresh Confirm database check,

[76] General Order, Sections 8.1.1.1, 8.1.1.3 and 8.1.1.4
[77] General Order. Section 9.3.8.
[78] General Order 153, Section 9.2.

they must renew by submitting supplemental documentation to verify their eligibility.

Subscribers who qualify through other eligible programs or based on income can renew their enrollment using one of five methods: (1) by U.S. mail; (2) through the CPUC's LifeLine Customer Portal; (3) over the phone, including using the Interactive Voice Response (IVR) system; (4) over the phone with the assistance of a customer service representative from the TPA's call center, or (5) through a service provider's approved website platform.

Conclusion

The California LifeLine and federal Lifeline programs are well-established. They have broad eligibility and effective administration. The programs have established rules for mitigating waste fraud and abuse, and for reimbursing participating providers. Each of these programs has made efforts to modernize the services they support, yet broadband adoption rates remain low. Ultimately, the success of these programs hinges on service provider participation, which continues to be lacking in these programs, especially for fixed broadband service. Where service provider participation is robust, it has either been compelled – as with the traditional wireline voice segment of the California LifeLine program – or incentivized, as with the Affordable Connectivity Program.

Part 4: Review of Alternative Adoption Strategies

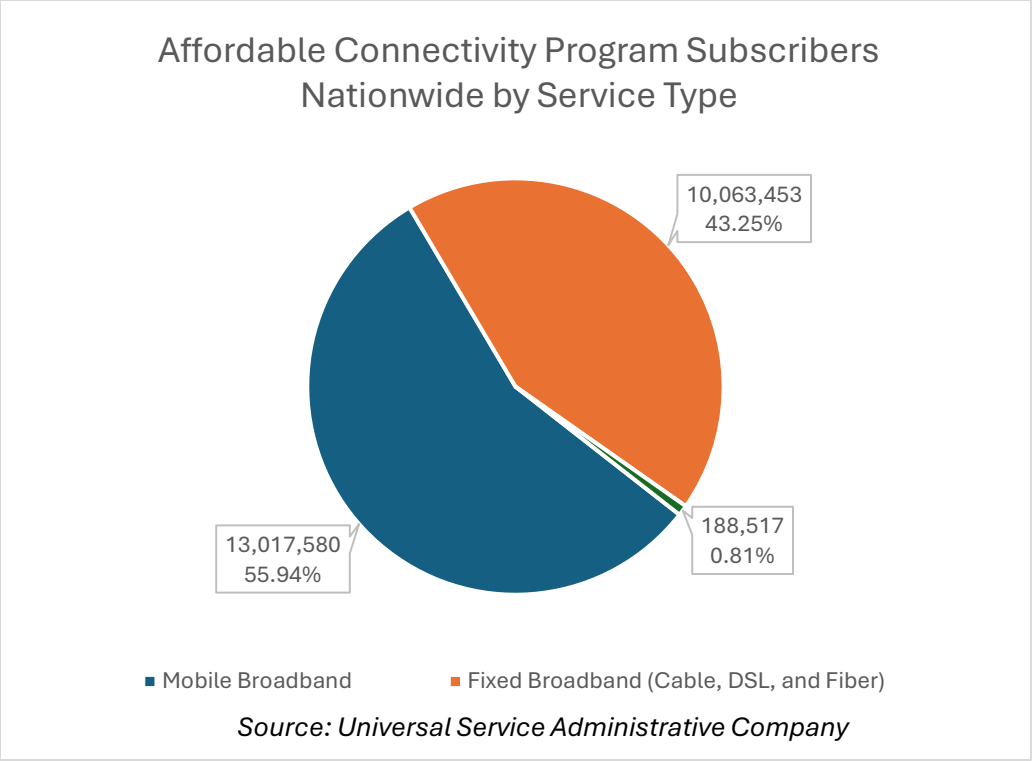
Introduction

Reviewing other broadband subsidy programs provides information to inform alternative strategies that the California LifeLine program can consider to improve adoption of affordable home broadband services.

Affordable Connectivity Program:

The ACP was a federal program that offered eligible households a discount of up to $30 per month toward internet service and up to $75 per month for households on qualifying Tribal Lands.[79] Eligible households could also receive a one-time discount of up to $100 toward the purchase of a laptop, desktop computer, or tablet from participating internet companies if the household contributed between $10 and $50 toward the purchase price. The Infrastructure Investment and Jobs Act provided $14.2 billion in funding for the program.

[79] FCC. "Affordable Connectivity Program." Available at: https://www.fcc.gov/acp.



Source: Universal Service Administrative Company

The ACP launched in December 2021, and by February 2024, over 23 million households relied on the program for affordable internet service. Approximately 55.94 percent of participants subscribed to mobile broadband services, 43.25 percent subscribed to fixed broadband, and 0.81% subscribed to fixed wireless or satellite services. By June 2024, the program ended due to a lack of additional funding appropriated by Congress.[80]

Californians participated significantly in the program. Of the 13.3 million households in California, nearly 6 million were eligible for the ACP subsidy. The total households enrolled in California at the enrollment freeze was 2,945,282 – approximately 49 percent of the households eligible for the program.[81]

While not all internet service providers participated in the ACP, 205 ISPs participated in California. Of these providers, 99 offered only fixed broadband, 27 offered fixed and/or mobile broadband, and 79 only offered mobile broadband.[82] Each of the largest ISPs in California participated: AT&T, Charter, Comcast, Cox, and Frontier. ACP rules allowed the $30 discount to be applied to any internet plan. The majority of subscribers paid additional

[80] USAC. "Additional ACP Data." Available at: https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/additional-acp-data/.
[81] USAC. "Enrollment by State." Available at: https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state.
[82] FCC. "ACP Provider List." Available at: https://www.fcc.gov/sites/default/files/acp_provider_list.xlsx.

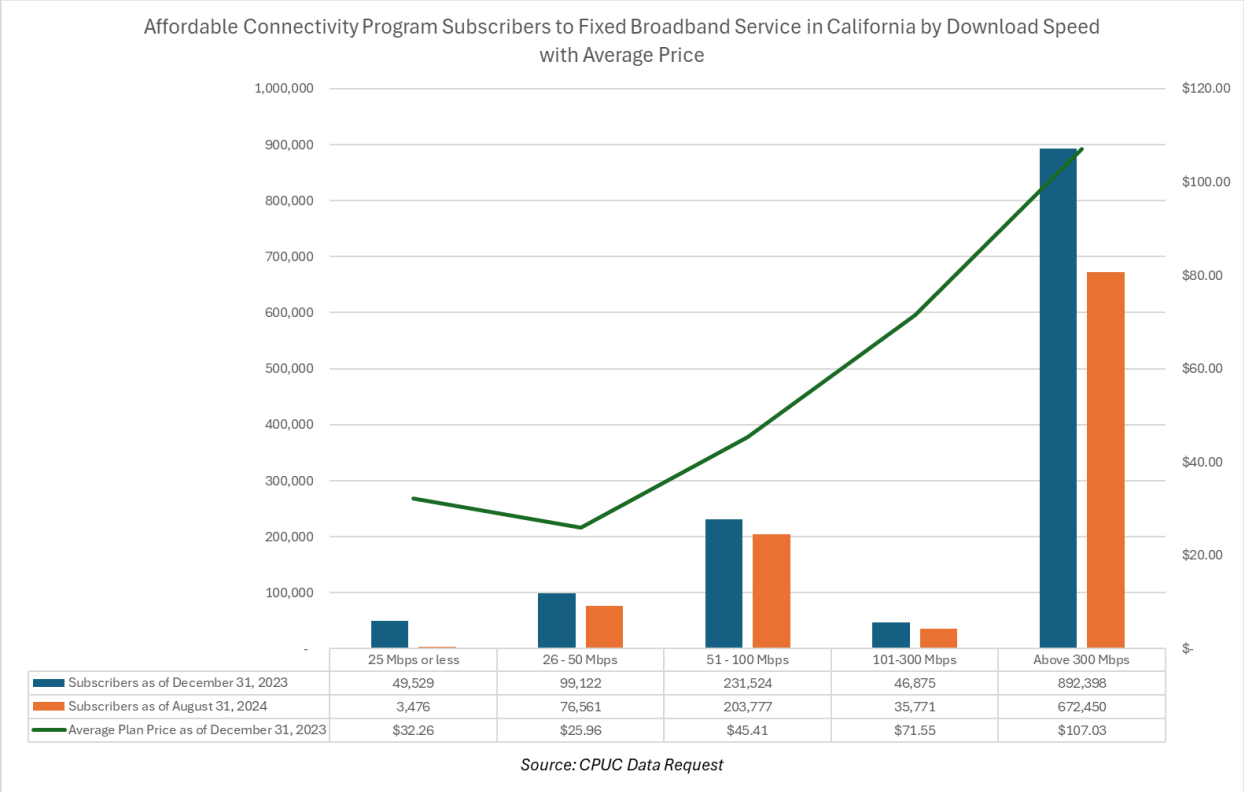
money out of pocket for internet services, even when lower cost plans would have been covered entirely by the ACP benefit.[83]

On June 9, 2023, the CPUC adopted two ACP pilot programs in Decision 23-06-003. The pilot programs allowed communications service providers to combine the California LifeLine discount with ACP, enhancing affordability and access to broadband services. By December 31, 2023, three wireless providers and one wireline provider had enrolled a total of 89,654 participants in the ACP pilot.[84]

The end of the ACP has left a significant gap. Major ISPs have reported subscriber losses following the end of the ACP. In 2024, Comcast reported losing 120,000 subscribers in the second quarter, 87,000 subscribers in the third quarter, and 139,00 broadband subscribers in the fourth quarter, attributing these losses to the end of the ACP.[85] Charter has been reported to be the largest recipient of ACP funding.[86] In 2024, Charter reported losing 154,000 subscribers in the second quarter, 110,000 in the third quarter, and 177,000 subscribers in the fourth quarter, also attributing these losses to the end of the ACP.[87]

The CPUC Communications Division issued a data request for information on home broadband plans to ACP-participating ISPs on November 1, 2024. This request sought data on the number of subscribers enrolled in the ACP as of December 31, 2023, the plans they were subscribed to, and the number of subscribers who continued to utilize those plans on August 31, 2024, four months after the ACP benefit period ended.

[83] FCC. "Affordable Connectivity Program." Available at: https://www.fcc.gov/acp.
[84] CPUC. Decision Approving Pilot Programs to Leverage Federal Affordable Connectivity Program Funds, available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M511/K130/511130680.PDF
[85] "Comcast Reports 2nd Quarter 2024 Results," available at: https://www.cmcsa.com/static-files/68abe434-80f7-437e-8e7a-fa457e43e63b; "Comcast Reports 3rd Quarter 2024 Results," available at: https://www.cmcsa.com/static-files/3fac14b3-42f9-44ac-ac77-d9b5fdada211; 'Comcast Reports 3rd Quarter 2024 Results," available at: https://www.cmcsa.com/static-files/3fac14b3-42f9-44ac-ac77-d9b5fdada211.
[86] Wall Street Journal. "How One Company Hoovered Up $3 Billion in Broadband Subsidies," available at: https://www.wsj.com/business/telecom/charter-internet-low-income-funding-037a9531.
[87] Charter Communications. "Charter Announces Second Quarter 2024 Results," available at: https://corporate.charter.com/newsroom/charter-announces-second-quarter-2024-results; "Charter Announces Third Quarter 2024 Results," available at: https://corporate.charter.com/newsroom/charter-communications-announces-third-quarter-2024-results; and "Charter Announces Fourth Quarter and Full Year 2024 Results," available at: https://corporate.charter.com/newsroom/charter-announces-fourth-quarter-and-full-year-2024-results.



	25 Mbps or less	26 - 50 Mbps	51 - 100 Mbps	101-300 Mbps	Above 300 Mbps
Subscribers as of December 31, 2023	49,529	99,122	231,524	46,875	892,398
Subscribers as of August 31, 2024	3,476	76,561	203,777	35,771	672,450
Average Plan Price as of December 31, 2023	$32.26	$25.96	$45.41	$71.55	$107.03

Source: CPUC Data Request

The CPUC received responses from 39 internet service providers that offer home broadband service. The data responses reveal internet service plans ranged in price from a low cost of $5.00 to a high of $299.99 per month. Speeds offered ranged from a low of 0.8 Mbps download and 0.4 Mbps upload to a high of 5,000 Mbps symmetrical service. Most plans did not have a data cap, while plans with data caps ranged from 10 GB per month to 1,536 GB per month.

Over the eight-month period covered by the data request – including four months occurring after the last fully funded month of ACP support – these providers reported a 25 percent drop in subscribership. As of December 31, 2023, these providers reported 1,319,448 subscribers participating in the ACP, and by August 31, 2024, this figure dropped to 992,035 subscribers remaining four months after the end of ACP. The approximate monthly revenues for December 2023 was $113.6 million and dropped to $87 million by August 2024.[88]

The data further reveals a consistent decline in subscribership across each internet service plan download speed tier. The lower cost plans were entirely or nearly entirely covered by the ACP subsidy, whereas the highest speed tier – which contains the majority of subscribers – only covers a portion of these plan costs.

With a 93 percent reduction, the download speed tier of 25 Mbps or less saw the most significant loss of subscribers. This is particularly notable, given that this download speed

[88] CPUC data request to internet service providers participating in the ACP, issued November 1, 2024.

tier had Average Subscriber Price of $32.27, meaning the majority of these subscribers' service was covered entirely by the ACP subsidy. It seems likely that without ACP support, these consumers could no longer afford broadband service.

Two thirds of the ACP participants in California subscribed to fixed broadband service plans with download speeds that exceeded 300 Mbps. On one hand, this is consistent with the FCC's decision to increase the definition of what qualifies as broadband service. Plans with higher broadband speeds are more likely to meet the needs of individual users, as well as the needs of other members of their households. On the other hand, news articles and Congressional inquiries have raised concerns over providers "upselling" ACP participants – the practice of encouraging customers to buy a more expensive or upgraded version of a product or service than they require.[89] Given that nearly 1 in 4 of these subscribers dropped these plans, it seems clear that the high Average Subscriber Price for this tier of $107.03 was prohibitive without the subsidy support.

The data shows a steep reduction in subscribership when ACP ended over a short period of time. It is likely that this trend has continued, as evidenced by reports that California's largest ISPs continue to experience drops in subscribership, in part, due to the end of the ACP. At the same time, most households continue to subscribe, revealing that standalone fixed broadband is an essential service for low-income households.

The end of the ACP also had harmful effects on the state's efforts to close the digital divide. Each of the CPUC's broadband infrastructure grant programs – Federal Funding Account, Broadband Infrastructure Grant Account, and Broadband Equity, Access and Deployment – will help to reduce the cost of service, but can also be complemented with subsidies for low-income customers. These programs obligate grantees to participate in the ACP or any successor program.

ISP Low-Cost Plans

Internet service providers are increasingly offering low-cost service plans for low-income households. These plans are typically in the $10-$30 per month range, and for a service tier that is lower than what the ISPs make available to the public, currently in the 50 to 100 Mbps download range.

[89] Committee on Energy and Commerce, Democratic Staff. "Pallone Demands Answers from Internet Providers on Reports of Anti-Consumer Practices in Broadband Affordability Programs," available at: https://democrats-energycommerce.house.gov/newsroom/press-releases/pallone-demands-answers-from-internet-providers-on-reports-of-anti-consumer.

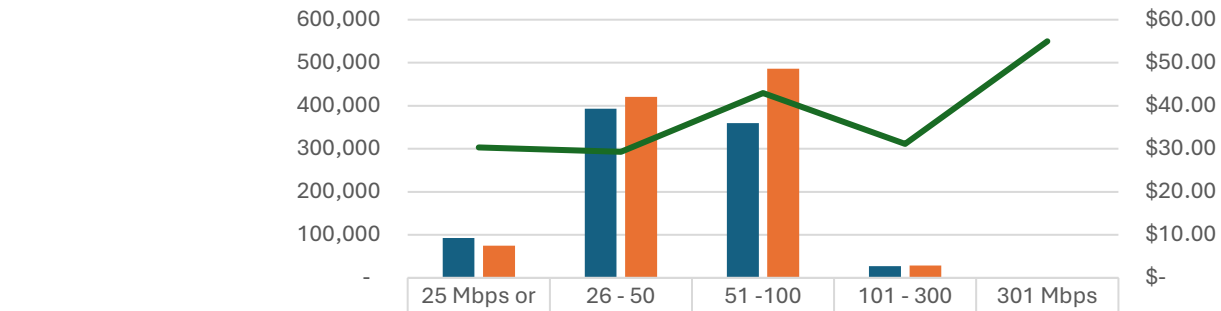
ISP Low-Cost Plans			
Company	**Plan Name**	**Monthly Cost**	**Speed**
AT&T	Access from AT&T[90]	$30	Up to 100 Mbps
Charter	Spectrum Internet Assist[91]	$25-$30	50 Mbps to 100 Mbps
Comcast	Internet Essentials[92]	$14.95 to $29.95	75 to 100 Mbps
Cox	ConnectAssist and Connect2Compete[93]	$9.95 to $30	100 Mbps

Many of these programs originate from requirements imposed as part of merger agreements. In 2011, as a condition of approving Comcast's acquisition of NBC Universal, the FCC required Comcast to create the Internet Essentials Program to provide low-cost internet service to low-income families with school-aged children. Similarly, the FCC imposed similar requirements on AT&T and Charter in 2016 as part of separate merger agreement approvals. In most instances, these companies have continued to offer these programs even after the merger conditions expired.

The eligibility of these low-cost plans depends on the provider. Charter's program has the narrowest eligibility criteria, only accepting programmatic eligibility for those participating in National School Lunch Program (NSLP), Community Eligibility Provision (CEP) of the NSLP, or receiving Supplemental Security Income (SSI). Comcast continues to accept the broader eligibility criteria previously offered by the ACP. Not all providers offer these programs, however. Frontier and the Small LECs rely on the Lifeline programs to offset costs for low-income providers. Other providers like Sonic Communications only provide a flat rate for all customers without any subsidies.

To determine the penetration rate of these programs, the Communications Division issued another data request on December 20, 2024, to the same list of ISPs as of November 1, 2024, for information on whether they offer income-qualified, low-cost, fixed broadband plans. This request sought data on the enrolled number of subscribers in income-qualified low-cost plans as of December 31, 2023, and the number of subscribers as of September 30, 2024.

[90] AT&T. "Access from AT&T," available at: https://www.att.com/internet/access/.
[91] Spectrum. "Spectrum Internet® Assist," available at: https://www.spectrum.com/internet/spectrum-internet-assist.
[92] Xfinity. "Internet Essentials," available at: https://www.xfinity.com/learn/internet-service/internet-essentials.
[93] Cox. "Low Cost Internet Plans," available at: https://www.cox.com/residential/internet/low-cost-internet-plans.html.



	25 Mbps or less	26 - 50 Mbps	51 -100 Mbps	101 - 300 Mbps	301 Mbps and above
Subscribers as of Dec. 31, 2023	92,434	393,326	359,668	26,911	113
Subscribers as of Sept. 30, 2024	74,569	420,285	486,301	28,415	135
Average Price of Subscribed Plans	$30.28	$29.30	$42.99	$31.16	$54.98

Source: CPUC Data request

Of the internet service providers that responded, 22 providers identified that they offer one or more internet service plans with income eligibility requirements. These plans ranged in price from a low cost of $9.95, to a high of $180 per month. Speeds offered ranged from a low of 0.8 Mbps download and 0.4 Mbps upload, to a high of 2500 Mbps symmetrical service. Most plans did not have a data cap, while plans with data caps ranged from 400 GB per month to 1,536 GB per month.

The data provided show that there were 850,840 active subscribers to these plans as of December 31, 2023. By September 30,2024, subscribership to these plans increased 15 percent to 980,587. This increase is likely due to consumers subscribing to these lower cost plans when the ACP ended, as they could no longer afford the full cost of plans with higher download speeds. A substantial portion of the low-income households in the state subscribe to the income qualified plans. Using the LifeLine program's estimated eligible population of 4,325,849 for reference, this is about 22.7 percent participation rate.[94] In addition, the approximate monthly revenue for these plans increased from $25.2 million in December 2023 to $31.1 million in September 2024.

Of note, there was a 19 percent decrease in low-cost plan customers for speeds at 25 Mbps or less, while the subscriber counts for all other speed tiers increased after the ACP ended. This may be reflective of consumers subscribing to higher speed plans that better meet their household needs.

[94] There are 4,325,849 households eligible for the California LifeLine program based on the 2023 U.S. Census Bureau American Community Survey. See also, https://www.usac.org/lifeline/resources/program-data/#Participation

The vast majority of subscriptions reported do not qualify as "broadband," as defined by the FCC. Of the 980,587 subscriptions reported by ISPs, only 84,938 subscriptions met or exceeded the 100/20 Mbps broadband standard, or 8.6 percent of total plans.

Government-Mandated Low-Cost Plans:

In 2021, the State of New York enacted the Affordable Broadband Act Comprehensive Broadband Connectivity Act as part of the state's 2022 budget.[95] This included a first-in-the-nation program that requires providers operating in New York to offer broadband to qualified low-income households for $15 per month for 25 Mbps service, or $20 per month for 200 Mbps service, with prices inclusive of taxes, fees, and rental charges. To be eligible, households must be eligible for the National School Lunch Program; the Supplemental Nutrition Assistance Program; Medicaid; senior citizen or disability rent increase exemption; or an affordability benefit from a utility. Small ISPs serving fewer than 20,000 households may be exempted from these requirements if the New York Public Service Commission determines the requirements would result in unreasonable or unsustainable financial impact on the broadband service provider.

Implementation of this law had been on hold while litigation brought by service providers and their associations worked its way through the courts. Ultimately, the U.S. Supreme Court declined to hear the industry's final appeal in December 2024.[96] After nearly four years, the law took effect in January 2025.

On March 18, 2025, the Public Advocates Office of the CPUC released a preliminary report analyzing the impact of adopting a $15 cap on broadband costs for low-income families with incomes at or below 200% federal poverty line.[97]

California Alternate Rates for Energy (CARE):

There are many similarities between the energy sector utility affordability programs and telephone and internet affordability programs, such as eligibility requirements, eligible population, ratepayer funding sources, and the vital nature of the services being provided.

California Alternate Rates for Energy (CARE) program offers a 30-35 percent discount on electric bills and a 20 percent discount natural gas bills for low-income households. This is a substantial benefit. With a typical bundled average monthly bill for residential customers

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[95] The Affordable Broadband Act was enacted as part of the State of New York's 2022 Comprehensive Broadband Connectivity Act. Available at: https://legislation.nysenate.gov/pdf/bills/2021/S2506C.

[96] *New York State Telecommunications Association, Inc., et al., Petitioners v. Letitia James, Attorney General of New York*. Available at: https://www.supremecourt.gov/search.aspx?filename=/docket/docketfiles/html/public/24-161.html.

[97] Cal Advocates, "Broadband Policy Options to Improve Affordability for Low-Income Californians." Available at: https://www.publicadvocates.cpuc.ca.gov/-/media/cal-advocates-website/files/press-room/reports-and-analyses/250318-public-advocates-office-broadband-policy-options-to-address-affordability-in-ca.pdf

approaching $200, this program provides low-income households with $60-$70 of rate relief per month.[98]

To be eligible, total household income must be at or below 200 percent of Federal Poverty Guidelines. Households may also be eligible if they are enrolled in public assistance programs such as Medicaid/Medi-Cal, Women, Infants and Children Program (WIC), National School Lunch's Free Lunch Program (NSL), Food Stamps/SNAP, etc. With this eligibility criteria, an estimated 4,671,207 households in the state are eligible for this program. An impressive 4,865,836 households participated, resulting in a 104 percent participation rate.[99]

CARE, which is paid for by energy utility ratepayers, costs approximately $2.2 billion annually. This does not include other energy savings programs for low-income households, such as Family Electric Rate Assistance Program (FERA) and Energy Savings Assistance Program (ESA). It also does not include the CARE programs of the small multi-jurisdictional utilities.

In sum, the CARE program provides a stark contrast to the affordability programs for telephone and broadband service, but it is funded differently and managed by the utilities themselves. The program provides a much larger benefit to households, has ubiquitous participation, is mandatory for providers to participate in, and has a substantial and sustainable budget that is offset by ratepayers generally.

This table provides a comparison of some of the key differences between the ACP, CARE, and the LifeLine programs:

[98] CPUC. "2024 Senate Bill 695 Report," Figure 15, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/electric-costs/sb-695-reports/sb-695-report_2024.pdf.
[99] ESA/CARE 2023 annual reports submitted on May 1, 2024. Reports are available on the docket card for proceeding A.19-11-003: https://apps.cpuc.ca.gov/apex/f?p=401:57

Affordability Program Comparison			
	ACP	**LifeLine + Lifeline**	**CARE**
Monthly Subsidy Rate	$30 General Population $75 for Tribal	California LifeLine: $19 + Federal Lifeline: $9.25 (+25 for Tribal) = $28.25 General Population $53.25 for Tribal	30-35% discount on electric and a 20% discount on gas bills
One Time Charges	One-time $100 device subsidy	Service connection discount up to $39[100]	None
Estimated Eligible Households	5,989,677	4,248,269	4,671,207
Percentage of Eligible Households Enrolled	49.2 %	28%	104%
Total Number of Households in State	13,315,822	13,315,822	13,315,822
Total Number of Households Enrolled	2,945,281	California LifeLine: 1,659,877	4,865,836
Estimated Annual Spending in State	$1,086,808,692	(California LifeLine: $345,961,000) + (Federal LifeLine: $134,648,987) = $480,609,987	$2,240,462,707

Part 5: The Future of Home Broadband Affordability

Affordability of essential services has long been the cornerstone of ensuring universal service. As communications services continue to evolve, it is clear that reforms are necessary for the state to achieve its universal service, affordability, and Broadband For All objectives.

As this report has detailed, there are substantial lessons and opportunities to improve upon past and present affordability programs to close the Broadband Adoption Gap. The federal Lifeline program offers providers a subsidy for broadband, but does not offer a sufficient subsidy to incentivize provider or consumer participation. Further, the USF funding mechanism seems unsustainable, and the future of the USF is under review by the U.S. Supreme Court. The ACP had substantial success in supporting broadband services, and achieving high levels of provider and subscriber participation, but ultimately failed

[100] This amount applies to wireless service connection reimbursements. For wireline service connection reimbursements, the subsidy is the lower of: 1) $10 or 2) 50 percent of the service provider's connection charge. See For more information, see General Order 153, Section 8.1.

without a sustainable funding source. The California LifeLine Program has a sustainable funding source, but does not support standalone home broadband service,[101] nor do the majority of home broadband providers participate in the Program. Many ISPs offer low-cost broadband plans for low-income households and have received substantial participation to date.

Major questions remain that require further review and stakeholder deliberation:

- Low-Cost Plan Mandate: Should communications services continue to be subsidized to promote affordability, or is it preferable to mandate low-cost rates? Are these approaches to promoting affordability complementary?
- Pilot Program: Should the California LifeLine Program support a pilot program for a subsidy to home broadband service, including standalone broadband service?
- Multiple Subsidies: Do households require both cellphone and home broadband subscriptions to fully and meaningfully participate in society? If so, should state and federal programs support both a cellphone and a home broadband subsidy per household to meet these needs? Can state and federal universal service programs support both services? Should the California LifeLine Program support cellphone and home broadband bundles?
- Eligibility: Should the existing California LifeLine customer eligibility requirements be used?
- Minimum Service Standards: What should the minimum service standards for broadband service be, including: minimum speeds, data cap requirements, provision of networking equipment (i.e., routers and modems) and devices (i.e., laptops and tablets)? Should subscribers be able to apply the subsidy to any plan offered by a provider, so long as it exceeds the minimum service standards? Should participating providers submit plans for approval by the Commission, and if so, what information should be provided? Should there be exceptions for networks that are unable to meet the minimum standards?
- Subsidy Amount: How much should the specific support amount (SSA) for standalone home broadband services be? What methodology should the Commission utilize to determine the SSA for standalone broadband and any changes to the SSA over time? Should the California LifeLine Program makeup for the loss of the SSA by providers that do not participate in the federal Lifeline program? Should home broadband providers receive reimbursement for Administrative Support Subsidies and Connection Charges currently provided to LifeLine providers? Should the program reimburse providers for all or a portion of equipment and device expenses?
- Provider Participation: Provider participation is vital to the success of a home broadband subsidy program. How can broadband provider participation be

[101] Under the Moore Act, the California LifeLine program subsidy supports voice services and cannot fund standalone broadband services unless the statute is amended.

incentivized and what measures can ensure their involvement? Are mandates necessary?

- Program Streamlining: Provider participation in the current state and federal Lifeline programs is limited. Are there reforms that should be considered to streamline and incentivize broadband provider participation?
- Funding Source: Is the current California LifeLine Program funding mechanism sufficient to support an expansion for home broadband service? What additional sources of funding should be considered?
- Federal Funding: The federal Lifeline program already supports home broadband service, yet few providers, including those with ETC designation, participate. Are there reforms that could incentivize broadband providers to participate, allowing the state to maximize or fully leverage federal funds? Does the Commission have authority to require existing ETCs to provide home broadband service in addition to voice service?
- Pilot Program Requirements: What should the parameters of the pilot program be (i.e., duration, budget, etc.)? What data should participating service providers be required to submit, and how frequently should those reports be submitted? Should the pilot include any customer notification and advertising requirements? Are there other requirements that would reduce and avoid waste, fraud, and abuse associated with the pilot?

These are complex issues that require further deliberation. This report lays a foundation for stakeholders to provide input on these issues. Ultimately, piloting reforms to the California LifeLine Program that support home broadband service can inform strategies for meeting the state's Broadband For All objectives.

Appendix 1

Survey of California LifeLine Program Wireline Service Providers' Broadband Offerings		
Service Provider	**Does your company offer California residents standalone broadband service which is eligible for the federal Lifeline program?**	**Does your company offer California residents voice + fixed broadband service which is eligible for the federal Lifeline and California LifeLine programs?**
AT&T	No	No
Calaveras Telephone Company	No	Yes
CAL-ORE Telephone	Yes	Yes
Charter Communications (Spectrum, Time Warner Cable, Brighthouse)	Yes, limited to our TWCIS and CFL RDOF areas.	Yes, limited to our TWCIS and CFL RDOF areas.
Comcast	No	No
ConnectTo communications	Yes	Yes
Consolidated Communications	Yes	Yes
Consolidated Communications of California Company	Yes	Yes
Cox Communications	Yes, in the Cox Rural Digital Opportunity Fund (RDOF) footprint.	Yes, in the Cox Rural Digital Opportunity Fund (RDOF) footprint.
Ducor Telephone Company	Yes	Yes
Frontier Communications	Yes	Yes
Pinnacles Telephone Co.	No Response	No Response
Ponderosa Telephone	No	Yes
Sebastian	No	Yes
Sierra Telephone Company, Inc.	Yes	Yes
Siskiyou Telephone	No	Yes
TDS Telecom/Happy Valley Telephone Company	Yes	Yes
TDS Telecom/Hornitos Telephone Company	Yes	Yes
TDS Telecom/Winter Haven Telephone Company	Yes	Yes
Varcomm Broadband	Yes	Yes
Volcano Telephone Company	No	Yes

(END ATTACHMENT A)