



June 22, 2026

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

RE: Reply Comments Regarding the State of Competition in the Communications Marketplace, GN Docket No. 26-78

Dear Ms. Dortch,

The ACLP at New York Law School respectfully submits the following reply comments in the above-referenced proceeding.

Should you have any questions, please do not hesitate to contact us.

Kind regards,

_____/s/_____
Michael J. Santorelli, Director

_____/s/_____
Alex Karras, Senior Fellow

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1. Introduction

The state of competition in the U.S. communications market is robust and continues to improve by the day. Consumer demand drives and shapes every segment of the marketplace. ISPs remain responsive to these demands, providing users with ever more choices to meet their specific needs. These gains stem directly from deliberate policy choices made by Congress and the FCC over the last three decades. The adoption of a light-touch regulatory approach to advanced communications services – i.e., broadband, mobile, and VoIP – coupled with forward-looking decisions by the FCC to remove outdated regulations (notably in the context of plain old telephone service or POTS) has facilitated enormous investment across each segment of the communications market, stoking competition and enhancing consumer welfare.

These reply comments address competition in the broadband, mobile, and voice segments of the communications market. As discussed more fully below, market dynamics are such that the once-bright lines that separated these spaces are dissolving rapidly, to the point where consumers rarely think about whether they are using a “fixed broadband” connection or a “mobile” connection or a “fixed wireless” connection. Instead, consumers demand seamless connectivity wherever they are, rendering these siloes more abstraction than reality. These comments provide a variety of data points and unique analyses to support these observations.

From a policy perspective, the challenge – and opportunity – for the Commission is to continue supporting investment, competition, and innovation at a time when the courts require clear grants of authority from Congress to justify regulatory agency action.¹ Indeed, as the communications marketplace continues to evolve, it moves further and further away from the Communications Act, which was comprehensively updated in 1996. Notwithstanding the age of the Communications Act, the Commission still possesses powerful tools to remove key barriers and otherwise trim the regulatory underbrush that grew like a thicket during the pre-broadband era. The FCC is to be commended for continuing to wield those tools to facilitate the retirement of POTS and more quickly address utility pole disputes, among other examples. As discussed below, it must continue making progress on these and other fronts.

Effective regulatory modernization requires that the FCC – and all policymakers and regulators – have a clear and accurate picture of the state of the communications marketplace. The following reply comments seek to provide the Commission with a data-driven overview of competition in the broadband, mobile, and voice market segments.

2. The State of Play: A Data Analysis of Connectivity and Competition in the U.S. Broadband, Mobile, and Voice Segments

The following section leverages available data from a variety of sources – the FCC, state broadband offices, the Census Bureau, the Bureau of Labor Statistics (BLS), and industry publications, among others – to provide a comprehensive overview of the state of availability, utilization, and competition in the broadband (section 2.1), mobile (2.2), and voice (2.3) sectors.

Unless otherwise noted, these analyses focus primarily on the 2022-2025 timeframe, which corresponds with the Commission’s embrace of location-level data via the Broadband Data Collection (BDC) program and creation of a national fabric plotting all broadband serviceable locations (BSLs) in the country. Together with additional data collected and

¹ For general discussion, see Michael Santorelli, *State Regulation of Advanced Communications Services: Learning from the Past to Understand the Present and Prepare for the Future*, 24 Colo. Tech. L. J. 15 (2026), https://ctlj.colorado.edu/wp-content/uploads/2026/02/02_CDT_24_1_text_SANTORELLI.pdf (“*State Regulation of Advanced Communications Services*”).

refined by states as part of their planning for the Broadband Equity, Access, and Deployment (BEAD) program, these data provide the most granular and accurate picture of broadband availability that has existed to date.

Section 2.4 concludes the data analyses with observations and key takeaways regarding the state of play in the U.S. broadband, mobile, and voice segments.

2.1 Broadband

The continued growth in broadband availability and profusion of choices for high-speed internet access is one of the greatest technological advancements in U.S. history, rivaled, perhaps, only by the equally fast and disruptive pace of change in the U.S. mobile sector (discussed in section 2.2). Indeed, by every metric, broadband connectivity in the U.S. is robust and continuing to improve.

2.1.1 Availability

Broadband of at least 100/20 Mbps is widely available from a variety of sources. Per the most recent data:²

- Broadband via a wire (cable, fiber, DSL) is available to 93.5% of residential units.³
- Broadband via FWA is available to 53.5% of residential units.
- Broadband via LEO is available to 99.7% of residential units.

Most of the remaining gaps in availability will be addressed via the BEAD program and other federal/state grant programs. Per the latest ACLP calculations, after BEAD:⁴

- Less than 2.8% of residential units will be without a 100/20 Mbps wired connection.
- Less than 1.2% will be without a 100/20 Mbps terrestrial connection (wired + FWA).

² ACLP processing of National Broadband Map Fixed Broadband Deployment Data as of 2025-06-30.

³ Percentages of “residential units,” as used throughout these comments, are intended to reflect the share of households to which a given metric applies. This measure factors in the number of “units” in each Broadband Serviceable Location (BSL). For example, a single-family home has 1 unit; a twenty-apartment building has 20 units.

⁴ ACLP processing of state’s BEAD Final Proposal data and National Broadband Funding Map data. For more information on this calculation, see Alex Karras and Michael Santorelli, *Updated Analysis Estimates 1.1 Million Locations Could Remain Unfunded After BEAD*, February 9, 2026, Broadband Expanded, <https://broadbandexpanded.com/posts/unservedafterbeadfeb2026>.

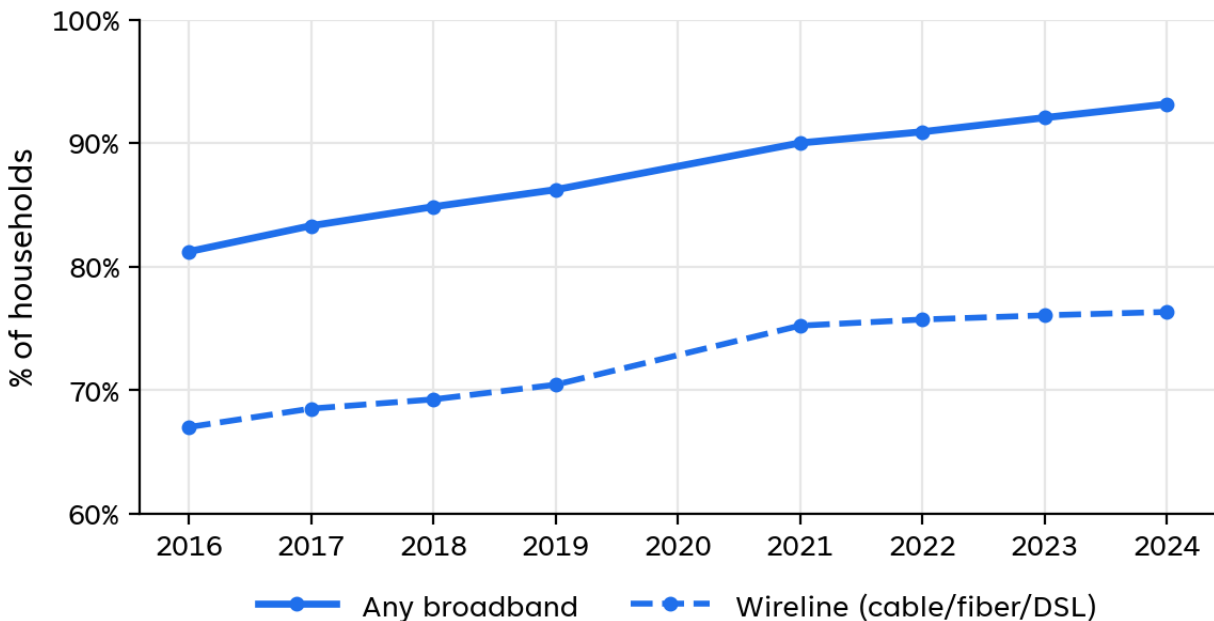
- When factoring in LEO satellite, less than 0.8% will be without a 100/20 Mbps connection.⁵

This is remarkable progress. Indeed, the U.S. is on the verge of something truly significant: universal broadband access. The FCC’s Competition Report should detail and celebrate this milestone.

2.1.2 Consumer Adoption & Utilization

Broadband adoption rates have continued to climb as high-speed internet access has become more widely available. However, there is evidence that adoption rates, particularly those for in-home wireline service, have plateaued in recent years (as discussed below, this is not a supply-side issue). The following charts, based on data from the Census Bureau’s American Community Survey (ACS), provide a summary. The dotted line below tracks in-home wireline adoption; the solid line includes that data plus adoption of other internet access services, notably mobile broadband.

Figure 1 - U.S. household broadband adoption, 2016-2024 (ACS 1-Year).



⁵ This calculation includes only LEO connections that received a BEAD award. As indicated above, LEO providers report service to roughly 99.7% of all housing units.

The following charts plot adoption trends by income, educational attainment, race/ethnicity, and age. For all four metrics, once-sizeable gaps between respective categories have narrowed significantly. For example, between 2016 and 2024:

- The gap between the highest- and lowest-adopting income brackets has narrowed from 39.2 percentage points to 17.9 percentage points (Figure 2).
- The gap by educational attainment has narrowed from 30.4 percentage points to 11.8 percentage points (Figure 3).
- The gap by race/ethnicity has narrowed from 15.3 percentage points to 4.0 percentage points (Figure 4).
- The gap by age has narrowed from 16.6 percentage points to 7.7 percentage points (Figure 5).

Figure 2 - Household broadband adoption by income bracket (ACS 1-Year).

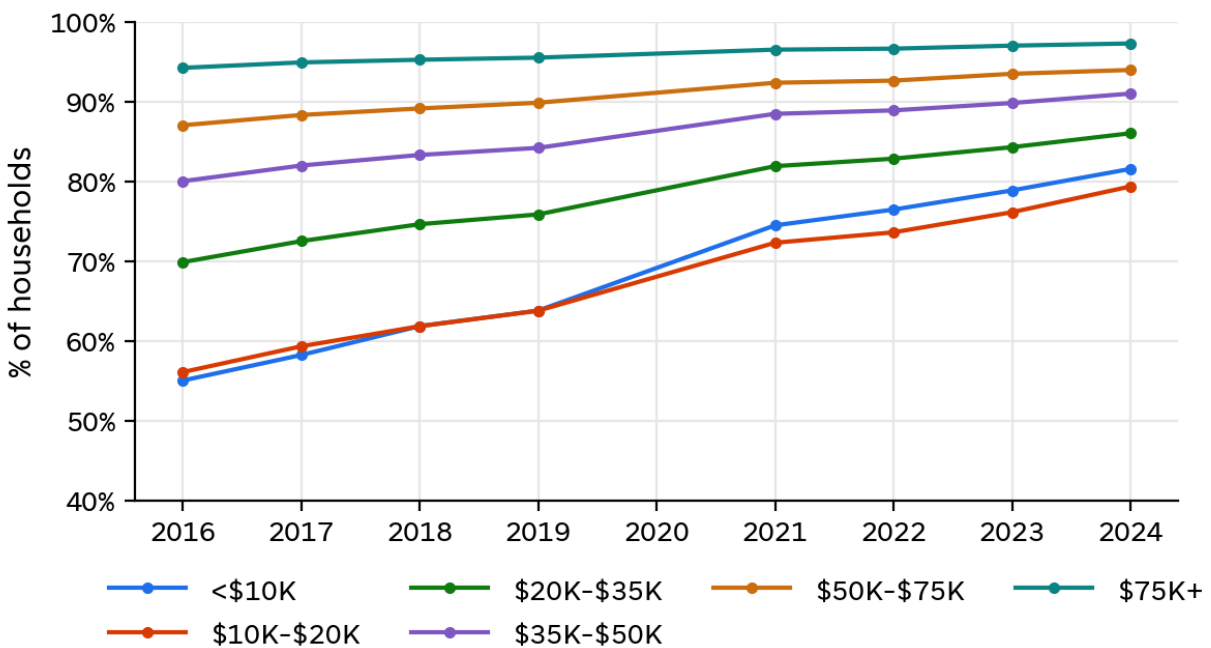


Figure 3 - Household broadband adoption by educational attainment (ACS 1-Year).

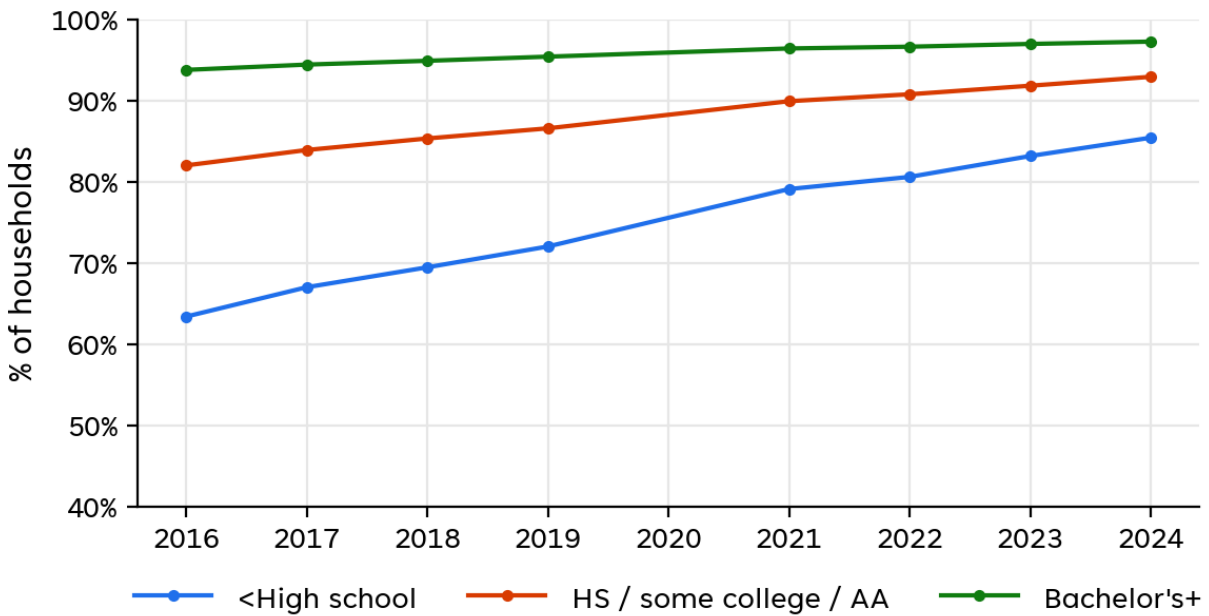


Figure 4 - Household broadband adoption by race / ethnicity (ACS 1-Year).

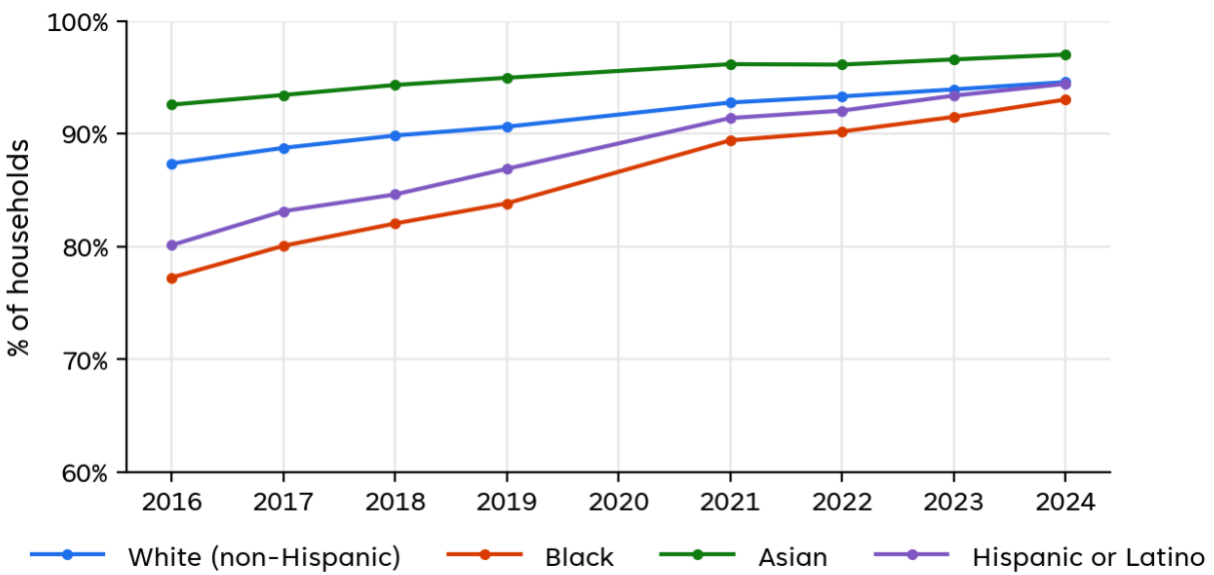
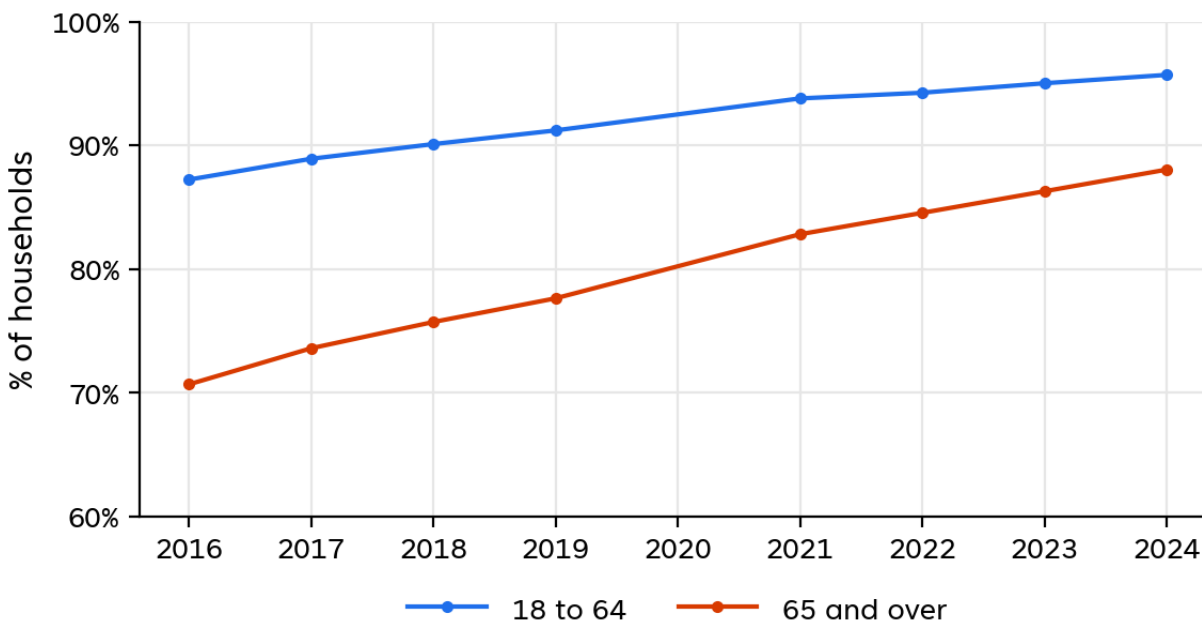


Figure 5 - Household broadband adoption by age of householder (ACS 1-Year).



These data and a host of related analyses, including by the ACLP, underscore that certain adoption discrepancies remain in place more than three decades after the term “digital divide” was coined.⁶ In particular, adoption rates continue to vary – but to a lessening degree – based on income, age, and educational attainment. Notably, gaps in adoption among different race/ethnic groups have all but closed (per Figure 4, above).

Broadband adopters are using their connections more intensely than ever before. Upward trends in adoption of higher upload and download speeds, first evident during the pandemic, have continued, as consumers’ appetite for data have increased. Consider that, in its report on broadband usage from the first quarter of 2021,⁷ OpenVault observed the following metrics for the “average broadband household”:

- Average downstream speed: 207 Mbps
- Average upstream speed: 16 Mbps
- Average data consumption: 462 GB/month

⁶ See, e.g., *State and Local Policymakers’ Broadband Planning Tool Kit*, at p. 120-122, ACLP at New York Law School (Oct. 2022), <https://broadbandexpanded.com/files/toolkit/ACLP%20-%20Broadband%20Planning%20Tool%20Kit%20-%20October%202022.pdf>.

⁷ These reports can be downloaded from OpenVault at <https://openvault.com/resources/ovbi/>.

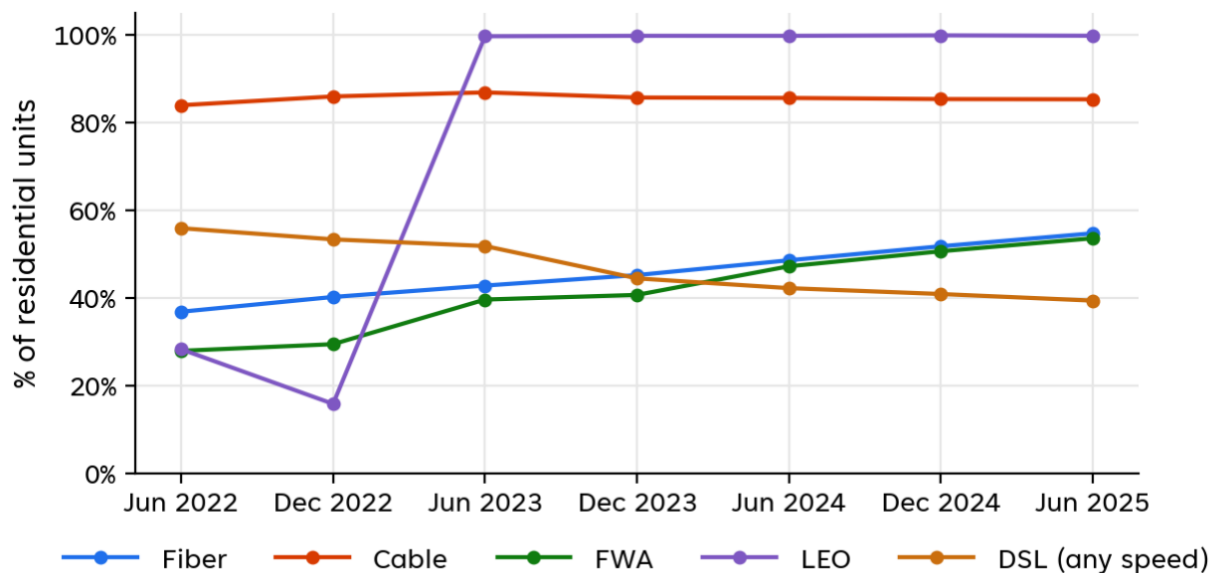
In its latest report from Q1 2026, OpenVault’s data for the average broadband household five years later looks starkly different:

- Average downstream speed: 586 Mbps, an increase of 183%
- Average upstream speed: 43.2 Mbps, an increase of 170%
- Average data consumption: 702.5 GB/month, an increase of 52%

These figures are poised to grow exponentially as AI is increasingly used by more people and entities for a wider array of tasks.

To date, consumers are availing themselves of more widespread access to next-generation networks that can deliver superfast speeds. Consider the following graphic showing the growth of fiber, cable, FWA, and LEO satellite over time, and the corresponding decline of slower DSL.

Figure 6 - Availability by technology at 100/20 Mbps (FCC BDC).

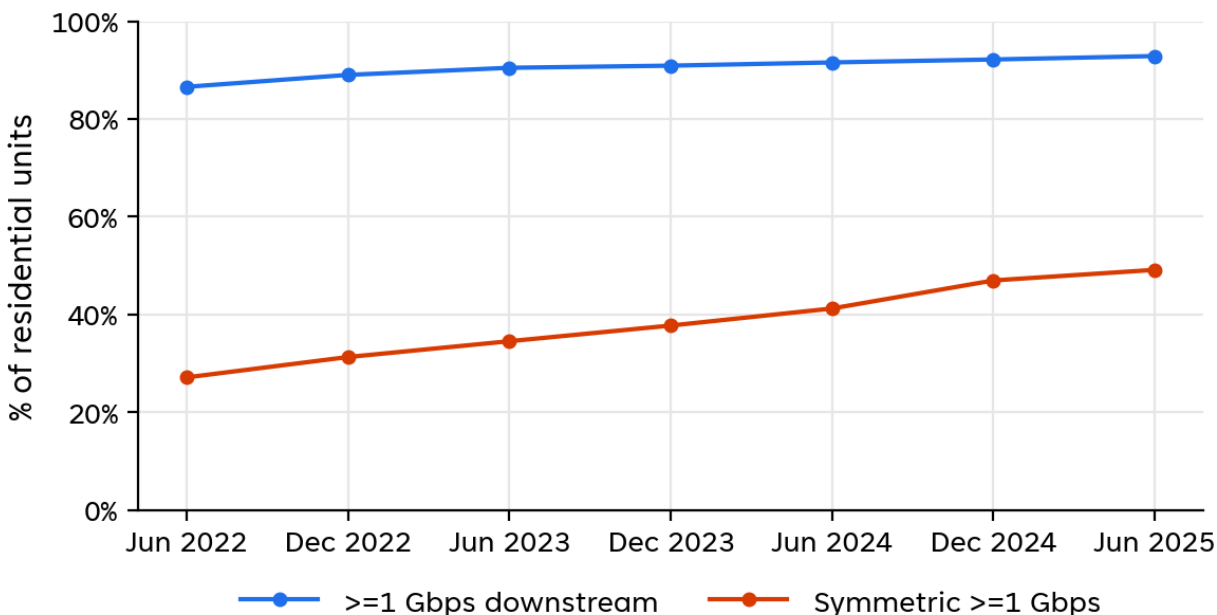


Wider availability of next-generation platforms has been facilitated by maintenance of a light-touch regulatory framework; supportive FCC actions to address key deployment barriers (e.g., pole attachments; siting and ROW access); and removal of outdated rules and requirements, especially those related to POTS. In response, ISPs have continued investing billions to expand and upgrade their networks to meet consumer demand for higher capacity networks that can accommodate greater and more diverse data needs. Consequently, broadband speeds have increased across the board.

The OpenVault data cited above tells only part of the story. Consider, for example, that 92.9% of residential units have access to a connection capable of gigabit downstream

speeds, a figure that has grown from 86.6% in mid-2022. A similar trend has been evident in the availability of symmetric gigabit connections: 49.1% currently have access to such a connection, up from 27.1% in mid-2022.

Figure 7 - Wireline gigabit availability, share of residential units (FCC BDC).



2.1.3 Investment

The wide availability of high-speed internet connectivity via fiber, cable, fixed wireless, and LEO stems directly from sustained investment in this infrastructure by ISPs of all ilk, whose investment has, as noted, come in response to the light-touch regulatory framework for advanced communications services.

Across all providers of wireline (cable, fiber) and wireless broadband, ISPs invested an average of \$90.4 billion per year between 2020 and 2024.⁸ In aggregate, the telecommunications sector has invested over \$2.2 trillion in its networks since 1996.⁹

It is difficult to pinpoint investment solely in the rapid deployment of FWA, but it is closely aligned with upward trends in wireless infrastructure investments, which capture spending

⁸ 2024 Broadband Capex Report, Oct. 2025, U.S. Telecom, <https://ustelecom.org/wp-content/uploads/2025/10/2024-Broadband-Capex-Report.pdf>.

⁹ Id.

on towers and related inputs. WIA estimates that investment in wireless infrastructure, including FWA, amounted to about \$65 billion in 2025.¹⁰

Similarly, it is difficult to untangle investments in LEOs by firms like SpaceX, where capital expenditures in one aspect of the business (e.g., rockets) directly impact and support the ability of another aspect of the business (e.g., Starlink satellites). However, it appears that SpaceX may have invested at least \$8 billion in these related activities in 2025.¹¹

All told, capital expenditures by broadband ISPs in the U.S. broadband market remain among the highest across all major segments of the economy.¹²

2.1.4 Competitive Dynamics

Data show significant competition among ISPs of all types in the broadband sector:¹³

- 52.0% of residential units can choose ≥ 2 wireline ISPs at 100/20 Mbps.
- 74.9% can choose ≥ 2 broadband options across wireline + FWA (both at 100/20 Mbps).
- 93.3% can choose ≥ 2 options across wireline + FWA (100/20 Mbps) + 5G mobile (35/3 Mbps).
- 98.6% can choose ≥ 2 options across wireline + FWA (100/20 Mbps) + 5G mobile (35/3 Mbps) + LEO (100/20 Mbps).

These figures highlight two important competitive trends in the U.S. communications space vis-à-vis broadband access.

First, increased convergence has led to ISPs once separated by discrete market boundaries – e.g., cable, telco, wireless, etc. – consciously eschewing those borders in the race to provide as much as possible of the constant connectivity that consumers crave. This has led, for example, to cable companies becoming mobile carriers; telecom companies

¹⁰ *Wireless Infrastructure by the Numbers: 2025 Key Industry Statistics*, WIA (2026), https://8967849.fs1.hubspotusercontent-na1.net/hubfs/8967849/WIA_WirelessInfrastructureByTheNumbers25_Compressed.pdf.

¹¹ See, e.g., Aditya Soni and Sayantani Ghosh, *At SpaceX, AI is Burning Cash That Starlink Earns*, April 24, 2026, Reuters, <https://www.reuters.com/business/finance/spacex-ai-is-burning-cash-that-starlink-earns-2026-04-24/> (noting that “In 2025, the AI division - home to xAI - accounted for 61% of the consolidated company's \$20.74 billion total capital spending,” which suggests that much of the remaining 39% in capex, or about \$8 billion, went toward core offerings like rockets and satellites).

¹² See, e.g., Michael Mandel and Andrew Fung, *Investment Heroes 2025*, Progressive Policy Institute (Sept. 2025), https://www.progressivepolicy.org/wp-content/uploads/2025/09/PPI_Investment-Heroes-2025.pdf.

¹³ ACLP processing of National Broadband Map Fixed Broadband Deployment Data as of 2025-06-30.

launching FWA; once purely mobile companies entering the fiber business; and many ISPs partnering with LEO providers to further the reach of their networks.

- Telcos like AT&T offer fiber, mobile, and FWA in many markets. In support of nationwide connectivity, AT&T has committed to investing \$250 billion over the next five years to bolster these offerings.¹⁴
- T-Mobile, which for many years operated only in the mobile telephony and data spaces, has expanded its offerings rapidly in the last few years. It has been among the leaders in grabbing FWA market share, and it is currently in the process of building a significant fiber footprint via a growing array of joint ventures with private firms.¹⁵
- Charter and Comcast, the two largest cable ISPs in the country, also offer mobile service as MVNOs. They have been acquiring mobile customers at a very robust rate, oftentimes outpacing customer additions by AT&T, T-Mobile, and Verizon.¹⁶

FWA, which leverages 5G networks to deliver in-home service, is popular with customers. This mixture of mobile networks and in-home connectivity provides yet another compelling example of the rapid erasure of the bright lines that once separated communications market segments.

Second, the rapid rise in the availability and robustness of broadband via LEO has further disrupted the competitive dynamics of the industry. Some have sought to diminish the capabilities of LEO, much like some tried to do when FWA first emerged. In reality, LEO has proven to be a viable competitor in certain contexts¹⁷ and has signaled its commitment to

¹⁴ AT&T Announces \$250 Billion Commitment to Advance U.S. Connectivity, March 10, 2026, AT&T, <https://about.att.com/story/2026/att-announces-250-billion-commitment.html>.

¹⁵ See, e.g., Catherine Sbeglia Nin, *T-Mobile US Outpaces Rivals as Broadband Becomes New Battleground*, Feb. 12, 2026, RCR Wireless, <https://www.rcrwireless.com/20260212/business/us-telcos-broadband>.

¹⁶ See, e.g., Jeff Baumgartner, *Cable's Mobile Share Could Grow 'Dramatically' in 2026 – Analyst*, Jan. 8, 2026, Light Reading, <https://www.lightreading.com/cable-technology/cable-s-mobile-gains-could-grow-dramatically-in-2026> (citing data from MoffettNathanson).

¹⁷ See, e.g., Jeff Baumgartner, *About 20% of Starlink Subs are Coming from Cable – Study*, May 13, 2026, Light Reading, <https://www.lightreading.com/satellite/about-20-of-starlink-subs-are-coming-from-cable-study> (citing a study from New Street Research, which observed that most of Starlink's 3-4 million U.S. subscribers are likely coming from "peripheral broadband players" and are "mostly based in rural markets with limited access to wired broadband options").

building market share,¹⁸ as well as winning a sizeable share of BEAD grants to support further growth.¹⁹

Taken together, these competitive dynamics have fueled the expansion of broadband via an array of platforms at different speeds and price points across every part of the country. These are leading indicators of a healthy marketplace and should be explored at length by the Commission in its report.

2.1.5 Prices

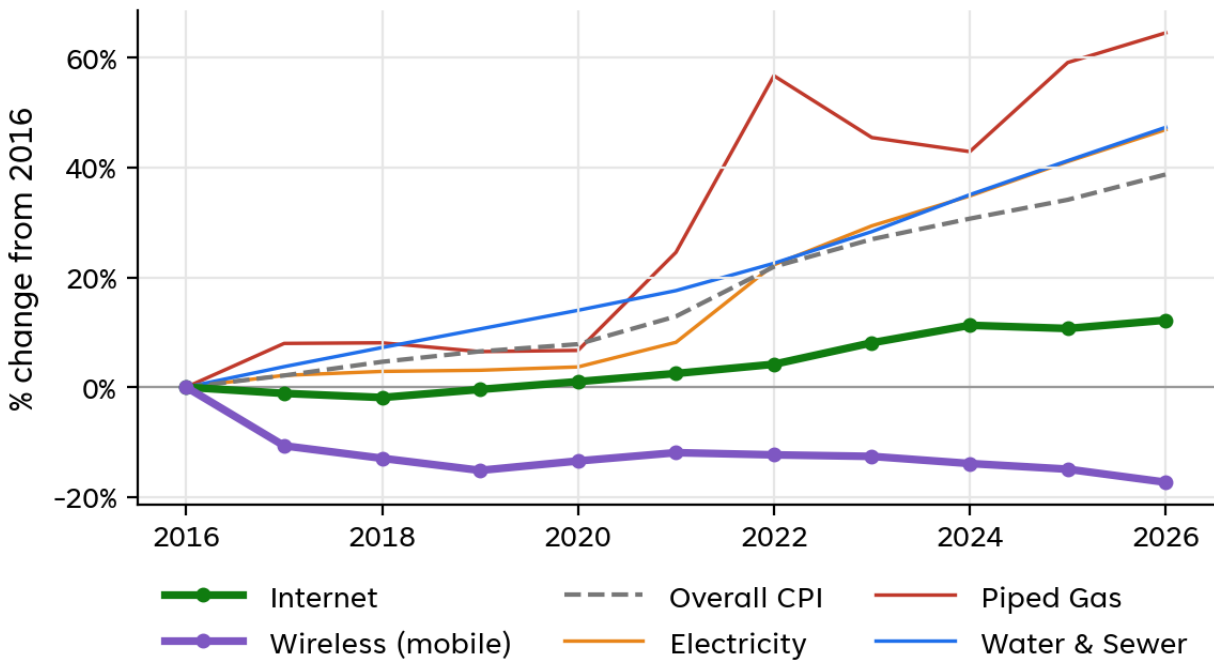
Over the last decade, the competitive dynamics discussed above have translated into lower prices for both in-home and mobile broadband service. Specifically, growth in prices for both kinds of service has been much lower than that of overall consumer price inflation, meaning that both in-home and mobile internet service has become cheaper in “real” terms (i.e., a smaller proportion of a given household’s expenditures).²⁰

¹⁸ See, e.g., Michael Kan, *Starlink Drops Price as Low as \$29/Month to Win Over New Users*, May 5, 2026, PC Mag, <https://www.pcmag.com/news/starlink-drops-price-as-low-as-29month-to-win-over-new-users>; cf. Michael Kan, *Starlink Raises Prices, Adding \$5 to \$10 to its Monthly Plans*, May 16, 2026, PC Mag, <https://www.pcmag.com/news/starlink-raises-prices-adding-5-to-10-on-monthly-plans>.

¹⁹ See, e.g., Alex Karras and Michael Santorelli, *From BEAD to Buildout: Comparing BEAD Awards to ISP Footprints*, March 5, 2026, Broadband Expanded, <https://broadbandexpanded.com/posts/beadfccprovidermatch>.

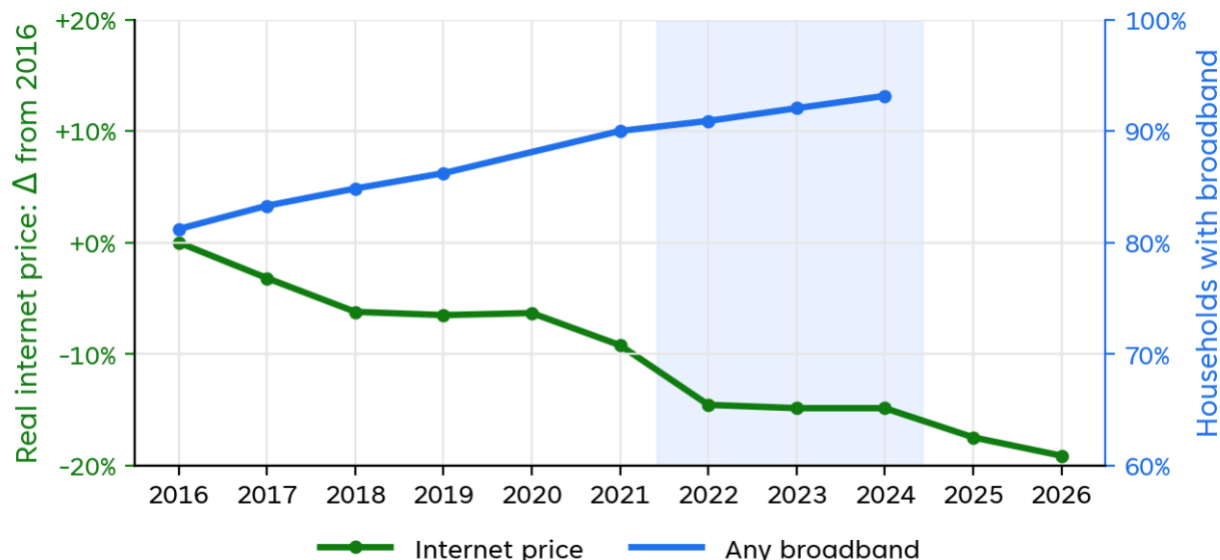
²⁰ Numerous analyses confirm this trend. See, e.g., Arthur Menko, *2026 Broadband Pricing Index*, U.S. Telecom (May 2026), <https://ustelecom.org/wp-content/uploads/2026/05/2026-USTelecom-Broadband-Pricing-Index.pdf>.

Figure 8 - Cumulative change in nominal consumer prices, 2016 baseline (BLS CPI-U) (not adjusted for inflation)



Though a boon to broadband subscribers, lower real prices have not fully closed the gap in adoption rates among lower income households and other under-adopting segments. Indeed, as depicted in Figure 9, below, broadband adoption barely budged when (1) broadband prices decreased when adjusted for overall inflation, (2) generous subsidies were available via EBB and ACP, and (3) most major ISPs made available low-cost offerings that, when combined with an ACP or EBB subsidy, made broadband free for qualifying customers (most major ISPs continue to offer these low-cost packages to qualifying customers).

**Figure 9 - Internet price²¹ vs. adoption, with EBB/ACP era shaded (BLS CPI-U, ACS 1-Year)
(prices adjusted for inflation)**



It is critical that the FCC memorialize these dynamics in its competition report to counter false narratives put forward by some, who continue to argue that broadband is too expensive (it isn't; prices have barely grown, and have decreased when adjusting for inflation) and thus unaffordable to many.²² This explicit linkage of price and affordability does not reflect reality and overlooks substantial data and commentary showing that the primary barrier to broadband adoption remains non-adopters not seeing high-speed internet subscription as relevant and worthwhile.²³

2.2 Mobile

Robust competition, sustained investment, strong consumer demand, and vibrant innovation also characterize the market for mobile broadband services in the U.S.

²¹ In this chart, household internet price is adjusted for overall inflation (i.e., shown in “real” terms), whereas the prior chart shows prices in “nominal” (i.e., not adjusted for inflation) terms.

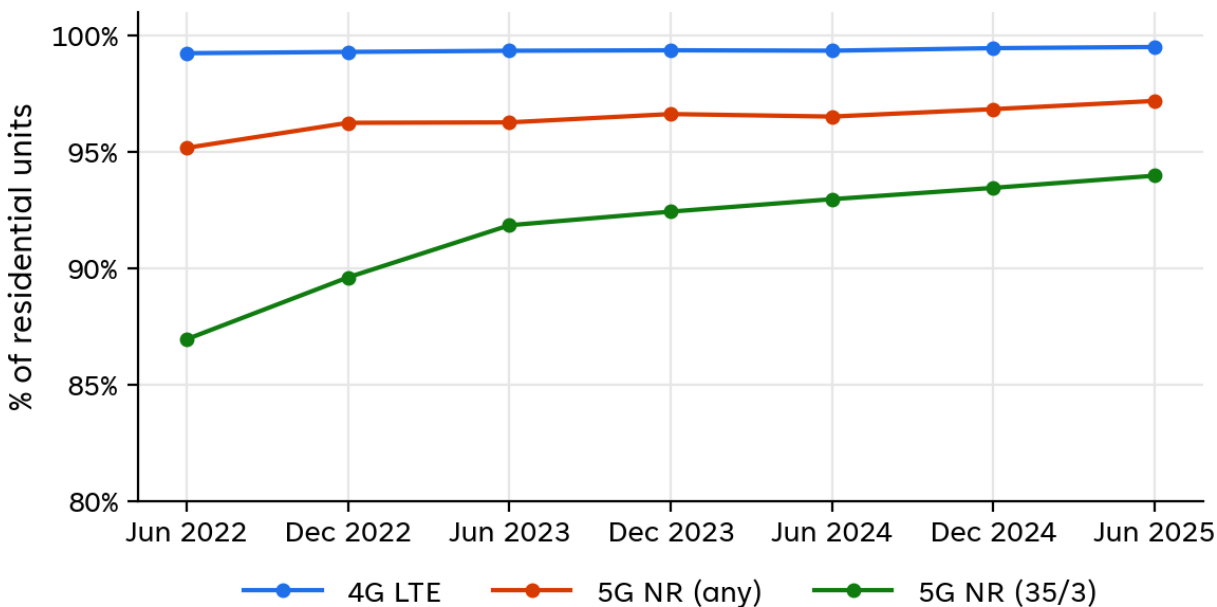
²² See, e.g., *Comments of the Benton Institute for Broadband & Society* (May 21, 2026), GN Docket No. 26-78. See also Alex Karras, *Broadband Prices Didn't Really 'Increase' For Consumers in 2025*, Jan. 13, 2026, *Broadband Expanded*, <https://broadbandexpanded.com/posts/bentonpricepiece> (countering one such argument).

²³ See, e.g., Michael Santorelli, *Why It's Time to Get Over the Broadband Affordability Fixation*, Sept. 26, 2024, *Forbes*, <https://www.forbes.com/sites/washingtonbytes/2024/09/26/why-its-time-to-get-over-the-broadband-affordability-fixation/> (“Affordability Fixation”).

2.2.1 Availability

High-speed mobile broadband access delivered over 4G and 5G networks is available to most Americans. Indeed, 4G networks are near-ubiquitous, and 5G networks have come to blanket the country very quickly in response to significant demand for seamless connectivity and policies that facilitated needed investment.

Figure 10 - Mobile broadband availability by tier, share of residential units (FCC BDC).



2.2.2 Consumer Adoption & Utilization

Consumers have long adopted smartphones and used mobile broadband at very high rates.

- In a country of about 342 million people,²⁴ the FCC reports that, by the end of 2024, there were some 390 million mobile voice telephone subscriptions, most of which also enable internet access.²⁵
- Pew reports that 98% of adults own a cellphone and 91% own a smartphone.²⁶ Cellphone ownership plateaued about a decade ago after growing consistently since

²⁴ U.S. and World Population Clock, U.S. Census Bureau, <https://www.census.gov/popclock/>.

²⁵ Voice Telephone Services: Status as of December 31, 2024, at Table 4, FCC (Feb. 2026), <https://docs.fcc.gov/public/attachments/DOC-418460A1.pdf>.

²⁶ Mobile Fact Sheet, Pew, <https://www.pewresearch.org/internet/fact-sheet/mobile/>.

2005. Smartphone ownership, though, has grown exponentially, rising from 31% in 2011 to 91% in 2025.²⁷

- Pew also reports that 16% of adults are “smartphone only” when it comes to accessing the internet.²⁸ This figure has remained relatively consistent over the last decade, strongly suggesting that this share of the population views mobile broadband as a viable substitute for fixed broadband.
- The preference for mobile broadband can also be seen in how most people used their ACP subsidy when the program existed. USAC reports that nearly 56% of ACP enrollees used their subsidy on a mobile broadband subscription, compared to 43% who used it on a fixed connection.²⁹
- Mobile broadband speeds are competitive with fixed broadband. Ookla reports that median mobile broadband speeds in April 2026 were 210/11 Mbps, compared to 308/57 Mbps for fixed.³⁰
- Data consumed by mobile broadband users has grown by 35% each year for the last several years.³¹ On average, smartphone users consume about 25 GB of data each month, a figure expected to nearly double in the next few years as AI and other data-hungry services become more widely used.³² Most mobile data is offloaded to Wi-Fi networks, with some customers offloading as much as 96% of mobile traffic to Wi-Fi when at home and 88% when away from home.³³

²⁷ Id.

²⁸ Id.

²⁹ *Additional ACP Data*, USAC, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/additional-acp-data/>.

³⁰ *Speedtest Global Index: United States Median Country Speeds Updated April 2026*, Ookla, <https://www.speedtest.net/global-index/united-states>.

³¹ *2025 Annual Survey Highlights*, CTIA, <https://api.ctia.org/wp-content/uploads/2025/09/2025-Annual-Survey-Highlights.pdf>

³² *Mobile Data Traffic Outlook*, Ericsson, <https://www.ericsson.com/en/reports-and-papers/mobility-report/dataforecasts/mobile-traffic-forecast>.

³³ Rupert Bapty et al., *Wi-Fi Drives Smartphone Data Consumption in the U.S., But Trends Vary Across Operators*, Oct. 31, 2024, OpenSignal, <https://insights.opensignal.com/2024/10/31/wi-fi-drives-smartphone-data-consumption-in-the-us-but-trends-vary-across-operators>.

2.2.3 Investment

To enable these consistent gains in speed, availability, and bandwidth, the U.S. mobile industry has invested over \$30 billion per year on average over the last decade to bolster and extend wireless networks.³⁴

These investments are being supplemented in a variety of ways. For example, each of the major wireless carriers – AT&T, T-Mobile, and Verizon – has invested significantly in deploying FWA across much of their wireless footprint. At the same time, as mobile services become more important to the business model for cable, these service providers are continuing to invest in bolstering their Wi-Fi offerings, which, as previously noted, are used to offload a substantial amount of mobile customer data.³⁵

2.2.4 Competitive Dynamics

Taken together, those offering mobile broadband services of all kinds continue to invest significant risk capital in extending and augmenting networks leveraging both licensed and unlicensed spectrum, providing customers with a menu of choices at varying price points.

Much like FWA has disrupted the fixed broadband segment, the entrance of cable MVNOs into the mobile broadband space has upended this market. In 2025, cable MVNOs “accounted for 45% of total industry postpaid phone net additions, more than any facilities-based carrier and approaching a majority share of growth.”³⁶

The share of the population with access to at least 3, and sometimes 4 or 5, 4G or 5G providers has grown substantially in the last few years.

- As of June 2025, 93.5% of residential units can subscribe to a 4G or 5G connection from all three major wireless carriers (AT&T, T-Mobile, and Verizon).
- 75.3% can subscribe to a 4G or 5G connection from all three major wireless carriers and at least one cable MVNO wireless service.³⁷

³⁴ 2025 Annual Survey Highlights.

³⁵ See, e.g., Jeff Baumgartner, *Wireless Now Comcast’s Top Priority, CEO Says*, May 14, 2026, Light Reading, <https://www.lightreading.com/cable-technology/wireless-now-comcast-s-top-priority-ceo-says>.

³⁶ XJ Wang, *The Great Convergence: The State of US Wireless Competition*, Feb. 6, 2026, Light Reading, <https://www.lightreading.com/wireless/the-great-convergence-the-state-of-u-s-wireless-competition>.

³⁷ This calculation uses the availability of wireline service from an MVNO-operating cable provider as a proxy for availability of the MVNO service; ISPs do not report availability of such service to the BDC.

- Looking strictly at the fastest 5G speed tier reported in FCC data, some 52.5% of households have a 5G 35/3 connection available from all three major wireless carriers.³⁸

Intense competition for customers has furthered longstanding innovation in service plan offerings and price. Foremost among these has been the rapid move towards unlimited postpaid plans. About two-thirds of mobile customers have unlimited plans.³⁹ Even so, price competition across all categories of users is evident in light of “razor-thin margins” at most wireless carriers, increasing churn rates across most platforms, and an increased focus by many ISPs on bundling fixed and mobile offerings to facilitate and monetize more of the online experience.⁴⁰

Competitive intensity in the mobile space is also evident in how carriers are responding to the potential competitive threat posed by LEO ISPs like Starlink. Many of the largest mobile carriers have struck deals with LEOs to fill in gaps in mobile broadband coverage, partnerships that were facilitated by FCC action to allow LEOs to engage in such behavior.⁴¹ At the same time, mobile carriers have begun to explore ways to ensure that multiple LEOs are capable of competing for these kinds of partnerships and so that mobile broadband coverage is maximized as much as possible.⁴² It remains theoretically possible for a LEO to offer mobile broadband and voice service, but no entity has yet expressed interest in doing so directly to customers.⁴³ Even so, the mere potential of that happening appears to be stoking significant competitive responses from carriers.

³⁸ The FCC requires mobile carriers to file coverage at preset tiers (4G LTE at 5/1 Mbps; 5G NR at either 7/1 or 35/3 Mbps), not at observed speeds. Real-world speeds are often higher than the tier the carrier filed.

³⁹ Max McCaskill, *American Families Waste \$2,200/Year on Cellphones. How Much Are You Overpaying?*, Dec. 12, 2025, WhistleOut, <https://www.whistleout.com/CellPhones/Guides/mobile-overspending-report>.

⁴⁰ See, e.g., John Fletcher, *US Broadband Monthly Churn Rate Hits 1.3%*, Feb. 8, 2026, S&P Global, <https://www.spglobal.com/market-intelligence/en/news-insights/research/2026/02/us-broadband-monthly-churn-hits-one-point-three-percent>; Michelle Donegan, *AT&T Banks on Convergence to Halt Wireless Churn*, Jan. 29, 2026, Light Reading, <https://www.lightreading.com/wireless/at-t-banks-on-convergence-to-halt-wireless-churn>.

⁴¹ For an overview, see *Satellite Direct-to-Cellular (D2C) Service: Emergence, Use Cases, and Considerations for Congress*, Congressional Research Service (April 2026), https://www.everycrsreport.com/files/2026-04-07_IF13198_e1abd54b5aca2549f8c369bf9310fbd75c624555.pdf.

⁴² See, e.g., Monica Allevan, *AT&T, T-Mobile & Verizon to Form JV for Satellite Dead Zone Coverage*, May 14, 2026, Fierce, <https://www.fierce-network.com/wireless/att-t-mobile-and-verizon-form-jv-satellite-dead-zone-coverage>.

⁴³ Cf. Roger Entner, *Starlink’s Path to Mobile is a Checklist, and Most Boxes are Already Checked*, May 19, 2026, Light Reading, <https://www.lightreading.com/wireless/starlink-s-path-to-mobile-is-a-checklist-and-most-boxes-are-already-checked>.

2.2.5 Prices

Intense competition in the mobile market across a growing number of providers – especially among legacy carriers and cable MVNOs – has placed downward pressure on prices. Indeed, as noted above, prices for all communications services have decreased in real (inflation-adjusted) terms.

Recent data from CTIA supports this dynamic in the mobile space. For example, CTIA found that “The Consumer Price Index (CPI) shows the overall real cost of wireless service declined 6.6 percent last year and is down more than 41 percent over the last ten years.”⁴⁴ In addition, the “effective price per gigabyte of mobile data dropped by over 21 percent last year and is down 40 percent over the last two years.”⁴⁵ All told, “the average wireless bill represents only 1.7 percent of Americans’ spending, and that share has shrunk over 15 percent since 2020.”⁴⁶

2.3 Voice

The market for voice services has undergone perhaps the most fundamental change of any segment in the U.S. communications sector.

At the turn of the millennium, most Americans had a POTS line at home and used it to make most of their calls. Cellphones were rapidly becoming more prevalent, and VoIP was nascent, but U.S. households still relied primarily, if not exclusively, on POTS. However, the number of POTS lines in service peaked in 2000; mobile telephone lines surpassed POTS in 2004; and by 2013, the number of VoIP lines surpassed POTS.⁴⁷ Currently:

- There are more mobile telephone lines in service – 390 million – than people in the U.S.
- The number of POTS lines has plummeted to 16.4 million, of which less than half are residential lines (the majority are business lines).⁴⁸

⁴⁴ 2026 Wireless Affordability Tracker, CTIA (April 2026), <https://api.ctia.org/wp-content/uploads/2026/04/2026-Wireless-Affordability-Tracker-Update.pdf>.

⁴⁵ Id.

⁴⁶ Id.

⁴⁷ These data are drawn from FCC Local Telephone Competition Reports and Voice Telephone Services Reports released over the last few decades.

⁴⁸ *Voice Telephone Services: Status as of December 31, 2024* at Figure 2.

- Less than 1% of U.S. households rely on a POTS line for voice service.⁴⁹ Meanwhile, nearly 79% of households are wireless-only.⁵⁰
- There are currently about 63.5 million VoIP lines in service.⁵¹

These data, though, tell only part of the story. Mobile voice subscriptions keep rising, but VoIP lines in service have been decreasing since 2022, dropping from 68 million to 63.5 million in just a few years.⁵² This trend aligns with the observation made in the previous section – that there is evidence of a mobile preference among many consumers.

This is also seen in the myriad non-voice ways in which consumers choose, and oftentimes prefer, to communicate.

- Americans prefer messaging over voice calls.⁵³
- Voice calls continue to be popular, with the total number of minutes spent on the phone continuing to rise each year.⁵⁴
- Video calls are increasingly popular.⁵⁵

Many of these kinds of communications travel primarily, if not exclusively, over data networks, making them more data or information services than traditional telecom or telephone services.

Viewed in this broader context, competition in “voice” services is nearly limitless, and prices for many of these offerings are very low and, in many cases, free or bundled with a smartphone and/or data plan. As such, consumers have a universe of choices to meet their every “voice” communications need.

From a competition standpoint, these trends support continued efforts by the FCC to revisit and remove the myriad POTS-era rules and requirements that no longer have a place in today’s advanced communications marketplace. Doing so would equalize regulatory

⁴⁹ Stephen J. Blumberg, Ph.D., and Julian V. Luke, *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2024*, at Table 1, CDC (June 2025), <https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless202506.pdf>.

⁵⁰ *Id.*

⁵¹ *Voice Telephone Services: Status as of December 31, 2024*.

⁵² *Id.*

⁵³ See, e.g., *How Americans Communicate in 2026: The Rise of Messaging and AI Trends*, Feb. 26, 2026, YouGov, <https://yougov.com/en-us/articles/54176-how-americans-communicate-in-2026-the-rise-of-messaging-ai-trends> (“*How Americans Communicate in 2026*”).

⁵⁴ *2025 Annual Survey Highlights*.

⁵⁵ *How Americans Communicate in 2026*.

treatment across every segment and further a tech-neutral approach to policymaking, which is critical given the rapidly disappearing lines that once separated these segments. Allowing POTS-era rules to persist at any level does not reflect consumer utilization patterns and only results in forced investment in infrastructure for which there is dwindling demand.⁵⁶

2.4 Observations & Takeaways

The analyses included in this section support the following observations and takeaways about competition in the provision of broadband, mobile, and voice services in the U.S.

First, these services have thrived under a light-touch regulatory framework. Congress explicitly called for advanced communications and information services like mobile and broadband to be minimally regulated at the national level.⁵⁷ Some FCCs unwisely sought to apply the heavy hand of POTS-like regulation to fixed and mobile broadband. Fortunately, this approach was finally struck down in court, preserving and reiterating the core notion of minimalist regulation of these services.⁵⁸ Notwithstanding these obstacles, and in response to unceasing consumer demand, ISPs have invested trillions in deploying and continuously upgrading networks of every kind, yielding a vibrantly innovative and fiercely competitive market.

The FCC has applied many of these lessons in its continuing efforts to roll back and remove outdated regulations, especially those related to the provision of POTS. The ACLP has long argued for the swift (and responsible) retirement of the public switched telephone network⁵⁹ and the removal of legacy POTS rules at every level.⁶⁰ The Commission should continue with and expand its “Delete, Delete, Delete” efforts to remove all unnecessary and burdensome POTS rules and make similar progress towards regulatory modernization in related dockets. It should also formally classify VoIP as an information service to prevent states from regulating this innovative offering like POTS.

Second, the data make clear that the boundaries that once segmented the communications marketplace into discrete siloes are quickly becoming an anachronism. Notions like the “cable company” and “telephone company” and “wireless carrier” are no longer relevant. Nowadays, ISPs large and small offer bundles of voice, data, and video. Many of the larger

⁵⁶ See, e.g., Charles Davidson and Michael Santorelli, *Federalism in Transition: Recalibrating the Federal-State Regulatory Balance in the All-IP Era*, 29 Berkeley Tech. L. J. 1131 (2014), https://btlj.org/data/articles2015/vol29/29_2/29-berkeley-tech-l-j-1131-1204.pdf (“Federalism in Transition”)

⁵⁷ *State Regulation of Advanced Communications Services*.

⁵⁸ *Id.*

⁵⁹ See, e.g., *Federalism in Transition; State Regulation of Advanced Communications Services*.

⁶⁰ *State Regulation of Advanced Communications Services*.

ISPs offer mobile service, too. At the same time, consumers are picking and choosing from a variety of connectivity options to meet their unique needs. A common thread, though, for most consumers is the need for fast and reliable internet speeds wherever they are. A combination of wireline, mobile, and Wi-Fi, and, in a growing number of cases, satellite, are providing this blanket of connectivity. Regulatory frameworks must adjust accordingly.

Third, many consumers continue to express a preference for mobility. Mobile broadband is the most prevalent internet-access platform; a stable percentage (around 16%) of the population rely solely on this technology for internet access, and most use it for voice communications; and most ACP recipients used their subsidies on mobile service. Consumers are also embracing 5G in-home FWA in large numbers, positioning it as another competitor of wireline broadband. And LEO is quickly becoming a robust platform competing for customers in a discrete segment of the market. The Commission should acknowledge these dynamics in its report.

Fourth, the Commission should seek to untangle the price/affordability conflation lest it undermine the light-touch regulatory approach and invite states and localities to intervene in the market.⁶¹ Broadband prices have barely grown over the last decade, rising at a much slower pace than inflation. A variety of sources has found that customers are paying less for more capacity across most segments of the market. Most major ISPs offer low-cost plans for qualifying low-income households. And yet, broadband adoption rates have stagnated, suggesting there are issues other than price, notably perceived relevance and

⁶¹ Two examples from New York illustrate this point. First, several years ago, the state adopted a first-in-kind broadband affordability law that requires ISPs operating in the state to offer qualifying low-income customers a low-cost service plan at a price-point enshrined in statute. As the ACLP has pointed out elsewhere, this law was unnecessary given (1) wide availability of similar low-cost offerings provided organically by ISPs and (2) data showing clear downward trends in broadband prices. Nevertheless, the law remains in place and represents the only broadband rate regulation framework of its kind in the nation. To date, at least one ISP has exited the New York market because of this law. For further discussion and analysis, see *Comments of the ACLP Regarding Case No. 22-M-0313 – In the Matter of the Commission's Broadband Study and Mapping Pursuant to the Broadband Connectivity Act*, N.Y. PSC (filed April 10, 2026), <https://broadbandexpanded.com/files/policy/ACLP%20-%20Comments%20to%20NY%20PSC%20re%20Docket%2022-M-0313%20-%20April%2010%202026.pdf>.

Second, in New York City, there are increasing calls for the city to build a municipal fiber network to provide lower cost broadband service to customers across the five boroughs. As the ACLP has discussed at length elsewhere, this is the latest in a long line of examples of cities seeking to justify expensive, risky, and unnecessary interventions into the broadband marketplace by arguing, without any basis in data, that a public broadband offering is the only way to drive down prices enough to boost broadband adoption rates. As noted in these comments and elsewhere, this is not how broadband adoption works. Demand-side challenges require demand-side solutions. For further discussion and analysis, see Michael Santorelli and Alex Karras, *Why New York City Should Not Build a Municipal Broadband Network*, June 16, 2026, Broadband Expanded, <https://broadbandexpanded.com/posts/nycmunipart1>.

need, hindering take-rates. If the Commission states these facts clearly and persuasively, it will help to reorient demand-side conversations in a more solution-focused manner.⁶²

Fifth, policy discussions and policymaking must be informed by the most accurate and precise data as possible. Much of the analysis in these comments leverages the latest BDC data, as well as refinements provided by state broadband offices. Census and BLS data are also updated regularly and offer interesting insights into broadband-related issues. To its credit, the Commission under the leadership of Chairman Carr has committed itself to data-driven policymaking. The FCC's forthcoming Competition Report should be informed as much as possible by these data.

3. Policy Recommendations to Bolster Competition & Innovation in the U.S. Communications Market

Even though competition in the broadband, mobile, and voice segments is robust, with consumers benefiting immensely from numerous choices, faster speeds, and lower prices, there remain several areas where Commission action could further these gains. In addition, it remains critical that this Commission and future Commissions be reminded of the good, bad, and ugly of certain policy interventions by federal, state, and local actors. This section offers recommendations across these fronts.

First, the FCC should do all that is within its authority and ability to maintain the light-touch national regulatory framework for broadband, mobile, and advanced voice services. This might be easier said than done in a post-*Chevron* world, where agency action, especially those addressing major questions of economic and social importance, must be tied to specific grants of authority from Congress.⁶³

State-level regulation of advanced communications services of all ilk is on the rise.⁶⁴ Several states – California, Connecticut, and New York, for example – have begun to regulate some or all these services (e.g., California regulates broadband and VoIP services; New York regulates broadband prices). Others – e.g., Illinois, Rhode Island – are actively considering whether to follow in kind. State-level regulation of broadband, mobile, and VoIP is harmful because it creates an inefficient patchwork of rules that raises transaction costs, which are ultimately passed on to consumers, and that diverts capital expenditures away from highly regulated states. This is not theoretical – an ISP opted to leave the New York marketplace rather than comply with the state's broadband rate regulation law.⁶⁵

⁶² See, e.g., *Affordability Fixation*.

⁶³ *State Regulation of Advanced Communications Services*.

⁶⁴ *Id.*

⁶⁵ See, e.g., Emily Barnes, *AT&T Ends Broadband Service in NY as Affordable Broadband Act Begins*, Jan. 24, 2025, LoHud.com, <https://www.lohud.com/story/news/2025/01/24/att-ends-broadband-service-new-york-as-affordable-broadband-act-begins/77922989007>.

There also remains uncertainty about the extent to which the Commission can act on several other critical fronts, notably USF reform and establishing a successor to ACP.⁶⁶

In certain instances, it may be the case that Congress must speak before the Commission can act. As such, the Commission should support an update of the Communications Act to help ensure that the successful light-touch national regulatory framework for advanced communications services remains in place.⁶⁷ This should include clear articulation of FCC authority to preempt state-level broadband regulation of the type discussed above. It is critical that the Commission has the legal tools needed to preempt state actions that are contrary to the interstate nature of broadband networks and that undermine the successful national framework governing advanced communications services like broadband, mobile, and VoIP.

Second, the Commission should continue applying the positive lessons learned from rolling back outdated and unnecessary regulations. This is seen most clearly in the consistent removal – over the course of many FCCs under both Democratic and Republican leadership – of antiquated POTS rules.⁶⁸ This has freed capital to be reinvested in fiber deployment and bolster more advanced voice offerings.⁶⁹ The FCC should pressure the remaining few states that insist on preserving and expanding these rules to competitive offerings to follow its lead in removing them or leverage available regulatory tools to do so itself.⁷⁰

Third, the Commission should continue maximizing its deregulatory, pro-competition push in areas where its authority is robust. This includes:

- *Rapidly settling utility pole disputes involving electric utilities.* The FCC’s Rapid Broadband Assessment Team, coupled with the Commission’s commitment to accelerating dispute resolution involving pole attachments, has created a promising precedent to govern the many disagreements that inevitably arise when ISPs seek

⁶⁶ *State Regulation of Advanced Communications Services. See also ACLP Comments to the USF Working Group*, Sept. 15, 2025, <https://broadbandexpanded.com/files/policy/ACLP%20-%20Comments%20to%20USF%20Working%20Group%20-%20September%2015%202025.pdf> (“ACLP Comments to the USF Working Group”).

⁶⁷ *ACLP Comments to the USF Working Group*.

⁶⁸ Of course, it is ironic that several FCCs have sought to apply Title II POTS-like rules to broadband while seeking to remove them from basic telephone service.

⁶⁹ See, e.g., Eric Fruits and Brian Albrecht, *Paying to Stand Still: Legacy Copper Mandates in a Fiber World*, ICLE Issue Brief (Feb. 2026), <https://laweconcenter.org/wp-content/uploads/2026/02/Copper-Retirement-Economics-v2-2026.pdf>.

⁷⁰ *Reply Comments of the ACLP at New York Law School Regarding Proposed Decision Establishing Regulatory Framework for Telephone Corporations Providing Interconnected Voice Over Internet Protocol (VOIP) Service*, Order Instituting Rulemaking Proceeding to Consider Changes to Licensing Status and Obligations of Interconnected Voice over Internet Protocol Carriers, Rulemaking 22-08-008 (Oct. 25, 2024), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M543/K837/543837606.PDF>.

access to utility poles. These simple (mostly) wooden structures continue to play key roles in broadband deployment, especially in rural areas. As part of the BEAD program, the ACLP estimates that nearly 4 million poles owned by electric utilities of all ilk – IOU, cooperative, municipal – will need to be “touched” in support of aerial fiber deployment.⁷¹ Utilities receiving BEAD funds must submit to the FCC pole regime, so having strong precedents on the books and a streamlined dispute resolution process in place will help to quickly settle what could be an influx of disagreements in the near future.⁷²

- *Addressing the need for more spectrum of all kinds.* There remains considerable debate among stakeholders about whether new spectrum that comes to market should be of the licensed or unlicensed variety. The common thread cutting across these debates, though, is general agreement that vastly more spectrum is needed to support mobile innovation – from supporting 6G deployment, to bolstering and expanding the reach of Wi-Fi and other unlicensed uses. The Commission has done a commendable job to date of (1) agreeing that more spectrum is needed and (2) facilitating the provision of additional resources for both licensed and unlicensed uses. Going forward, the Commission must continue serving as a lead advocate for more spectrum from all available sources, including the federal government and broadcasters.
- *Modernizing space regulations.* The FCC via its Space Bureau has spearheaded numerous forward-looking reforms to existing space policies. Taken together, these support existing efforts to deploy broadband in space and will facilitate market entry by as many firms as possible to assure a competitive market for LEO services and any other innovations that might emerge. It should continue modernizing existing space regulations and adopting new ones to support growth in this segment of the communications marketplace.

⁷¹ Alex Karras and Michael Santorelli, *Lingering Utility Pole Issues Could Raise Costs and Delay BEAD Buildout*, May 12, 2026, Broadband Expanded, <https://broadbandexpanded.com/posts/beatpoles>.

⁷² The ACLP commends the Commission for opening an inquiry into the overall pole attachment framework, which remains fractured and scattershot. The ACLP looks forward to providing comments and analysis in that proceeding under separate cover.