



2023 Preview

Playing Catch Up

Why the FCC is Poised to Move Forcefully on
Telecommunications Policy

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Introduction

Capstone believes the Biden administration and a Democrat-led Federal Communications Commission (FCC) will move forcefully in 2023 on various telecommunications policy issues—notably broadband funding, net neutrality, and Universal Service Fund (USF) reform.

Now that we are through the midterm election cycle and Democrats will control the Senate, President Biden is well-positioned to get nominee Gigi Sohn confirmed as the FCC’s fifth commissioner in early 2023, setting the stage for the commission to finally move on net neutrality and other telecommunications policies.

On the heels of including \$65 billion for broadband-related initiatives in the Infrastructure Investment and Jobs Act (IIJA) in 2021, the administration now will step up the process of setting up programs to distribute this federal funding through various grant and subsidy programs.

We expect that the evolution of the \$42.45 billion Broadband Equity, Access, and Deployment (BEAD) program under the National Telecommunications and Information Administration (NTIA) and the release of funding to support broadband network deployments in late 2024 or 2025 will drive investment decisions by broadband providers in the near term and the forward-looking outlook for both telecommunications companies and their vendor community.

Capstone believes President Biden will successfully get Sohn confirmed as a fifth commissioner by the Senate in 2023, giving Democrats majority control in the FCC.



Source: Nico ElNino via Adobe Stock

A Deeper Look

Federal Support for Internet Service Providers

ISPs Get a Jump on Broadband Funding in 2023	
Winners	Major internet service providers (ISPs) currently deploying fiber in unserved and underserved areas, including Frontier Communications Inc. (FYBR), Lumen Technologies Inc. (LUMN), Charter Communications Inc. (CHTR), and Brightspeed
Losers	Smaller ISPs and rural cooperatives that are more capital-constrained and need federal funding to grow their networks

Capstone believes the FCC's years-long broadband mapping process is a modest positive for companies that are aggressively building out their residential broadband markets in unserved or underserved communities. Their aggressive buildout will help ensure that as states roll out their broadband grant programs in 2024, the neighborhoods and communities where fiber networks are being deployed will be served by fiber-based networks providing well above 100/20 megabits per second (Mbps) network speed. Lumen Technologies Inc. (LUMN), just one of several major internet service providers (ISPs) with aggressive fiber-based capital programs underway, is expected to spend \$1 billion in

2023 to deploy fiber-to-the-home (FTTH) technology.

The broadband maps the FCC is creating will help determine how much of the \$42.45 billion in BEAD program funding states will receive and the specific locations that will be eligible for the funding. BEAD funding will be allocated based on the number of unserved locations each state has relative to others. States, in turn, will distribute the funding to subgrantees to provide service first to unserved locations and then underserved locations. Unserved locations are those that get service below 25/3 Mbps while underserved locations are those that get service slower than 100/20 Mbps.



Source: Ronstik

IIJA Funding for Broadband Service Providers

Investment to Kick into Overdrive in 2025	
Winners	Digital communications infrastructure and equipment vendors such as Bechtel Corp., MasTec Inc. (MTZ), Corning Inc. (GLW), Alcatel-Lucent Teletas Telekomunksyn AS (ALCTL), Clena Corp. (CIEN), Cisco Systems Inc. (CSCO) will benefit once funding is deployed at scale in 2025. To be determined for the provider side.
Losers	Incumbent local exchange carriers (ILECs) operating outdated networks, low-Earth orbit (LEO) satellite companies, including Viasat Inc. (VSAT) and SpaceX, that choose not to bid for funding will lose share once federal funding is deployed at scale starting in 2025

It is our expectation that the \$42.45 billion in Broadband Equity, Access, and Deployment (BEAD) funding provided by the Infrastructure Investment and Jobs Act (IIJA) will start being spent at scale on the deployment of primarily fiber-based broadband networks in late 2024 to early 2025. NTIA is overseeing the program and must first hit a few milestones before the funds can be distributed and spent on broadband deployments. These include:

- NTIA has to wait for the FCC to finish updating its national broadband map (expected on June 30, 2023). Once this is completed, NTIA can allocate BEAD funding based on the number of unserved locations in each state.
- Once states know how much they are eligible to receive, they will develop grant programs for distributing the funding to subgrantees—a process that likely will not be complete before late 2024.
- These subgrantees will be companies, municipal governments, and nonprofits, such as rural utility cooperatives, that will collectively use the funds to deploy broadband in primarily unserved and underserved communities. We expect the subgrantees will start investing in broadband network deployments at scale in 2025 and funding will be fully deployed by 2030.

The \$42.45 billion in funding the NTIA will distribute overshadows the \$6 billion distributed through the FCC's Rural Digital Opportunity Fund (RDOF) and represents the single-largest investment the federal government has made on broadband infrastructure. It also is more than 8x the amount the commission spends on operating or capital subsidies for providers through the USF to help ensure that rural communities have access to an equivalent level of telecommunications service as urban and suburban communities.

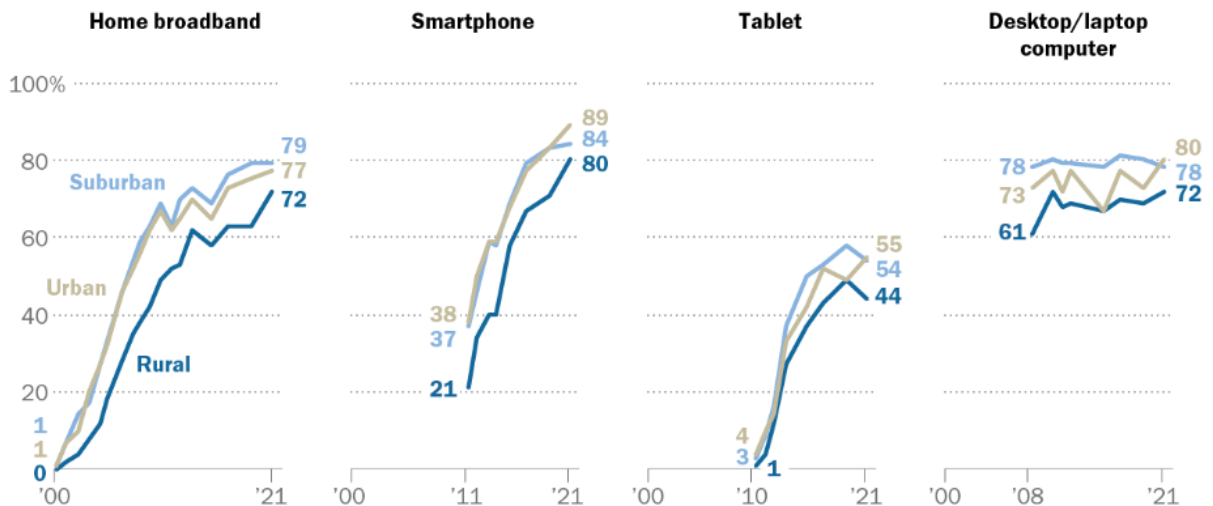
We believe all the funds will be spent by 2030 and the biggest beneficiaries will be ISPs seeking to expand into unserved and underserved communities and vendors providing either engineering and construction services to ISPs or supplying the necessary construction materials and equipment to build these networks. In addition, BEAD funding will be directed primarily at areas that are defined as unserved and underserved. A location is considered unserved if it can only receive broadband service below 25/3 Mbps or it receives service either via unlicensed wireless spectrum or a low-Earth orbit (LEO) satellite company such as Starlink. Underserved locations are those that can only get service slower than 100/20 Mbps.

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Capstone believes the biggest losers from this influx of federal funding will be incumbent local exchange carriers (ILECs) that are operating outdated digital subscriber line (DSL) networks and choose not to bid for funding, rural telecommunications firms operating fixed wireless networks using unlicensed spectrum, and LEO satellite companies. It is unclear at this time exactly which companies are most liable to receive this federal funding, but we would suggest the impact will be focused on states with large rural areas such as Texas, where there are 344,000 locations that can receive service through fixed wireless access and would be eligible for BEAD funding. When the FCC's broadband maps are finalized, we expect that more densely populated states in the Northeast will end up having few BEAD-eligible locations compared to states such as Texas, California, and Oklahoma.

Despite Growth, Rural Americans have Consistently Lower Levels of Technology Ownership than Urbanites and Lower Broadband Adoption than Suburbanites

% of US adults who say they have or own the following



Source: Pew Research Center, survey conducted Jan. 25-Feb. 8, 2021

Democratic-Led FCC Will Take Action on Net Neutrality

Impact of Net Neutrality on Companies	
Winners	Content providers such as Alphabet Inc. (GOOGL) and Netflix Inc. (NFLX)
Losers	Large ISPs such as Verizon Communications Inc. (VZ), AT&T Inc. (T), T-Mobile USA Inc. (TMUS), Comcast Corp. (CMCSA), Charter, Frontier, and Lumen
Future Risks	Adoption of a net neutrality rule and designation of ISPs as common carriers could open broadband providers to future regulatory risk for pricing, business, and network management practices

Capstone believes President Biden will successfully get Sohn confirmed as a fifth commissioner by the Senate in 2023, giving Democrats majority control in the FCC. This will finally allow the commission to undertake rulemakings that have been considered more controversial, including net neutrality, which have not been able to move forward during the past two years because the FCC was deadlocked at a 2-2 tie between Republicans and Democrats. We believe FCC staff has been working behind the scenes, gathering information, meeting with stakeholders, and perhaps even drafting a Notice of Proposed Rulemaking (NPRM), but all these efforts have effectively been in limbo because it takes a majority of commissioners to even get an NPRM approved, much less a final rule.

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Once Democrats are in control of the FCC in 2023, they will undertake either a formal rulemaking process, which could take more than a year to complete, or vote to approve declaratory ruling, reversing the 2018 Restoring Internet Freedom Order and reinstating the 2015 Open Internet Order. The 2015 order originally was approved during the Obama administration. It classified wireless and wireline broadband providers as common carriers under Title II of the Communications Act of 1934 and imposed net neutrality on wireline and wireless broadband providers. Net neutrality effectively bans the paid prioritization, throttling, and blocking of network traffic. (An exception is ISPs may block or throttle traffic to manage their network, but these steps must be nondiscriminatory.) However, the reimposition of net neutrality means ISPs will not be able to give preferential treatment to their affiliated content providers. That makes companies such as Comcast Corp. (CMCSA) losers under net neutrality and unaffiliated content providers such as Netflix Inc. (NFLX) and Alphabet Inc. (GOOGL) winners.

A Democrat-led FCC could prefer to issue a declaratory ruling and bypass a formal rulemaking process, but this would leave the commission open to legal challenges on the grounds that such a move violates the Administrative Procedures Act. We believe the safer route will be for the FCC to undertake a formal rulemaking process that will include a lengthy comment period to ensure that the final rule is robust enough to withstand any potential litigation. We do not view net neutrality as problematic for ISPs given their business and network management practices already align with its basic principle of treating all

network traffic equally. However, finding that broadband providers are common carriers under Title II of the Communications Act potentially exposes ISPs to potential future regulatory risks. In theory, this could include regulating pricing or requiring ISPs to offer wholesale access to all or part of their networks, which could affect other aspects of how broadband providers run their businesses. The 2015 Open Internet Order included provisions granting forbearance on much of Title II, and required only ISPs to abide by the principles of net neutrality. However, there is no reason why the FCC could not impose more onerous regulations in the future, particularly with respect to pricing and network management practices.

Capstone believes there is potential longer-term regulatory risk to ISPs should net neutrality be reimposed.

Capstone believes there is potential longer-term regulatory risk to ISPs should net neutrality be reimposed. However, in the near-to-intermediate term, we believe the only risk is a Democrat-led FCC classifies ISPs as common carriers and imposes a net neutrality regime. Such an order also would cover both wireless and wireline broadband providers and most likely prohibit the zero-rating of data by wireless companies—a practice some carriers are already abandoning.

Democrats Will Cinch the Majority on the FCC with the Likely Confirmation of Gigi Sohn



Current FCC Commissioners: Commissioner Brendan Carr (R), Commissioner Nathan Simington (R), Chairwoman Jessica Rosenworcel (D), and Commissioner Geoffrey Starks (D). Likely future Commissioner: Gigi Sohn
Source: FCC, National Journal

Likely Universal Service Fund Reform

Stabilizing the Universal Service Fund	
Winners	Verizon, AT&T, T-Mobile, and other wireline and other providers of voice service that currently provide 100% of funding for USF
Losers	Unclear at this time, but could include the content companies and other internet-based businesses depending on how broadly the USF's contribution base is expanded
	No specific companies or industries are losers if the USF does end up being funded through an annual appropriation from Congress

In addition, Capstone believes the Universal Service Fund is on a financially unsustainable trajectory and must be reformed. The biggest beneficiaries of such a change would be telecommunications companies such as Verizon Communications Inc. (VZ), AT&T Inc. (T), T-Mobile USA Inc. (TMUS), and Vonage, which provide voice service and are the only companies contributing to the fund. The USF collects about \$9 billion annually and provides telecommunications service in rural areas, consumer subsidies for impoverished households, telehealth services in rural areas, and broadband service in schools and libraries.

Litigation is pending in the US Court of Appeals for the Fifth Circuit challenging the constitutionality of the USF. The plaintiff in this case, Consumers Research, alleges that Congress violated the Constitution by delegating legislative authority to the FCC to raise and spend funds through the USF, and the FCC, in turn, delegated this authority to a private entity—the Universal Service Administrative Company (USAC). The lawsuit alleges that funds raised

through the USF are taxes and the delegation to raise taxes and spend money in an unlimited amount violates Article I, Section 1 of the US Constitution, which vests taxing authority upon Congress. Should this litigation prevail, it will cause an immediate financial crisis for every program that receives funding through the USF and force Congress to pass emergency legislation for funding.

The USF is paid for with contributions from telecommunications providers. This cost is passed on to consumers via a line-item charge that is added to their monthly bills. It is levied on traditional landline voice service and wireless voice and voice over Internet Protocol (VoIP) service. The amount carriers must contribute to the USF is based on the revenues they generate from interstate and international voice calls. Although this fee is passed on to consumers, it can be levied only on interstate and international voice calls and intrastate calls, while services such as text messaging and data are exempt.

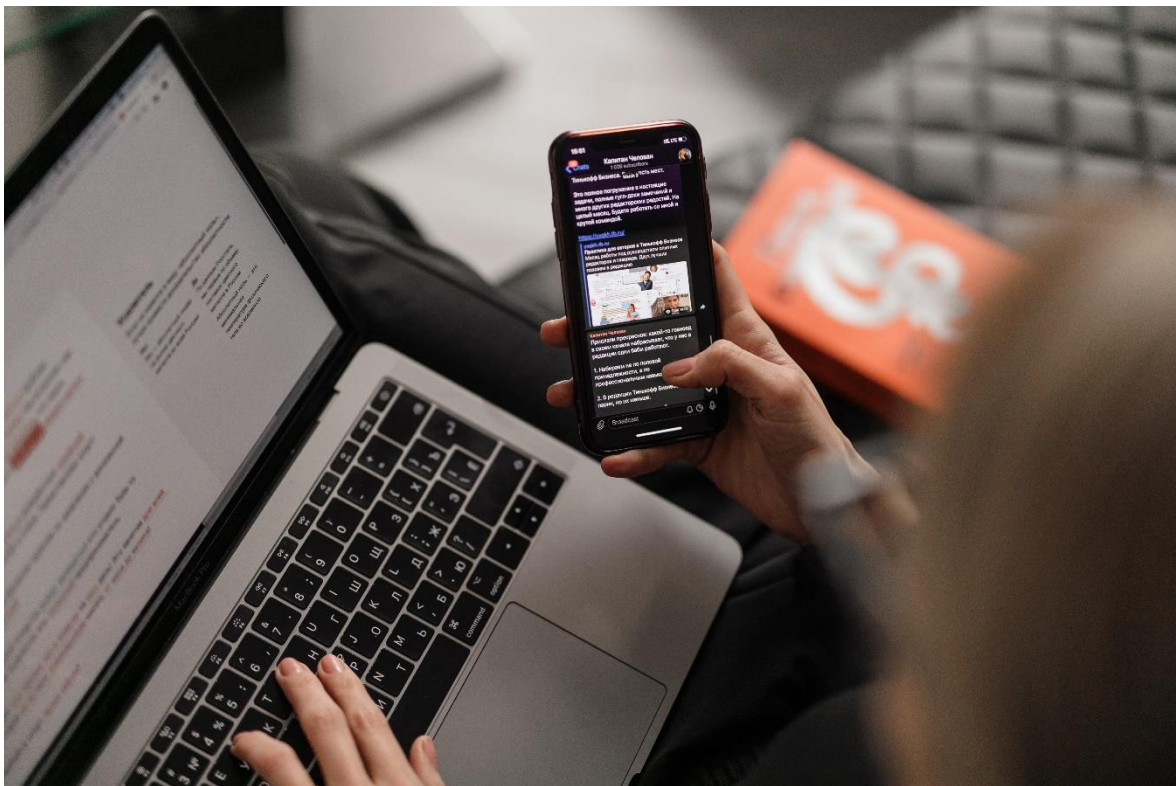
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USF contributions have grown by more than 3% annually during the past two decades, doubling from about \$4.5 billion in 2001 to \$9 billion in 2021. During this time, revenue from interstate and international voice calls has plummeted relative to intrastate calls, broadband, and data. Per a comment filed by FCC Commissioner Brendan Carr (R), traditional landline revenues have declined from a high of around \$80 billion in the early 2000s to less than \$30 billion as of 2021.

Consequently, telecommunications companies have to source their USF contributions from fewer customers (those who subscribe to traditional voice service only)—USF contributions for these customers have risen sharply: from 6% in 2001 to approximately 30% in 2021. A recent study the FCC cited suggests that this could increase to 75% in four years. This would put a significant financial burden on voice-only customers of both wireline and wireless phone companies such as Verizon and AT&T and could lead to the fee

becoming unsustainable, jeopardizing the future of the USF program.

Although it is unclear exactly how policymakers will fix the USF, we believe they will likely spread the burden more broadly, including across data service; shift the burden to taxpayers; or relieve some of that burden on carriers that provide voice service. This would be a modest benefit to voice providers such as Verizon, T-Mobile, AT&T, and other companies that provide either VoIP service or traditional voice phone service. Such a move also would help to ensure that the USF remains relevant for years, particularly as the Affordable Connectivity Program (ACP) will need a permanent source of funding after it fully depletes the one-time appropriation of \$14 billion it received from Congress in 2021. The ACP serves 15 million of the estimated 51.6 million eligible households and is expected to fully deplete its funding by 2025.



Source: Maxim Ilyahov via Unsplash

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