

MEMORANDUM

9/8/2023

To: Members, Subcommittee on Communications and Technology
From: Majority Staff
Re: Communications and Technology Subcommittee Hearing

I. INTRODUCTION

On Wednesday, September 13, 2023, at 2:00 p.m., the Subcommittee on Communications and Technology will hold a hearing in 2322 Rayburn House Office Building titled “Lights, Camera, Subscriptions: State of the Video Marketplace.” The following witnesses are expected to testify:

II. WITNESSES

- Mr. Curtis LeGeyt, President and Chief Executive Officer, National Association of Broadcasters
- Mr. Grant Spellmeyer, President and Chief Executive Officer, ACA Connects-American’s Communications Association
- Mr. David Gandler, Co-Founder and Chief Executive Officer, FuboTV Inc.
- Mr. Jonathan Schwantes, Senior Policy Counsel, Consumer Reports

III. BACKGROUND

In recent years, the video marketplace has undergone significant changes and transformations driven by technological advancements, shifts in consumer behavior, and evolving business models.¹ Traditional cable, satellite, and fiber television (PayTV) providers are facing challenges as many consumers consider cutting the cord in favor of streaming services.² Streaming platforms have experienced exponential subscriber growth, with major players like Netflix, Prime Video, Disney+, Hulu, and HBO Max leading the way.³

These and other platforms are changing how audiences consume content by offering on-demand access to a wide variety of movies, television (TV) shows, and original programming. Many traditional media networks have adapted to the digital era by launching their own streaming platforms and digital services.⁴ This increased competition has resulted in both

¹ Michael Nathanson, *How the Streaming Wars will alter the Media Landscape*, Yale Insights (Sept. 14, 2022), <https://insights.som.yale.edu/insights/how-the-streaming-wars-will-alter-the-media-landscape>.

² Lee Raine, *Cable and satellite TV use has dropped dramatically in the U.S. since 2015*, PEW RESEARCH CENTER (March 17, 2021), <https://www.pewresearch.org/short-reads/2021/03/17/cable-and-satellite-tv-use-has-dropped-dramatically-in-the-u-s-since-2015/>.

³ Florian Zandt, *Most Used Video Streaming Platforms*, STATISTA (JUL. 20, 2023), <https://www.statista.com/chart/25382/most-used-video-streaming-platforms/>.

⁴ See PEACOCK, <https://www.peacocktv.com/>; see also DIRECTTV STREAM, <https://streamtv.directv.com/>.

traditional media and streaming platforms investing heavily in original and exclusive content to keep audiences engaged.⁵

With the rapid changes in the video marketplace, new terms for how video content is delivered to consumers have emerged. Video programming can be either linear or non-linear.⁶ Linear video programming is appointment viewing—in order to view the content, you must watch it at a set time. Linear content can be live, like sports or local news, or it can be scripted content, like sit-coms or documentaries, that are presented at set times throughout the day. Non-linear content, however, is available on-demand and largely consists of scripted content but can include re-runs of other live events.

Business models have evolved and vary widely to meet consumer demands. Often, viewing options can include both linear and non-linear content with varying subscription or advertising supported pricing models.⁷ Broadcast TV is primarily distributed over-the-air (OTA) and includes both linear and non-linear content. Some content provided OTA may also be retransmitted by others under certain circumstances as required by the Communications Act. For example, Multichannel Video Programming Distributors (MVPDs) deliver multiple broadcast TV channels to their customers through cable, fiber, or satellite, but they also provide other content from independent programmers.

Over-the-top (OTT) programmers deliver video programming via the Internet, bypassing traditional cable or broadcast distribution. Virtual Multichannel Video Programming Distributors (vMVPDs) are distributors that aggregate both linear and non-linear programming and deliver content over the Internet directly to consumers.⁸ Examples of vMVPDs include: YouTube TV, DIRECTV Stream, Hulu Live, and Fubo. Although vMVPDs still have a direct relationship with their viewers, unlike OTA broadcast TV, vMVPDs may support their service by offering subscriptions, selling advertising, or a combination of both. Other OTT programmers provide only non-linear content directly to their viewers over the Internet. Like vMVPDs, these other OTT programmers may support their service by offering subscriptions (often referred to as Subscription video on demand (SVOD)) or by offering advertisements (often referred to as Advertising-supported Video On Demand). Examples of these include Netflix, Hulu, and Amazon Prime.⁹

IV. CONSUMER BEHAVIOR

⁵ Alex Irwin-Hunt, *Streaming wars: Disney+, Netflix and Amazon to drive original content spend*, FDI INTELLIGENCE (Feb. 8, 2023), <https://www.fdiintelligence.com/content/data-trends/streaming-wars-disney-netflix-and-amazon-to-drive-original-content-spend-82017>.

⁶ *Linear TV: All You Need to Know*, KALTURA (accessed on Aug. 28, 2023), <https://corp.kaltura.com/blog/linear-tv-all-you-need-to-know/>.

⁷ See, e.g., Hulu + Live TV, <https://www.hulu.com/live-tv>, (Hulu + Live TV offers both linear and non-linear content with options for advertisement free content for an additional cost).

⁸ See, e.g., *Id.*

⁹ Leslye Schumacher, *What is OTT, CTV, VMVPD and All The Rest of Those New Digital Video Terms?*, VICI MEDIA INC. (April 23), <https://vicimediainc.com/what-is-ott-ctv-vmvpd-and-all-the-rest-of-those-new-digital-video-terms/>.

The average U.S. adult spends two hours and 33 minutes per day watching television.¹⁰ Approximately 56 percent of Americans watch cable or satellite TV, and 78 percent of all U.S. households subscribe to at least one or more streaming services, meaning that Americans with a cable subscription are likely paying for additional streaming services to augment their content options.¹¹

Ten years ago, the main way to watch video programming was either OTA broadcasts accessed through the use of an antenna, or by purchasing a subscription package from a MVPD service. However, since 2013, the number of MVPD subscribers has been on the decline. In 2017, there were nearly 94 million MVPD subscribers¹² and in 2021 that number fell to 69.2 million subscribers.¹³

With an increase in vMVPD and other OTT services available to Americans, many consumers have chosen to cut the cord – meaning they cancel their PayTV subscriptions in favor of streaming options. In 2022, streaming viewership overtook cable TV, marking a shift in consumer preferences.¹⁴ In July 2023, streaming viewership represented a 38.7 percent share of the total television consumption in the U.S., exceeding cable at 29.6 percent and broadcast at 20 percent.¹⁵

However, many consumers still prefer cable television for sports coverage and cable news: 43 percent of cable subscribers say they will not cut their cords because of sports coverage.¹⁶ Viewership of sporting events on cable increased by 22 percent in January 2022, with ESPN being the sixth most-watched channel on cable TV.¹⁷

V. EVOLVING BUSINESS MODELS

As consumers continue to transition towards streaming services, traditional providers are experimenting with alternate modes of viewing: Apple has teamed with HBO Max to show the network’s programming on Apple TV, Amazon Prime has partnered with the NFL to air Thursday

¹⁰ Julia Stoll, *Time spent watching television in the U.S. 2019-2024*, STATISTA (March 15, 2023), <https://www.statista.com/statistics/186833/average-television-use-per-person-in-the-us-since-2002/>.

¹¹ Abby McCain, *23 Incredible Cord Cutting Statics [2023]: Why Americans are Moving Away from Cable*, Zippia (Feb. 26, 2023), <https://www.zippia.com/advice/cord-cutting-statistics/>; see also Ana Durrani, *The Average American Spends Over 13 Hours a Day Using Digital Media—Here’s What They’re Streaming*, Forbes Home (Mar. 27, 2023), <https://www.forbes.com/home-improvement/internet/streaming-stats/>.

¹² Federal Communications Commission, *Consolidated Communications Marketplace Report*, Report, GN Docket No. 18-231, FCC 18-181, para. 54, (Dec. 26, 2018), <https://docs.fcc.gov/public/attachments/FCC-18-181A1.pdf>.

¹³ Federal Communications Commission, *Consolidated Communications Marketplace Report*, Report, GN Docket No. 22-203, FCC 22-103, para. 218 (Dec. 30, 2022) (“FCC Marketplace Report”), <https://docs.fcc.gov/public/attachments/FCC-22-103A1.pdf>.

¹⁴ Daniel Arkin, *Streaming viewership overtakes cable TV for the first time*, NBC NEWS (Aug. 18, 2022), <https://www.nbcnews.com/business/consumer/streaming-viewership-overtakes-cable-tv-first-time-rcna43704>.

¹⁵ *Streaming grabs a record 38.7% of total TV usage in July, with acquired titles outpacing new originals*, NIELSEN'S THE GAUGE (Aug. 2023), <https://www.nielsen.com/insights/2023/streaming-grabs-a-record-38-7-of-total-tv-usage-in-july-with-acquired-titles-outpacing-new-originals/>.

¹⁶ *23 Interesting Sports Streaming Statistics to Show How Bit it is in 2023*, PLAY TODAY (July 19, 2023), <https://playtoday.co/blog/stats/sports-streaming-statistics/>.

¹⁷ *The Big List of TV Viewership Statistics [Updated for 2023]*, TVSCIENTIFIC (APR. 26, 2023), <https://www.tvscientific.com/insight/tv-viewership-statistics>.

Night Football, and several networks have launched their own OTT services to compete with other streaming platforms.¹⁸ Several providers, including YouTube TV, DISH, and DirecTV, are now offering “skinny bundles” – streaming services that provide consumers a small bundle of live TV channels.¹⁹ Whether through new packages offered by pay TV providers, or bundled subscriptions from OTT providers, these novel options provide true alternatives to MVPDs.

Consumers today have unprecedented access to high-quality content, and the demand continues to grow. Media companies are focused on creating new content to keep customers using their platforms. In 2022, OTT platforms spent \$23 billion on original, new scripted content, which led to a record-breaking 600 new original scripted series produced in the U.S.²⁰ HBO Max’s House of Dragon, the Game of Thrones prequel series, will cost \$20 million per episode, and Amazon Prime’s Rings of Power, the Lord of the Rings prequel series, will cost \$58 million per episode for five seasons.²¹

The rise of content costs, pressure to reduce churn among subscribership, and increased scrutiny from Wall Street to produce profits has led both traditional and streaming services to increase their subscription prices.²² Since launching, nearly every major subscription streaming company has raised its price.²³ The average cost of watching ad-free streaming services has increased by nearly 25 percent in the past year.²⁴ Similarly, monthly cable bills have increased by 52 percent in the last three years from \$96 to \$147 per month on average.²⁵

The rise of streaming services has also upended traditional Hollywood practices. As the Hollywood writers and actors strike stretches on, video production has come to a halt. The strike has essentially stopped all scripted film and TV production after writers and actors failed to reach a new labor deal with major studios.²⁶ The last time both actors’ and writers’ unions were on

¹⁸ See PARAMOUNT+, <https://www.paramountplus.com/>; see also MAX, <https://www.max.com/>; see also PEACOCK, <https://www.peacocktv.com/>.

¹⁹ Howard Homonoff, *Streaming TV Skinny Bundles Ponder: How Much Does Size Matter?*, FORBES (Aug. 20, 2020), <https://www.forbes.com/sites/howardhomonoff/2020/08/20/streaming-tv-skinny-bundles-ponder-how-much-does-size-matter/?sh=624c0eb44088>.

²⁰ Aden Ikram, *Netflix, Amazon, Disney, Others Spent a Record \$23 Billion on Original New Content Last Year—So Why Is Everyone Watching Movies and TV from the Past?*, FORTUNE (June 29, 2023), <https://fortune.com/2023/06/29/netflix-amazon-disney-others-spent-a-record-23-billion-on-original-new-content-last-year-so-why-is-everyone-watching-movies-and-tv-from-the-past-aden-ikram/>.

²¹ Rachyl Jones, *Even as Growth Slows, Streaming Services Will Increase Spending on Original Programming 10% Next Year*, OBSERVER (Aug. 30, 2022), <https://observer.com/2022/08/even-as-growth-slows-streaming-services-will-increase-spending-on-original-programming-10-next-year/>.

²² Sara Fischer, *Wall Street drives streaming’s pivot to ads*, AXIOS (Apr. 22, 2022), <https://www.axios.com/2022/04/22/wall-street-streaming-pivot-ads>; see also Will Leitch, *It’s About to Get Incredibly Expensive to Watch Sports*, NYMAG (May 23, 2023), <https://nymag.com/intelligencer/2023/05/espn-streaming-and-the-rising-cost-of-watching-sports.html>.

²³ Sarah Fischer, *Almost every big streaming service is getting more expensive*, AXIOS (Jul. 25, 2023), <https://www.axios.com/2023/07/25/streaming-prices-2023-comparison-raise>.

²⁴ David Marcelis, *Television Accounts for Less Than Half of U.S. Viewing Time for the First Time*, The Wall Street Journal (Aug. 15, 2023), <https://www.wsj.com/articles/television-accounts-for-less-than-half-of-u-s-viewing-time-for-the-first-time-158a1fc>.

²⁵ Kayla Wassell, *The Average Cable TV Bill Is Up 52% in Just 3 Years*, CORD CUTTERS NEWS (June 13, 2023), <https://cordcuttersnews.com/the-average-cable-tv-bill-is-up-52-in-just-3-years/>.

²⁶ Matt Stevens, *What to Know About the Actors’ Strike*, NYTIMES (July 14, 2023), <https://www.nytimes.com/article/actors-strike-1?why.html>.

strike was in the 1960s over similar residual issues.²⁷ In the 1960s, the residual fight was over workers getting paid for movies licensed or sold to TV; now, the fight is over how much workers are paid when their shows and movies are licensed to streaming services.²⁸ Further, the rapid use of artificial intelligence (AI) has raised concerns with writers and actors that their work could be replaced or replicated by computers.²⁹ The continued strike is causing delays on upcoming film releases and TV show premieres.

VI. SELECTED ISSUES

a. Current Regulatory Framework

The Federal Communications Commission (FCC) is tasked with regulating the U.S. media marketplace to promote competition, localism, and diversity. The FCC media market regulations focus primarily on radio and television broadcast stations alongside cable and direct broadcast satellite MVPDs. The Cable Communications Policy Act of 1984 (1984 Act) established a national regulatory policy concerning cable television communications for the first time.³⁰ The 1984 Act contained significant provisions relating to all corners of the cable industry, including: franchises; cable rates; public, educational, and government channels; and programming.³¹

The Cable Television Consumer Protection and Competition Act of 1992 (1992 Act) and the Telecommunications Act of 1996 (1996 Act) further revised both the 1984 Act and the underlying Communications Act of 1934 (1934 Act).³² Whereas the 1984 Act made efforts to deregulate the cable industry, the 1992 Act shifted the industry into a more regulated state, with rules pertaining to cable rates, services, the furthering of protections for public access channels, and the inclusion of cable and public access channels under obscenity regulations.³³ The 1992 Act sought to address the lack of competition in the broadcast programming market and to protect consumer interests by reinstating must-carry regulations previously overturned by the courts.³⁴

The 1996 Act represented a substantial rewrite of the Communications Act of 1934, which then included significant deregulatory measures for the cable television industry.³⁵ The

²⁷ David Canfield, *Inside the 1960 SAG Strike, From Elizabeth Taylor's Vacation to Ronald Reagan's Star-Studded Meeting*, VANITY FAIR (July 20, 2023), <https://www.vanityfair.com/hollywood/2023/07/sag-strike-1960-elizabeth-taylor-ronald-reagan-explained>.

²⁸ Samantha Delouya, *Why celebrities are striking: The average pay for actors may surprise you*, CNN Business (July 17, 2023), <https://www.cnn.com/2023/07/17/business/hollywood-actors-sag-aftra-strike-by-the-numbers>.

²⁹ Canfield, *supra* note 28.

³⁰ Cable Communications Policy Act of 1984, Pub. L. 98 Stat. 2779, P.L. 98-549 (1984).

³¹ Roger Heinrich, *Cable Communications Policy Act of 1984 (1984)*, The First Amendment Encyclopedia (accessed on Aug. 28, 2023), <https://www.mtsu.edu/first-amendment/article/1057/cable-communications-policy-act-of-1984>.

³² *Id.*

³³ Brian Caterino, *Cable Television Consumer Protection and Competition Act of 1992 (1992)*, The First Amendment Encyclopedia (accessed on Aug. 28, 2023), <https://mtsu.edu/first-amendment/article/1058/cable-television-consumer-protection-and-competition-act-of-1992>.

³⁴ *Id.*, see also *Quincy Cable RV, Inc. v Federal Communications Commission (D.C. Circuit 1985)*.

³⁵ Ruth Ann Strickland, *Telecommunications Act of 1996 (1996)*, The First Amendment Encyclopedia (accessed on Aug. 28, 2023), <https://mtsu.edu/first-amendment/article/1095/telecommunications-act-of-1996>.

1996 Act allowed local telephone companies to provide cable television service, providing the chance for new market entrants to increase competition.³⁶ The Act also increased the number of television stations that a single company could own, resulting in several media mergers.³⁷ Since the 1996 Act, the video marketplace has remained largely untouched by Congress, with the FCC acting as the primary regulator in the space.

b. Retransmission Consent

Whether an MVPD can carry a broadcaster's content depends on whether the broadcaster has provided consent to retransmit its signal. This occurs in two ways: a broadcaster can seek "must carry" status and require an MVPD to carry the signal,³⁸ or it can negotiate for retransmission consent.³⁹ When a broadcaster seeks retransmission consent, it is required to negotiate in good faith for compensation from the MVPD in return for consent to retransmit the broadcaster's signal.⁴⁰ A portion of this fee is sent by the broadcaster to its network affiliate. Failure to reach an agreement leads to blackouts, where the broadcaster's signal is pulled from the MVPD. In 2019, Congress amended the Communications Act to permit small MVPDs—those that serve no more than 500,000 subscribers nationally—to form buying groups to negotiate retransmission consent with large station groups.⁴¹

Retransmission consent has become controversial. Most broadcasters negotiate for retransmission consent and these fees have increased significantly in recent years. According to the Congressional Research Service, the total amount of retransmission consent fees paid by MVPDs has increased from \$210 million in 2006 to \$12.38 billion in 2019.⁴² Reasons for this increase include declining advertising revenue for broadcasters and increasing costs for content. The fees that MVPDs pay broadcasters are often passed to consumers, resulting in higher bills.

vMVPDs are not required to negotiate retransmission consent with broadcasters. Instead, networks negotiate master agreements with vMVPDs on behalf of their broadcast affiliates. This leads to an asymmetry over what broadcasters receive from MVPDs and vMVPDs.

c. Media Ownership

The FCC regulates the number of radio and TV broadcast stations an entity can own within a local market and prohibits mergers between the big four networks of ABC, CBS, FOX, and NBC.⁴³ Additionally, Section 202(h) of the Telecommunications Act of 1996 requires the FCC to review its media ownership rules every four years to determine whether they remain

³⁶ *Id.*

³⁷ *Id.*; see also *The Cable History Timeline*, Syndeo Institute (accessed on Aug. 28, 2023), <https://syndeoinstitute.org/wp-content/uploads/2022/10/CableTimelineFall2015.pdf>.

³⁸ 47 U.S.C. § 534.

³⁹ 47 U.S.C. § 325.

⁴⁰ *Id.*

⁴¹ Further Consolidated Appropriations Act, 2020, Pub. L. No. 116-94, div. P, tit. X § 1003 (2019).

⁴² Dana A. Scherer, *Copyright Act and Communications Act Changes in 2019 Related to Television* (Jan. 13, 2020), <https://www.crs.gov/Reports/R46023>.

⁴³ FCC Broadcast Ownership Rules, FEDERAL COMMUNICATIONS COMMISSION (last visited Aug. 23, 2023), <https://www.fcc.gov/consumers/guides/fccs-review-broadcast-ownership-rules>.

“necessary in the public interest as the result of competition.”⁴⁴ The FCC began its 2022 Quadrennial Review on December 22, 2022.⁴⁵

The 2018 Quadrennial Review remains pending due to litigation over the 2014 Quadrennial Review that did not conclude until the Supreme Court’s *FCC v. Prometheus Radio Project* decision in 2021.⁴⁶ That decision affirmed the FCC’s decision to eliminate several restrictions on media ownership that it determined were no longer necessary to serve the agency’s public interest goals of promoting competition, localism, and viewpoint diversity.⁴⁷ Because that decision occurred three years after the FCC began its 2018 review, the Commission had to refresh the record on that proceeding.⁴⁸ It has not yet completed that review.

d. Promoting Innovation and Competition in the Provision of Multichannel Video Programming Distribution Services

On December 19, 2014, the FCC released a Notice of Proposed Rulemaking (NPRM) seeking comment on a proposal to update its rules to reflect the fact that video services are being provided over the Internet.⁴⁹ The FCC proposed changing the definition of a MVPD to include vMVPDs, as video programming is now available from a myriad of distribution technologies outside of the original term. The NPRM proposed to define the term MVPD in either one of the two following ways: 1) any programming distributor of multiple linear video programming streams, including Internet-based services, or 2) any programming distributor that has control over a transmission path.⁵⁰

The proposal was never adopted and lays dormant at the FCC. In August, Chair Cathy McMorris Rodgers (R-WA) and Chair Bob Latta (R-OH) sent a letter to the FCC urging Chair Rosenworcel to not reopen the proceeding, stating that “if the laws and regulations governing the video marketplace need to be reexamined, it is up to Congress to make updates, not the FCC.”⁵¹ By contrast, earlier this summer, Senator Cantwell (D-WA) sent a letter to the FCC requesting the FCC to update the record.⁵²

⁴⁴ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, § 202(h) (1996).

⁴⁵ *Media Bureau Opens Docket and Seeks Comment for 2022 Quadrennial Review of Media Ownership Rules*, MB Docket No. 22-459, Public Notice, DA 22-1364 (MB 2022), <https://docs.fcc.gov/public/attachments/DA-22-1364A1.pdf>.

⁴⁶ 141 S.Ct. 1150, 1154 (2021).

⁴⁷ *See 2014 Quadrennial Regulatory Review – Review of the Commission’s Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996*, MB Docket No. 14-50 et al, Order on Reconsideration and Notice of Proposed Rulemaking (2017), <https://docs.fcc.gov/public/attachments/FCC-17-156A1.pdf>.

⁴⁸ Media Bureau Seeks to Update Public Record in the 2018 Quadrennial Regulatory Review, Public Notice, 36 FCC Rcd 9363, 86 FR 35089 (July 1, 2021).

⁴⁹ Promoting Innovation and Competition in the Provision of Multichannel Video Programming Distribution Services, Notice of Proposed Rulemaking, 29 FCC Rcd 15995 Para. 1 (2014) (“2014 NPRM”). Available at: <https://docs.fcc.gov/public/attachments/FCC-14-210A1.pdf>.

⁵⁰ *Id.*

⁵¹ Letter from the Honorable Cathy McMorris Rodgers and the Honorable Robert E. Latta, U.S. House of Representatives, to Jessica Rosenworcel, Chairwoman, FCC (Aug. 8, 2023), https://d1dth6e84htgma.cloudfront.net/08_08_23_Letter_to_FCC_on_v_MVP_Ds_359d8b2454.pdf.

⁵² Letter from the Honorable Maria Cantwell, U.S. Senate, to Jessica Rosenworcel, Chairwoman, FCC (June 22, 2023), https://www.nab.org/documents/newsRoom/pdfs/062223_Cantwell_Letter.pdf.

e. Expanding Universal Service Fund to OTT Providers

In 1996, Congress enacted the Telecommunications Act of 1996, which included a new Section 254 that addressed universal service. Section 254 directs the FCC to establish “policies for the preservation and advancement of universal service” based on certain principles,⁵³ and mechanisms to support universal service.⁵⁴ The result was the creation of the Universal Service Fund (USF).

The USF is funded through assessments from telecommunications providers based on a percentage of their interstate and international voice-service revenues. Providers usually pass this cost on to their customers.⁵⁵ The percentage, known as the contribution factor, is adjusted each quarter based on the fund’s estimated needs. The contribution factor has increased from 5.5 percent in 2000⁵⁶ to 29.2 percent for the second quarter of 2023.⁵⁷

This significant increase has led to calls for contribution reform. One proposal is to expand the base and assess contributions on a broad range of revenues, such as digital advertising and edge providers, entities that provide content, applications, or services over the internet, such as Amazon, Facebook, Google, and Netflix.⁵⁸

VII. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Kate O’Connor, Giulia Leganski, or Slate Herman of the Committee Staff at (202) 225-3641.

⁵³ 47 U.S.C. § 254(b).

⁵⁴ *Id.* § 254(a).

⁵⁵ Federal Universal Service Fund, California Public Utilities Commission (last accessed on Aug. 25, 2023), <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/telecommunications-surcharges-and-user-fees/federal-universal-service-fund>.

⁵⁶ *Proposed Second Quarter 2000 Universal Service Contribution Factor*, CC Docket No. 96-45, Public Notice, DA 00-517 (rel. Mar. 7, 2000), <https://docs.fcc.gov/public/attachments/DA-00-517A1.pdf>.

⁵⁷ Universal Serv. Admin. Co., Contribution Factors (2023), <https://www.usac.org/service-providers/making-payments/contribution-factors/>.

⁵⁸ *See, e.g.*, Brendan Carr, Ending Big Tech's Free Ride, Newsweek (May 24, 2021), <https://www.newsweek.com/ending-big-techs-free-ride-opinion-1593696>.