

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
The State of Competition in the	)	GN Docket No. 22-203
Communications Marketplace	)	

**COMMENTS OF  
THE FREE STATE FOUNDATION**

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**I. Introduction and Summary**

These comments are submitted in response to the Commission's Notice seeking comments for the agency's biennial report that assesses the state of competition in the communications marketplace. The focus of these comments is on the broadband Internet and video services markets. As these comments demonstrate, available data from 2020 and 2021 support the conclusion that the broadband and video services markets are effectively competitive. Indeed, there is solid evidence that each of these markets increasingly is characterized by effective intermodal competition. These comments also identify specific actions that the Commission should take to promote even more competition in the broadband and video markets, including by removing costly regulatory burdens on investment and innovation.

In 2020 and 2021, overall conditions in the broadband Internet services market were effectively competitive, in many instances even more so than in 2019. Despite unprecedented government-imposed lockdowns, labor shortages, and supply chain problems, consumers benefitted from the expansion of fiber and gigabit-speed cable broadband services. Fiber

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<sup>1</sup> These comments express the views of Randolph J. May, President of the Free State Foundation, Seth L. Cooper, Senior Fellow and Director of Policy Studies, Andrew Long, Senior Fellow, and Andrew K. Magloughlin, Legal Fellow. The views expressed do not necessarily represent the views of others associated with the Free State Foundation. The Free State Foundation is a nonpartisan, non-profit free market-oriented think tank.

broadband growth was explosive in 2020 and 2021. Research published in January 2022 showed that fiber now passes over 60.5 million U.S. homes, or 43% of all homes. Studies found that fiber broadband availability to U.S. homes increased 12% in 2021 and 10% in 2020. Consumers also benefitted from rapid 5G rollout in 2020 and 2021. At the end of 2019, there were an estimated 587,000 5G connections in the U.S. and Canada. But by the end of 2021, there were 72 million 5G connections. AT&T, T-Mobile, and Verizon have nationwide 5G footprints. Also, multi-regional providers and cable mobile virtual network operators (MVNOs) provide consumers 5G choices.

Deployment of next-generation networks resulted in consistently faster broadband speeds. For instance, Ookla found that median U.S. fixed broadband upload/download speeds increased to 134.10 Mbps/19.45 Mbps by November 2021. That amounted to a 32% increase in median download speeds and a 31% increase in median upload speeds compared to a year earlier. Also, in May 2022, median fixed broadband speeds reached 156.22 Mbps/21.51 Mbps. Meanwhile, Ookla found that median U.S. mobile download speeds rose to 53.31 Mbps in November 2021, a 25% annual increase. Median mobile speeds again rose to 59.94 Mbps/8.02 Mbps in May 2022.

These pro-competitive and pro-consumer results depended on strong private market capital investment by broadband ISPs. According to USTelecom, U.S. broadband providers invested about \$79.4 billion in 2020. And CTIA reported wireless capital expenditures for 2020 totaling \$30 billion. Similar capital investment totals can be expected to be reported for 2021.

The broadband market's competitive conditions have helped maintain consumer affordability, as services prices held constant or even declined in the midst of high inflation. Research published in July 2021 found that broadband service prices fell between 2020 and 2021

across the board, with inflation-adjusted prices for entry level tiers having dropped by 10.8%, the most popular tiers by 9.3%, and for the fastest tiers by 4.2%. And research published in June 2022 showed that inflation-adjusted prices fell between March 2021 and March 2022, the most popular tiers having dropped by 14.7% and the fastest speed tiers by 11.6%. Additionally, there is positive pricing evidence for wireless services. The Consumer Price Index (CPI) for May 2022 showed that the "wireless telephone services" index *decreased* by 0.7% between May 2021 and May 2022, while the "all items" index increased 8.6%.

Notably, intermodal competition for broadband services has continued to grow since 2019, as reflected by increasing availability and consumer adoption of offerings by cable mobile virtual network operators, 5G fixed wireless access (FWA) services, and low-earth orbit (LEO) satellite services. In its forthcoming *2022 Communications Marketplace Report*, the Commission should cease its exclusively piecemeal evaluation of broadband marketplace competition that continues to rely on "siloeed" service definitions. Instead, it should evaluate competition with a broader "broadband market" definition that takes into account fiber, cable, mobile, FWA, and satellite platforms. This broader outlook would more accurately reflect market realities and be a better guide to formulating Commission policy.

To ensure that the broadband services market remains competitive across platforms, the Commission should put more spectrum into commercial use. In a timely fashion, it should conduct its license auction for the 2.4 GHz band and prioritize the lower 3 GHz band for repurposing. To enable more competitors to serve more Americans, the agency should develop every proposal for repurposing spectrum that might be suitable for commercial uses on a licensed or unlicensed basis.

Additionally, the Commission should remove local regulatory obstacles to timely infrastructure buildout. The agency should reform its pole attachment rules by adopting an objective pole replacement cost-sharing formula along with a rebuttable presumption that pole owners benefit from replacement poles. And pole attachment disputes in unserved areas should be placed on the Accelerated Docket for resolution. Furthermore, the Commission should adopt shot clocks and fee caps for wireline infrastructure deployment in state and local rights-of-way.

Regarding video, the experience of the past two years demonstrates incontrovertibly that streaming has rendered wholly unrecognizable the marketplace in which consumers shop for content. Moreover, COVID-19's influence further accelerated the transition away from traditional multichannel video programming distributor (MVPD) offerings – and, more fundamentally, "television" as we once knew it – toward an environment in which individuals curate personalized "bundles" comprised of multiple selections from the diverse and steadily growing universe of subscription, ad-supported, and free competitive options delivered over the Internet to a wide range of devices.

Specifically, in the short window since the Commission last sought comment on the status of the video marketplace, millions more customers have abandoned traditional video "bundles." The top seven cable operators alone witnessed well over five million subscribers cut the cord, representing a nearly twelve percent decline in only 27 months. Meanwhile, five of the top streaming services have added almost 33 million subscribers since the beginning of this year – and that list notably includes only those providers that publicly divulge their subscriber numbers. Of arguably even greater significance, consumers today spend significantly more time watching streamed content than broadcast television. And if that trendline continues as expected,

consumers soon will engage with streaming to a greater extent than even traditional "cable" services.

Given the video marketplace's current competitive state, and the direction in which all signs suggest that it is heading quickly, it is imperative that the Commission act swiftly and decisively to sweep away outdated regulations. Absent compelling evidence justifying their continued application, rules that impede uniquely the ability of facilities-based MVPDs to contribute to consumer-benefiting competition require repeal. That includes program access and program carriage requirements, network non-duplication and syndicated exclusivity rules, and regulations under Section 629 of the 1996 Telecommunications Act that apply to navigation devices.

## **II. The Broadband Services Market Is Effectively Competitive**

Available data shows that, in 2020 and 2021, overall conditions in the broadband Internet access services market and across service sectors within the market were effectively competitive, having held strong or improved compared to 2019. Despite unprecedented government-imposed lockdowns, labor shortages, and supply chain problems, consumers benefitted from next-generation network infrastructure deployments and significantly improved capabilities as well as better pricing options. And intermodal competition for broadband services continues to grow.

### **A. Data for 2020 and 2021 Shows That the Broadband Market Is Competitive**

#### **1. Broadband Deployment, Access, and Competition Continue to Increase**

*Improved Access to Fixed Broadband Services.* According to Form 477 data,<sup>2</sup> as of December 31, 2020, 97.53% of the U.S. population had access to a fixed broadband Internet

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<sup>2</sup> FCC, Fixed Broadband Deployment Data: "Compare Broadband Availability in Different Areas," at: [https://broadbandmap.fcc.gov/#/area-comparison?version=dec2019&tech=acfosw&speed=250\\_25&searchtype=county](https://broadbandmap.fcc.gov/#/area-comparison?version=dec2019&tech=acfosw&speed=250_25&searchtype=county) (last accessed Jan. 10, 2022).

Service Provider (ISP) offering speeds of 25 Mbps/3 Mbps. This figure is up from 96.28% at the end of June 2020, and 95.62% at the end of December 2019. Also, as of year-end 2020, 90.55% of the population in rural areas had access to at least one fixed broadband ISP offering speeds of 25 Mbps/3 Mbps, up from 82.76% a year before. In tribal areas, 86.77% had access to at least one provider at those same speeds compared to 79.05% a year before. Additionally, 93.11% of the U.S. population had access to a fixed broadband ISP offering speeds of 100 Mbps/10 Mbps at the end of 2020. That is up from 91.71% at the end of 2019. Plus, 88.8% had access to a fixed provider offering 250 Mbps/25 Mbps at the end of 2020, up from 87.12%. And the strong momentum of fixed broadband deployment remains. ACA Connects projects that by the end of 2025, over 95% of U.S. homes will have access to at least one provider of 100 Mbps/20 Mbps and one provider of 25 Mbps/3 Mbps speeds.<sup>3</sup>

Furthermore, analysts' reports indicate that fiber broadband expanded significantly in 2020 and 2021. According to RVA LLC, more than 54 million homes were passed with fiber in 2020, an increase of 10% over the prior year.<sup>4</sup> Research published in January 2022 indicated that fiber broadband now passes 60.5 million homes in the U.S., a figure comprising 43% of all U.S. homes.<sup>5</sup> RVA found that fiber broadband availability to U.S. homes increased 12% in 2021.<sup>6</sup>

*5G's Big Breakout Provides Competition in Wireless Broadband Services.* The broadband market's competitiveness in 2020 and 2021 is epitomized by the rapid rollout of 5G wireless

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<sup>3</sup> ACA Connects, "Broadband Competition is Thriving Across America" (Jun. 23, 2022), 14-15, at: <https://acaconnects.org/index.php?checkfileaccess=/wp-content/uploads/2022/06/220623-Broadband-Competition-Is-Thriving-Across-America-An-ACA-Connects-White-Paper.pdf>. See also Andrew K. Magloughlin, "ACA Connects Broadband Competition Report Undermines Common Carriage," FSF Blog (Jun. 27, 2022), at: <https://freestatefoundation.blogspot.com/2022/06/aca-connects-broadband-competition.html>.

<sup>4</sup> See Sean Buckley, Fiber Trends: What 2021 Promises for the Broadband Industry, *Broadband Communities Magazine* (Jan./Feb. 2021), at: <https://www.bbcmag.com/multifamily-broadband/fiber-trends-what-2021-promises-for-the-broadband-industry>.

<sup>5</sup> Fiber Broadband Association, Press Release: "Fiber Broadband Enters Largest Investment Cycle Ever" (January 5, 2022), at: <https://www.fiberbroadband.org/blog/fiber-broadband-enters-largest-investment-cycle-ever>.

<sup>6</sup> See *id.*



networks and accelerated adoption of 5G services by U.S. consumers. At the end of 2019, there were about 587,000 total 5G connections in North America (the U.S. and Canada).<sup>7</sup> By the fall of 2020, AT&T, T-Mobile, and Verizon had nationwide 5G footprints. According to 5G Americas, by September 2021, the total number of 5G connections in U.S. and Canada grew to 56.5 million, an enormous 627% increase over the 9 million connections in September 2020.<sup>8</sup> And by the end of 2021, there were 72 million 5G connections in the U.S. and Canada.<sup>9</sup> Multi-regional wireless providers and cable mobile virtual network operators provide more 5G choices. These next-generation services are a huge boon to consumers because 5G networks are more capacious than 4G LTE networks and they are expected to eventually deliver average speeds about ten times faster than LTE networks, with peak speeds 100 times faster.<sup>10</sup>

*4G LTE Provides Competition in Wireless Broadband Services.* As reported by 5G Americas, as of September 2021, there were 505 million 4G LTE connections in the U.S. and Canada, an increase of 7.6% from 469 million in September 2020. By the end of 2021, 4G LTE connections in the U.S. and Canada grew to 514 million.<sup>11</sup>

*Consumers Continuing to Benefit From Mobile Broadband Competitors.* In addition to three competing nationwide mobile service providers – AT&T, T-Mobile, and Verizon – U.S. consumers have a choice among multi-regional providers UScellular and C Spire, as well as

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<sup>7</sup> 5G Americas, Press Release: "5G Network Rollouts Accelerate as LTE's Long Tail Extends," (September 19, 2019), at: <https://www.5gamericas.org/5g-network-rollouts-accelerate-as-ltes-long-tail-extends/>.

<sup>8</sup> 5G Americas & Omdia, "North America Statistics," (Sept. 2021), at: <https://www.5gamericas.org/resources/charts-statistics/north-america/>.

<sup>9</sup> 5G Americas, Press Release: "5G Forecast: 1.3 Billion by Year-End 2022" (Mar. 23, 2022), at: <https://www.5gamericas.org/5g-forecast-1-3-billion-by-year-end-2022/>.

<sup>10</sup> Sanjay Dhar, Tejas Rao, and Majed Al Amine, "Smart Cities: How 5G Can Help Municipalities Become Vibrant Smart Cities," Accenture Strategy (Feb. 27, 2017), at: [https://www.accenture.com/\\_acnmedia/pdf-43/accenture-5g-municipalities-become-smart-cities.pdf](https://www.accenture.com/_acnmedia/pdf-43/accenture-5g-municipalities-become-smart-cities.pdf).

<sup>11</sup> 5G Americas, Press Release: "5G Forecast: 1.3 Billion by Year-End 2022."

smaller local providers. UScellular has about 4.8 million wireless connections,<sup>12</sup> and C Spire likely serves about 1 million. Also, DISH Network is transitioning its Boost MVNO brand to a nationwide facilities-based mobile broadband service.<sup>13</sup> On June 15, DISH announced that it offers 5G service to over 120 cities, covering 20% of the U.S. population.<sup>14</sup>

From early 2020 to now, mobile broadband competition has benefitted from the remarkable growth of cable MVNOs that combine Wi-Fi networks with leased spectrum. Xfinity Mobile had 1.2 million subscribers at the end of 2019,<sup>15</sup> and nearly 4 million by the end of 2021.<sup>16</sup> In the first quarter of 2022, Xfinity Mobile's subscribership grew to 4.3 million.<sup>17</sup> Charter's Spectrum Mobile brand grew to about 3.5 million subscribers in the fourth quarter of 2021,<sup>18</sup> up from 1.1 million in the fourth quarter of 2019.<sup>19</sup> And Spectrum Mobile's total subscribership has quadrupled over the last two years.<sup>20</sup> And as of first quarter 2022, Spectrum Mobile has a subscriber base of 3.9 million, a 47.2% increase compared to a year earlier.<sup>21</sup>

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<sup>12</sup> UScellular, "UScellular Reports First Quarter 2022 Results" (May 5, 2022), at: <https://investors.uscellular.com/news/news-details/2022/UScellular-reports-first-quarter-2022-results/default.aspx>.

<sup>13</sup> See, e.g., DISH Network, Press Release, "DISH and Dell Technologies Will Build the Nation's First Open RAN 5G Edge Infrastructure (Jun. 17, 2021), at: <https://about.dish.com/news-releases?item=123509>;

<sup>14</sup> DISH Network, Press Release, "DISH's Smart 5G™ Wireless Network is Now Available to Over 20 Percent of the U.S. Population" (Jun. 15, 2022), at: <https://ir.dish.com/news-releases/news-release-details/dishs-smart-5gtm-wireless-network-now-available-over-20-percent>.

<sup>15</sup> Comcast, Press Release: "Comcast Reports 4th Quarter and Full Year 2019 Results" (Jan. 23, 2020), at: <https://www.cmcsa.com/news-releases/news-release-details/comcast-reports-4th-quarter-and-full-year-2019-results>.

<sup>16</sup> Comcast, "Comcast Reports 4th Quarter and Full Year 2021 Results" (Jan 27, 2022), at: <https://www.cmcsa.com/news-releases/news-release-details/comcast-reports-4th-quarter-and-full-year-2021-results>.

<sup>17</sup> Comcast, "Comcast Reports 1st Quarter 2022 Results" (Apr. 28, 2022), at: <https://www.cmcsa.com/news-releases/news-release-details/comcast-reports-1st-quarter-2022-results>.

<sup>18</sup> Charter Communications, "Charter Announces Fourth Quarter and Fully Year 2021 Results" (Jan. 28, 2021), at: <https://corporate.charter.com/newsroom/january-28-2022/charter-announces-fourth-quarter-and-full-year-2021-results>.

<sup>19</sup> Charter Communications, Press Release: "Charter Announces Fourth Quarter 2019 Results" (Jan. 31, 2020), at: <https://corporate.charter.com/investors/Charter%20Announces%20Fourth%20Quarter%202019%20Results>.

<sup>20</sup> Spectrum Mobile reported 794,000 subscribers as of the third quarter of 2019. See Charter Communications, Press Release: "Charter Announces Third Quarter 2019 Results (Oct. 25, 2019), at: <https://ir.charter.com/static-files/76cf320f-4610-448b-9768-c1a27f2d2c2e>.

<sup>21</sup> Charter Communications, Press Release: "Charter Announces First Quarter 2022 Results (Apr. 29, 2022), at: <https://ir.charter.com/news-releases/news-release-details/charter-announces-first-quarter-2022-results>.

*Continued Wireless Infrastructure Deployment.* CTIA reported that the number of cell sites in operation increased from 395,562 in 2019 to 417,215 in 2020, an increase of about 5%.<sup>22</sup> Rapid deployment of 5G networks and observable mobile broadband speed increases are indicators of strong infrastructure deployments and facilities upgrades.

## **2. Broadband Speeds Continue to Improve**

*Increased Fixed Broadband Speeds.* Ookla found that median U.S. fixed broadband upload/download speeds increased to 134.10 Mbps/19.45 Mbps by November 2021.<sup>23</sup> This marked a 32% increase in median download speeds and a 31% increase in median upload speeds since November 2020. And based on speed tests apparently spanning both fixed and mobile broadband network technologies, HighSpeedInternet.com reported that the national average for download speeds in 2021 increased to 99.3 Mbps, doubling the national average of 42.86 Mbps in 2021.<sup>24</sup> And the positive trend continues, as Ookla reports the median U.S. fixed broadband speeds in May 2022 rose to 156.22 Mbps/21.51 Mbps.<sup>25</sup>

*Increased Mobile Broadband Speeds.* Ookla found that median U.S. mobile download speeds rose to 53.31 Mbps in November 2021, a 25% annual increase.<sup>26</sup> This increase was enabled by significant upgrades to 5G networks. Opensignal's January 2022 "5G User Experience Report" shows that T-Mobile's 5G network's average download speed rose to 150

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<sup>22</sup> CTIA, 2021 Annual Survey Highlights (Jul. 2021), 5, at: <https://api.ctia.org/wp-content/uploads/2021/07/2021-Annual-Survey-Highlights.pdf>.

<sup>23</sup> Ookla, "Speedtest Global Index" (United States) (Nov. 2021), at: <https://www.speedtest.net/global-index/united-states#fixed>.

<sup>24</sup> Trevor Wheelwright (Cara Haynes, ed.). "The State of the Internet in 2021: Internet Speeds on the Rise Nationwide," HighSpeedInternet.com (Dec. 16, 2021), at: <https://www.highspeedinternet.com/resources/state-of-the-internet#mobile-internet>.

<sup>25</sup> Ookla, "United States' Mobile and Fixed Broadband Speeds," at: <https://www.speedtest.net/global-index/united-states> (last accessed Jun. 23, 2022).

<sup>26</sup> Ookla, "Speedtest Global Index" (United States).

Mbps, compared to 58 Mbps a year prior.<sup>27</sup> The same report also shows that Verizon's 5G network download speeds reached 56.2 Mbps and AT&T's 5G speed was 49 Mbps. Opensignal attributed T-Mobile's stellar performance to 2.5 GHz mid-band spectrum it acquired by merging with Sprint. It has elsewhere been reported that Verizon's deployment of C-band spectrum in 2022 has boosted its 5G median download speeds to at least 100 Mbps in nine markets and increased speeds by at least 40 Mbps in 11 of its C-band markets.<sup>28</sup> And AT&T's 5G networks can be expected to surge as it begins using more of its C-band and 3.45-3.55 GHz spectrum this year.<sup>29</sup> Also, the positive overall trend on rising speeds also continues for mobile broadband, as Ookla found that median speeds rose to 59.94 Mbps/8.02 Mbps in May 2022.<sup>30</sup>

### **3. Broadband Pricing Trends Continue to Favor Consumers**

The broadband market's effectively competitive conditions have helped secure consumer affordability, as services prices held constant or even declined in the midst of high inflation. Research published by USTelecom in July 2021 indicated that prices for broadband services fell between 2020 and 2021 across the board.<sup>31</sup> That is, prices for entry level tiers dropped by 9.1% (10.8% when adjusted for inflation), for the most popular tiers by 7.5 % (9.3% when adjusted for inflation), and for the highest speed tiers by 2.3% (4.2% when adjusted for inflation). And research published by US Telecom in June 2022 indicated that prices fell between March 2021

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<sup>27</sup> Opensignal, "5G User Experience Report" (Jan. 2022), at:

<https://www.opensignal.com/reports/2022/01/usa/mobile-network-experience-5g>.

<sup>28</sup> Juan Pedro Tomás, "Verizon says usage on its 5G Ultra Wideband network grew 249%" RCRWireless (Jun. 2, 2022), at: <https://rcrwireless.com/20220602/5g/verizon-says-usage-5g-ultra-wideband-network-grows-249>.

<sup>29</sup> See Mike Dano, AT&T's 5G build gets more ambitious, *LightReading* (Jan. 26, 2022), at: <https://www.lightreading.com/5g/atandts-5g-buildout-gets-more-ambitious/d/d-id/774851>.

<sup>30</sup> Ookla, "United States' Mobile and Fixed Broadband Speeds" (May 2022).

<sup>31</sup> Arthur Menko, Business Planning Inc., "2021 Broadband Pricing Index: An Updated Analysis of Decreasing Prices and Increasing Value for U.S. Broadband Service Over Time" (Jul. 2021), at: <https://ustelecom.org/wp-content/uploads/2021/05/2021-Broadband-Pricing-Index-Report.pdf>. For a summary, see USTelecom, "Entry-Level Broadband Pricing Dropped in 2021" (July 2021). See also Andrew Long, "Evidence of Falling Broadband Prices Grows Despite Overall Spike in Inflation," *Perspectives from FSF Scholars*, Vol. 16, No. 42 (Aug. 9, 2021), at: <https://freestatefoundation.org/wp-content/uploads/2021/08/Evidence-of-Falling-Broadband-Prices-Grows-Despite-Overall-Spike-in-Inflation-080921.pdf>.

and March 2022.<sup>32</sup> According to the research, prices for entry level tiers for the most popular tiers decreased by 5.1% (14.7% when adjusted for inflation) and it decreased for the fastest speed tiers by 1.7% (11.6% when adjusted for inflation).<sup>33</sup>

There also is evidence that competition in the wireless sector has held prices in check. For example, the Consumer Price Index (CPI) for May 2022, shows that the "wireless telephone services" index *decreased* by 0.7% between May 2021 and May 2022, while the "all items" index increased by 8.6% over the last 12 months.<sup>34</sup> And while it would not be surprising if continued economy-wide high inflation prompts small price increases for wireline and wireless broadband services in 2022, strong market competition in the market will continue put downward pressure on prices.

#### **4. Providers Continue to Invest in Broadband Networks**

*Evidence Indicates Strong Network Investment.* According to USTelecom, U.S. broadband providers invested about \$79.4 billion in 2020, slightly lower than the \$80.8 billion invested in 2019, but keeping in line with the sustained, increasing investment in the market seen since 2017.<sup>35</sup> And the wireless industry reported that capital expenditures for 2020 rose to a record \$29.9 billion, a 3% increase over the year before and 13% increase over 2016.<sup>36</sup> Reported private capital investment totals in 2021 by the wireline and wireless sectors can be expected to

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<sup>32</sup> Arthur Menko Business Planning, Inc, "2022 Broadband Pricing Index: A Comparative Analysis Showing Decreasing Prices and Increasing Value for U.S. Broadband Service Over Time" (Jun. 2022), at: <https://ustelecom.org/wp-content/uploads/2022/06/USTelecom-Broadband-Pricing-Report2022.pdf>.

<sup>33</sup> *Id.* at 3, 5.

<sup>34</sup> Bureau of Labor Statistics, News Release: "Consumer Price Index – May 2022" (Jun. 10, 2022), at: <https://www.bls.gov/news.release/pdf/cpi.pdf> (last checked Jun. 28, 2022). For a brief comparison of declining prices for wireless and Internet services reported in the April 2022 CPI, *see* Andrew K. Magloughlin, "Dropping Consumer Broadband Prices Indicate Lack of Market Power," *FSF Blog* (May 13, 2022), at: <https://freestatefoundation.blogspot.com/2022/05/dropping-consumer-broadband-prices.html>.

<sup>35</sup> USTelecom, 2020 Broadband Capex Report (2021), at: <https://ustelecom.org/wp-content/uploads/2021/09/USTelecom-2020-Broadband-Capex-Report.pdf>.

<sup>36</sup> CTIA, 2021 Annual Survey Highlights, 3.

be similar to totals for 2020. Indeed, news reports in 2021 and 2022 indicate broadband ISPs are continuing to invest heavily in infrastructure.<sup>37</sup>

## **B. There Is Strong Evidence of Effective Intermodal Broadband Competition**

The RAY BAUM'S Act of 2018 requires that the Commission consider the effect of intermodal competition on the communications marketplace.<sup>38</sup> In the Commission's *2020 Communications Marketplace Report* proceeding, Free State Foundation scholars filed comments that provided strong evidence of intermodal competition in the broadband marketplace.<sup>39</sup> Since then, the evidence for intermodal competition has only strengthened. In its forthcoming *2022 Communications Marketplace Report*, the Commission should cease its exclusively piecemeal evaluation of broadband marketplace competition that continues to rely on "siloes" service definitions. Instead, it should evaluate competition with a broader "broadband market" definition that takes into account fiber, cable, mobile, FWA, and satellite platforms. This broader outlook would more accurately reflect market realities and be a better guide to formulating Commission policy.<sup>40</sup> A more holistic analytical outlook would better reflect marketplace realities and bring the Commission's views into accord with Congress's policies in the American Connectivity Program.

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<sup>37</sup> See, e.g., See, e.g., Dan O'Shea, "Consolidated ahead of schedule on fiber build," *FierceTelecom* (Jun. 15, 2022), at: <https://www.fiercetelecom.com/telecom/consolidated-ahead-schedule-fiber-build/>; Carl Weinschenk, "Brightspeed Announces First Fiber Upgrade Markets" *Telecompetitor* (Jun. 7, 2022), at: <https://www.telecompetitor.com/brightspeed-announces-first-fiber-upgrade-markets/>; Diana Goovaerts "Frontier launches \$1.2B fundraising bid to fuel fiber build" *FierceTelecom* (May 10, 2022), at: <https://www.fiercetelecom.com/telecom/frontier-launches-12b-fundraising-bid-fuel-fiber-build/>.

<sup>38</sup> See Public Notice, The State of Competition in the Communications Marketplace, GN Docket No. 22-203 (May 16, 2022) (citing 47 U.S.C. § 163(d)(1)).

<sup>39</sup> Comments of the Free State Foundation, In the Matter of the Communications Marketplace Report, GN Docket 20-60 (Apr. 27, 2020), 5-15, at: [https://www.fcc.gov/ecfs/file/download/DOC-5c6efb1ce7400000-A.pdf?file\\_name=FSF%20Comments%20-%20Communications%20Marketplace%20%20Competition%20042720.pdf](https://www.fcc.gov/ecfs/file/download/DOC-5c6efb1ce7400000-A.pdf?file_name=FSF%20Comments%20-%20Communications%20Marketplace%20%20Competition%20042720.pdf).

<sup>40</sup> See Comments of the Free State Foundation, In the Matter of the Communications Marketplace Report, GN Docket 20-60, at 14-15. See also Randolph J. May, *Why Stovepipe Regulation No Longer Works: An Essay on the Need for a New Market-Oriented Communications Policy*, FED. COMM. L.J. (2006).

## **1. Wireless Broadband Now Matches the Service Quality of 2020 Fixed Broadband and Is Closing the Gap With Fixed Broadband**

Average mobile download speeds are now as fast as fixed networks were when FSF scholars filed comments in the 2020 report proceeding. According to Ookla, as of May 2022, average (mean) mobile broadband speeds were 130.91 Mbps/14.43 Mbps.<sup>41</sup> Ookla measured average fixed broadband speeds at 130.79 Mbps/49.53 Mbps in December 2019.<sup>42</sup> Likewise, present day mobile speeds are far above the Commission's 25 Mbps/3 Mbps benchmark for "broadband Internet access service" and they exceed the 100 Mbps download speed mandate for broadband projects under the Infrastructure Investment and Jobs Act.<sup>43</sup>

Fixed networks also have markedly improved. Ookla measured average fixed U.S. broadband speeds for May 2022 at 223.82 Mbps/86.38 Mbps.<sup>44</sup> But if broadband ISPs had not strongly invested in fixed networks to achieve service improvements over the past two years, mobile networks could have surpassed fixed networks in speeds. It is likely that fixed providers investment decisions were at least partly motivated by challenges from next-generation mobile networks. Thus, mobile and fixed networks compete intermodally, both actually and potentially.

Also, over the last two years the growth rate of average mobile broadband speeds has outpaced the growth rate of average fixed broadband speeds. Looking at Ookla data between December 2019 and May 2022, average mobile download speeds more than tripled, growing by 319%.<sup>45</sup> During the same period, average fixed broadband download speeds increased by a lesser but still impressive 70%. This is not to say that fixed broadband providers are underperforming,

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<sup>41</sup> Ookla, Speedtest, "United States' Mobile Mobile and Fixed Broadband Internet Speeds" (May 2022).

<sup>42</sup> Comments of the Free State Foundation, In the Matter of the Communications Marketplace Report, GN Docket 20-60, at 6 (Ookla, "Speedtest Global Index" (United States) (December 2019).

<sup>43</sup> Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, § 80401, 135 Stat. 1331 (2021).

<sup>44</sup> Ookla, "United States' Mobile Mobile and Fixed Broadband Internet Speeds" (May 2022).

<sup>45</sup> Ookla, Speedtest, "United States Mean Speeds May 2022" (May 2022).

but simply to acknowledge that the gap between fixed and mobile performance is narrowing. Likewise, there continues to be a sizable "mobile-only" user base. According to Pew Research, 15% of U.S. adults are "smart phone only" users, including 27% of low-income adults.<sup>46</sup> For these users, the price point of mobile broadband, or particular features of mobile broadband, may best suit their needs as compared to fixed broadband.

Observable improvements in wireless broadband speeds that foster intermodal competition are due largely to the rapid rollout of 5G services. As described earlier, at the end of 2021, there were 72 million 5G connections in North America, an increase of 15.5 million or 27% from the previous quarter.<sup>47</sup> In September 2020, there were just 9 million 5G connections in North America.<sup>48</sup> Customers of the three largest wireless providers now spend between 10-35% of their time connected to 5G.<sup>49</sup> And as C-band and 2.5 GHz spectrum is put into use for 5G, those speeds will continue to improve.

## **2. Congress Implicitly Recognized Intermodal Competition in the Affordable Connectivity Program**

Recognizing the strength of intermodal competition in the broadband marketplace, Congress permitted broadband subscription subsidy recipients of the Affordable Connectivity Program (and its predecessor, the Emergency Broadband Benefit Program) to choose among

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<sup>46</sup> Pew Research Center, "Internet/Broadband Fact Sheet" (Apr. 2021), at: <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/?menuItem=6ba9316e-006c-482d-be4b69feb64c4be8>.

<sup>47</sup> 5G Americas & Omdia, "North America Statistics" (2022), at: <https://www.5gamericas.org/resources/charts-statistics/north-america/>.

<sup>48</sup> Seth L. Cooper & Andrew K. Magloughlin, "The Broadband Internet Services Market in January 2022: 5G, Cable, Fixed Wireless, Wi-Fi 6, and Fiber Are Benefitting Consumers," *Perspectives from FSF Scholars*, Vol. 17, No. 5 (Jan. 21, 2022), at: <https://freestatefoundation.org/wp-content/uploads/2022/01/The-Broadband-Internet-Services-Market-in-January-2022-5G-Cable-Fixed-Wireless-Wi-Fi-6-and-Fiber-Are-Benefitting-Consumers-012122.pdf>.

<sup>49</sup> Opensignal, "5G Experience Report January 2022" (Jan. 2022), at: <https://www.opensignal.com/reports/2022/01/usa/mobile-network-experience-5g>.



fixed and mobile broadband providers, including for bundled service options.<sup>50</sup> By permitting intermodal choice under the law, Congress implicitly recognized that fixed broadband subscriptions are advantageous for closing the digital divide and providing low-income Americans with the services they need. Indeed, in its Emergency Broadband Benefit Order, the Commission cited evidence of intermodal competition from the *2020 Communications Marketplace Report* while implementing Congress's mandate for tech neutrality.<sup>51</sup> And Commissioner Starks' statement on the order seems to implicitly agree that broadband providers compete intermodally, as he wrote that the Emergency Broadband Benefit Program would "reach more disconnected low-income households and people of color than any previous FCC effort to close the digital divide."<sup>52</sup> If closing the digital divide involves simply connecting unserved people to the Internet, it should not matter whether that connection is fixed or mobile. The Commission should take the same technologically neutral view for defining the broadband marketplace.

### **3. FWA, C-MVNOs, and LEO Satellites Are Reshaping the Market**

As innovative service options gain additional subscribers and cause further market disruption, it will become increasingly difficult to view the broadband market in distinct technological service categories. FWA broadband subscribership is exploding. T-Mobile and Verizon already have 1.4 million fixed wireless subscribers combined, and Cohen Inc. predicts

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<sup>50</sup> See Affordable Connectivity Program, WC Docket No. 21-450; Emergency Broadband Benefit Program, WC Docket No. 20-445, Report and Order and Further Notice of Proposed Rulemaking (released Jan. 21, 2022), ¶ 11 ("The Commission will retain the broad, technologically neutral approach to provider participation that was used in the EBB Program").

<sup>51</sup> See Emergency Broadband Benefit Program, WC Docket No. 20-445, Report and Order (released Feb. 26, 2021), ¶ 77, n. 251 (released Feb. 26, 2021) (citing evidence of wireless providers competing with cable providers by bundling communications service packages).

<sup>52</sup> Emergency Broadband Benefit Program, WC Docket No. 20-445, Report and Order, 91 (Statement of Commissioner Geoffrey Starks).

that major FWA providers will add 2.3 million subscribers by year end.<sup>53</sup> Wireless offerings from cable providers Comcast and Charter have 4.3 million and 3.9 million subscribers, respectively.<sup>54</sup> And Starlink's low earth orbit (LEO) satellite constellation, which offers 87 Mbps/13.54 Mbps speeds and historically low latency, now has 400,000 customers and is quickly growing.<sup>55</sup> The advantages of each of these innovative options will increasingly facilitate intermodal competition as they eliminate or lessen the constraints traditionally associated with each techno-functional service category.

### **C. More Spectrum Availability and Reduced Regulatory Barriers to Infrastructure Deployment Will Further Boost Broadband Competition**

In order to further promote the competition, innovation, and investment in the broadband marketplace, the Commission should work proactively to make more spectrum available for commercial use and by removing regulatory barriers to broadband deployment.

There is strong demand for additional mid-band spectrum. Thus, the Commission should ensure that its July 2022 auction for the 2.5 GHz band is completed on schedule and that spectrum licenses are granted in timely fashion. The Commission also ought to prioritize the lower 3.1-3.45 GHz band for study and prompt repurposing.<sup>56</sup> Although proposals for repurposing different bands are at different stages of development and each face unique

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<sup>53</sup> See Seth L. Cooper, "Fixed Wireless Access Is Boosting Rural Broadband and Consumer Choice," *Perspectives from FSF Scholars* Vol. 17, No. 21 (Apr. 25, 2021), at: <https://freestatefoundation.org/wp-content/uploads/2022/04/Fixed-Wireless-Access-Is-Boosting-Rural-Broadband-and-Consumer-Choice-042522.pdf>; Seth L. Cooper, "More Indicators of a Bright Future for Fixed Wireless Access Services," *FSF Blog* (May 19, 2022), at: <http://freestatefoundation.blogspot.com/2022/05/more-indicators-of-bright-future-for.html>.

<sup>54</sup> See Seth L. Cooper, "Cable Continues to Gain Traction in the Mobile Wireless Market," *FSF Blog* (May 2, 2022), at: <http://freestatefoundation.blogspot.com/2022/05/cable-continues-to-gain-traction-in.html>.

<sup>55</sup> See Andrew K. Magloughlin, "Starlink Hits 400,000 Subscribers, Introduces Portable Dishes," *FSF Blog* (May 25, 2022), at: <http://freestatefoundation.blogspot.com/2022/05/starlink-hits-400k-subscribers.html>; Andrew K. Magloughlin, "Starlink's Performance Shows Prudence of Swift FCC Approval," *FSF Blog* (Jan/ 19, 2022), at: <http://freestatefoundation.blogspot.com/2022/01/starlinks-performance-shows-prudence-of.html>.

<sup>56</sup> See Seth L. Cooper, "Fast Action on the Lower 3 GHz Band Will Secure America's 5G Future," *Perspectives from FSF Scholars*, Vol. 16, No.9 (Feb. 18, 2021), at: <https://freestatefoundation.org/wp-content/uploads/2021/02/Fast-Action-on-the-Lower-3-GHz-Band-Will-Secure-Americas-5G-Future-021821.pdf>.

challenges, the Commission should advance every proposal for spectrum that may realistically be suitable for commercial uses – whether on a licensed or unlicensed basis. A larger spectrum supply will enable more competitors to serve more Americans with next-gen services.

Additionally, Congress's allocation of over \$45 billion for broadband-related spending in the Broadband, Equity, Access, and Deployment (BEAD) Program, and billions more for broadband through other programs, magnifies the need to clear away impediments to efficient and timely buildout of broadband facilities. To this end, the Commission should reform its rules for pole attachments by establishing an objective formula for pole replacement cost-sharing along with a rebuttable presumption that pole owners directly benefit from replacement poles.<sup>57</sup> And the agency should place pole attachment disputes between pole owners and broadband providers in unserved areas on the Accelerated Docket for resolution. Furthermore, the Commission should adopt shot clocks and fee caps for wireline infrastructure deployment in state and local rights-of-way. These actions could help enhance broadband competition, enable service upgrades, and promote investment that will connect more Americans and give them more choices.

### **III. Radical Viewing Changes Require Rejection of the Video Regulatory Status Quo**

The Commission's Public Notice seeks "comment on the issues and trends affecting competition in the market to deliver video programming services."<sup>58</sup> Put simply, the issue is that the current regulatory landscape bears no resemblance to a marketplace transformed by the relentless trend by which consumers reject traditional MVPD offerings in favor of a dynamic,

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<sup>57</sup> See Comments of the Free State Foundation, Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WC Docket No. 17-84 (Jun. 27, 2022), at: <https://www.fcc.gov/ecfs/search/search-filings/filing/106270482814231>. See also Seth L. Cooper and Andrew K. Magloughlin, "The FCC Should Preserve and Expand its Broadband Infrastructure Reforms," *Perspectives from FSF Scholars*, Vol. 17, No. 30 (Jun. 8, 2022), at: <https://freestatefoundation.org/wp-content/uploads/2022/06/The-FCC-Should-Preserve-and-Expand-its-Broadband-Infrastructure-Reforms-060822.pdf>.

<sup>58</sup> Public Notice, The State of Competition in the Communications Marketplace, GN Docket No. 22-203, at 7.

self-curated mix of subscription streaming services accessed on consumer-owned connected hardware (Netflix, Amazon Prime, Hulu, Apple TV+, HBO Max, Discovery+, Paramount+), ad-supported web-based video platforms (YouTube, Dailymotion, Vimeo, Vevo, Twitch), social media smartphone apps (TikTok, YouTube Shorts, Snapchat, Instagram), and so on.

The Public Notice also seeks comment on the "[e]ffects of the COVID-19 pandemic on the marketplace for video services."<sup>59</sup> For streaming services, the pandemic undeniably accelerated further their prominence vis-à-vis traditional MVPD offerings. As Americans spent more time at home, consuming greater amounts of content, they expressed clearly through their purchasing decisions a preference for the vast and steadily expanding array of streaming options available: "in the U.S. and many other parts of the world, the COVID pandemic propelled over-the-top video uptake years ahead of where it would otherwise have been – a 'pull-forward' effect seen by many services."<sup>60</sup> The expanded reliance upon broadband connections described elsewhere in these comments largely reflects increased usage driven by the tectonic shift toward video delivered over the Internet.

The consumption of video in 2022 is untethered not just from the prime-time schedule, but from the very concept and physical manifestation of the "television." Without question, the marketplace significance of MVPDs has diminished to an extent that it no longer appropriately serves as the foundation for one-sided regulation. Consequently, it is time for the Commission to acknowledge at long last that the regulatory model applied to video, writ large, is premised upon

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<sup>59</sup> Public Notice, The State of Competition in the Communications Marketplace, GN Docket No. 22-203, at 8.

<sup>60</sup> Todd Spangler, "U.S. Subscription VOD Revenue Growth Slowing to 13% in 2022, Hitting \$25 Billion: PwC Report," *Variety* (Jun. 20, 2022), at: <https://variety.com/2022/digital/news/us-subscription-vod-revenue-pwc-forecast-1235298797/> ("[I]n the U.S. and many other parts of the world, the COVID pandemic propelled over-the-top video uptake years ahead of where it would otherwise have been – a 'pull-forward' effect seen by many services."). *See also* Netflix Letter to Shareholders re First Quarter 2022 Earnings (April 19, 2022), at: [https://s22.q4cdn.com/959853165/files/doc\\_financials/2022/q1/FINAL-Q1-22-Shareholder-Letter.pdf](https://s22.q4cdn.com/959853165/files/doc_financials/2022/q1/FINAL-Q1-22-Shareholder-Letter.pdf), at 3 ("[O]ur membership growth has temporarily accelerated due to home confinement.").

assumptions that simply do not match reality. A fresh look is required, one that inevitably must result in a prompt transition to a free-market approach that embraces an efficient, pro-consumer reliance on the vibrant competitive forces that unquestionably define today's video marketplace.

#### **A. Traditional MVPDs Continue to Shed Subscribers**

Over the past two years, Americans spent a disproportionate amount of time in their homes, in front of screens. Even still, and in the face of the incredible and sustained growth enjoyed by streaming services, subscriptions to traditional MVPD services continued their steady downward trend. FSF's comments in the 2020 report proceeding observed that, according to Leichtman Research Group data, cable subscriber totals dropped from 59.8 million in 2010 to 45.8 million at the end of 2019.<sup>61</sup> By year-end 2021, that number fell further to 41.3 million – nearly a 10% decline.<sup>62</sup> As of May 2022, that total sits at 40.5 million, over 825,000 lower than just three months prior,<sup>63</sup> and down almost 12% from December 2019.

Other traditional MVPDs have had similar experiences. For example, publicly available data reveals that subscribers to DISH TV, the number two Direct Broadcast Satellite service, declined from 9.4 million at year-end 2019 to 8.2 million two years later – a 13% drop. Verizon FiOS total subscribers fell 14% over the same timeframe, from 4.2 million to 3.6 million.

Even virtual MVPDs (vMVPDs), a subset of streaming services that offer bundles comparable to traditional MVPDs – but without the responsibilities of maintaining physical distribution facilities (fiber, coaxial cable, satellites) or the regulations that attach thereto – are facing flat or declining subscription totals. Some, such as YouTube TV and DIRECTV Stream,

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<sup>61</sup> Comments of the Free State Foundation, Communications Marketplace Report, GN Docket 20-60, at 17.

<sup>62</sup> Leichtman Research Group (LRG) Press Release, "Major Pay-TV Providers Lost About 44,700,000 Subscribers in 2021" (Mar. 8, 2022), at: <https://www.leichtmanresearch.com/wp-content/uploads/2022/03/LRG-Press-Release-3-8-2022-1.pdf>.

<sup>63</sup> LRG Press Release, "Major Pay-TV Providers Lost About 1,950,000 Subscribers in 1Q 2022" (May 17, 2022), at: <https://www.leichtmanresearch.com/wp-content/uploads/2022/05/LRG-Press-Release-5-17-2022.pdf>.

do not regularly release such data.<sup>64</sup> Of those that do, Hulu + Live TV, Sling TV, and fuboTV all experienced significant subscriber losses during the first quarter of this year: Hulu + Live TV shed 200,000 subscribers, a 4.7% change, Sling TV's total subscribers fell by 234,000, a 4.7% drop, and fuboTV lost nearly 74,000 subscribers, a 6.5% decline.<sup>65</sup> All told, losses by these three leading vMVPDs exceeded a half million subscribers, representing 6.4% of their collective base.

Further contraction of the total MVPD subscriber base is expected. According to Parks Associates, "pay-TV subscriptions and revenues are on a continuous decline as consumers embrace OTT services" – resulting in an anticipated 27% decrease in subscribers over the ten-year period ending in 2024.<sup>66</sup> By comparison, subscription video-on-demand (VOD) services are expected to increase revenues by 13% this year and enjoy a compound annual growth of rate of 8.5% between 2021 and 2026.<sup>67</sup>

## **B. By Every Measure, Streaming's Dominance Increases Steadily**

As more and more consumers turn away from traditional MVPD bundles, streaming growth, in terms of both subscriptions and engagement time, more than makes up the difference. As Parks Associates' Paul Erickson, Director of Research, recently explained, "streaming's debut changed the trajectory of the modern video service industry."<sup>68</sup> And the latest numbers bear that

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<sup>64</sup> See Phil Nickinson, "How many subscribers does YouTube TV have?" *Variety* (Feb. 2, 2022), at: <https://www.digitaltrends.com/home-theater/how-many-youtube-tv-subscribers/> (pointing out that "[i]ts now been a year since YouTube last released any sort of subscriber numbers" and "what it put out a year ago was, at best, vague"). See also *id.* (reporting that DIRECTV Stream's subscriber base shrank by 64 percent between the third quarter of 2018 and the fourth quarter of 2020, the most recent period for which reliable data is available).

<sup>65</sup> See LRG Press Release, "Major Pay-TV Providers Lost About 44,700,000 Subscribers in 2021" (Mar. 8, 2022), at: <https://www.leichtmanresearch.com/wp-content/uploads/2022/03/LRG-Press-Release-3-8-2022-1.pdf>, LRG Press Release, "Major Pay-TV Providers Lost About 1,950,000 Subscribers in 1Q 2022" (May 17, 2022), at: <https://www.leichtmanresearch.com/wp-content/uploads/2022/05/LRG-Press-Release-5-17-2022.pdf>.

<sup>66</sup> Parks Associates Blog Post, "By 2024, traditional pay-TV services will decline to 76.7 million households, a 27% drop since 2014" (Jun. 21, 2022), at: <https://www.parksassociates.com/blog/article/06212022>.

<sup>67</sup> See Todd Spangler, "U.S. Subscription VOD Revenue Growth Slowing to 13% in 2022, Hitting \$25 Billion: PwC Report," *Variety* (Jun. 20, 2022), at: <https://variety.com/2022/digital/news/us-subscription-vod-revenue-pwc-forecast-1235298797/>.

<sup>68</sup> *Id.*

out. Let us start with the transformative fact that, according to Nielsen, streaming constituted 30.4% of all "TV" content watched in April 2022.<sup>69</sup> That total, which broke the record set the month prior, surpassed broadcast television at 24.7% and was within striking distance of "cable" at 36.8%. Netflix alone represented 6.6% of viewing overall.

According to Kagan Consumer Insights, the amount of time spent watching subscription video-on-demand (VOD) content during the first quarter of 2022 was even higher: 45% of an average of 4+ hours per day in households with a "smart TV" and 43% in those without.<sup>70</sup>

One of the primary reasons for the explosive growth in the amount of time spent viewing streamed video also represents perhaps the most striking change in consumer behavior since the bygone days when traditional MVPDs were the only game in town: Americans no longer choose one and only one source of video, but instead actively curate personalized "bundles" by subscribing to multiple, hand-selected subscription services.<sup>71</sup> As the Free State Foundation noted in our comments in 2020, as of year-end 2019, 46 percent of households subscribed to more than one streaming service.<sup>72</sup> During the intervening two years, that trend has accelerated rapidly. According to NPD Connected Intelligence, at the height of the pandemic, the average

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<sup>69</sup> Todd Spangler, "HBO Max Broken Out in Nielsen Streaming Estimates for First Time, Notches 1% Share of April TV Viewing," *Variety* (May 19, 2022), at: <https://variety.com/2022/tv/news/hbo-max-nielsen-streaming-share-1235272439/>.

<sup>70</sup> Karlene Lukovitz, "Smart TVs Have Little Impact On U.S. Household TV Viewing Behavior," *Digital News Daily* (Jun. 10, 2022), at: <https://www.mediapost.com/publications/article/374678/smart-tvs-have-little-impact-on-us-household-tv.html>.

<sup>71</sup> See Andrew Long, "Pixel by Pixel, Video Streaming's Ascension Comes Into Focus," *Perspectives from FSF Scholars*, Vol. 16, No. 52 (Sept. 29, 2021), at: <https://freestatefoundation.org/wp-content/uploads/2021/09/Pixel-by-Pixel-Video-Streamings-Ascension-Comes-Into-Focus-092921.pdf>, at 3-4 (drawing a sharp contrast between consumer behavior at the time when the 1992 Cable Act was passed, at which point "Congress perceived significant technological challenges preventing consumers from even watching over-the-air broadcast signals and cable television service on the same device," and today, when, as discussed herein, broadband households on average subscribe to five or more streaming services).

<sup>72</sup> Comments of the Free State Foundation, Communications Marketplace Report, GN Docket 20-60, at 18.

number of such subscriptions leapt to 5.2.<sup>73</sup> As of April 2022, that number remained impressively high, and slightly above the average a year prior: 4.6, as compared to 4.3.

Meanwhile, a survey conducted by Kagan Consumer Insights in March of this year arrived at an even higher number: an average of 6.8 services per connected household, up from 6.6 in September 2021. Those totals include not just subscription services, but also free, ad-supported platforms such as YouTube and social media sources like TikTok and YouTube Shorts.<sup>74</sup> As younger Americans increasingly turn to smartphone apps for video content, "social video" engagement metrics skyrocket: TikTok announced in September 2021 that it has a billion monthly users,<sup>75</sup> and last month YouTube reported that Shorts "are now being watched by over 1.5 billion logged-in users every month."<sup>76</sup>

The growing number of subscribers to the top streaming services tells a consistent story. As detailed in "Don't Believe the Hype: Streaming Dominates the Video Marketplace," a May 2022 *Perspectives from FSF Scholars*, during the same timeframe that Netflix shed a statistically small number of subscribers – 200,000 out of a total of 220 million, or less than 0.1% – five leading streaming services added nearly 33 million subscribers: HBO/HBO Max (3 million), Disney+ (7.9 million), Hulu (500,000), Paramount+ (6.3 million), and Discovery+ (2 million).<sup>77</sup>

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<sup>73</sup> See Erik Gruenwedel, "NPD: Use of Multiple SVOD Services in the U.S. Homes Rebounds, Remains Below Mid-Pandemic High," *Media Play News* (May 23, 2022), at: <https://www.mediaplaynews.com/npd-use-of-multiple-svod-services-in-the-u-s-rebounds-remains-below-mid-pandemic-high/>.

<sup>74</sup> See George Winslow, "Average U.S. Internet Home Uses a Record 6.8 OTT Services," *TV Tech* (Jun. 21, 2022), at: [https://www.tvtechnology.com/news/average-us-internet-home-uses-a-record-68-ott-services?utm\\_source=SmartBrief&utm\\_medium=email&utm\\_campaign=14B53D24-35C5-41D4-B190-AC51C762248C&utm\\_content=0D4FA6C3-7798-46DD-A06E-1645B5A60135&utm\\_term=2de6fe8f-2a3c-41b7-a71d-ecaf9c482459](https://www.tvtechnology.com/news/average-us-internet-home-uses-a-record-68-ott-services?utm_source=SmartBrief&utm_medium=email&utm_campaign=14B53D24-35C5-41D4-B190-AC51C762248C&utm_content=0D4FA6C3-7798-46DD-A06E-1645B5A60135&utm_term=2de6fe8f-2a3c-41b7-a71d-ecaf9c482459).

<sup>75</sup> TikTok, Press Release: "Thanks a billion!" (Sept. 27, 2021), at: <https://newsroom.tiktok.com/en-us/1-billion-people-on-tiktok>.

<sup>76</sup> Matt Binder, "YouTube Shorts says it has 1.5 billion monthly users. Those are TikTok-like numbers." Mashable (Jun. 15, 2022), at: <https://mashable.com/article/youtube-shorts-1-5-billion-monthly-users>.

<sup>77</sup> See Andrew Long, "Don't Believe the Hype: Streaming Dominates the Video Marketplace," *Perspectives from FSF Scholars*, Vol. 17, No. 25 (May 16, 2022), at: <https://freestatefoundation.org/wp-content/uploads/2022/05/Dont-Believe-the-Hype-Streaming-Dominates-the-Video-Marketplace-051322-kb-edits.pdf>, at 3.



Moreover, Netflix itself has enjoyed phenomenal growth over the past two years, notwithstanding its recent stumble. At the end of Q1 2020, its global subscriber total stood at 182.86 million.<sup>78</sup> By the end of Q1 of the current year, that number had reached 221.64 million, a 21.2% jump.<sup>79</sup> By comparison, the total combined subscriber base of the top seven cable operators today is just 40.49 million, less than a fifth of that of Netflix.

Other indicia of streaming's strong marketplace position include the following:

- **Accolades:** At the 2021 Emmy Awards, Netflix won 44 trophies – and Ted Lasso, an Apple TV+ original, took home the prize for outstanding comedy series. Amazon Prime Video's *The Underground Railroad* and Hulu's *The Handmaid's Tale* received numerous nominations: 7 for the former and 21 for the latter.<sup>80</sup>
- **Sports:** Once primarily seen a source of stored library content, streaming services increasingly are investing in live sports programming. Apple has secured the rights to stream every Major League Soccer game,<sup>81</sup> Amazon Prime Video is now the exclusive home of Thursday night NFL football games,<sup>82</sup> and Netflix reportedly was in the running for the U.S. rights to Formula 1 races.<sup>83</sup> Relatedly, New England Sports Network became the first regional sports network (RSN) to launch a direct-to-consumer streaming service.<sup>84</sup> Not long ago, the Commission regarded RSNs as "must-have" programming able to distort the MVPD market.<sup>85</sup>

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<sup>78</sup> Netflix Letter to Shareholders re First Quarter 2020 Earnings (Apr. 21, 2020), at: [https://s22.q4cdn.com/959853165/files/doc\\_financials/2020/q1/updated/FINAL-Q1-20-Shareholder-Letter.pdf](https://s22.q4cdn.com/959853165/files/doc_financials/2020/q1/updated/FINAL-Q1-20-Shareholder-Letter.pdf).

<sup>79</sup> Netflix Letter to Shareholders re First Quarter 2022 Earnings (Apr. 19, 2022), at: [https://s22.q4cdn.com/959853165/files/doc\\_financials/2022/q1/FINAL-Q1-22-Shareholder-Letter.pdf](https://s22.q4cdn.com/959853165/files/doc_financials/2022/q1/FINAL-Q1-22-Shareholder-Letter.pdf).

<sup>80</sup> See Andrew Long, "Pixel by Pixel, Video Streaming's Ascension Comes Into Focus," *Perspectives from FSF Scholars*, Vol. 16, No. 52 (Sept. 29, 2021), at: <https://freestatefoundation.org/wp-content/uploads/2021/09/Pixel-by-Pixel-Video-Streamings-Ascension-Comes-Into-Focus-092921.pdf>, at 3.

<sup>81</sup> See Janko Roettgers, "Apple strikes a 10-year deal to stream every MLS game," *Protocol* (Jun. 14, 2022), at: <https://www.protocol.com/bulletins/apple-tv-mls-streaming-pact>.

<sup>82</sup> See Daniel Frankel, "Amazon Prime Video and NFL Set Full 'Thursday Night Football' Schedule," *Next TV* (May 13, 2022), at: <https://www.nexttv.com/news/amazon-prime-video-gets-full-nfl-thursday-night-football-schedule>.

<sup>83</sup> See Lauren Forristal, "Netflix, ESPN, and NBCUniversal compete for US Formula 1 rights, report says," *TechCrunch* (Jun. 7, 2022), at: <https://techcrunch.com/2022/06/07/netflix-espn-and-nbcuniversal-compete-for-u-s-formula-1-rights-report-says/>.

<sup>84</sup> See Alex Weprin, "Boston's NESN Offers Break From Cable Bundle With Streaming Service Launch," *The Hollywood Reporter* (Jun. 1, 2022), at: <https://www.hollywoodreporter.com/tv/tv-news/nesn-streaming-service-red-sox-cost-1235157178/> ("[T]he launch of the streaming service is significant, with RSNs serving as one of the last bastions of important exclusive content tied to the pay-TV bundle.").

<sup>85</sup> See, e.g., General Motors Corporation and Hughes Electronics Corporation, Transferors And The News Corporation Limited, Transferee, For Authority to Transfer Control, Memorandum Opinion and Order, MB Docket No. 03-124, FCC 03-330 (2004), at: <https://www.fcc.gov/document/general-motors-corporation-hughes-electronics-corporation-and-news>, at 62 ("Since the Commission first began tracking regional cable programming networks in 1998, it has repeatedly recognized the importance of regional sports programming to MVPD offerings.") (citations omitted).

- Ad-Supported Tiers: Embracing a strategy long employed by cable programming services and broadcast television stations, and thereby further blurring the lines that the FCC in the past has relied upon to distinguish MVPDs, OVDs, and broadcasters, subscription-based streaming services have announced intentions to launch ad-supported versions – including, notably, Netflix<sup>86</sup> and Disney+.<sup>87</sup>

### **C. Competition Compels Reassessment of the MVPD Regulatory Model and Elimination of Outdated Regulations**

In all regards, the state of the video marketplace in 2022 demands a de novo assessment of the fundamental justification, let alone need, for government intrusion. As set forth above, streaming services today enjoy all of the momentum and – appropriately – face none of the legacy regulations that burden traditional MVPDs. However, this reality demands the elimination of any existing rule predicated upon the notion that traditional MVPDs possess undue power. The alternative – a scenario in which "laws, regulations, [and] regulatory practices pose a barrier ... to the competitive expansion of existing providers of" video content<sup>88</sup> – lacks evidentiary justification, and it denies consumers the full benefits of unbridled competition from all sources.

Accordingly, the Commission should act promptly to eliminate its program access and carriage requirements, along with its network non-duplication and syndicated exclusivity rules. In addition, the Commission should follow its sound decision in September 2020 to terminate the so-called "unlock the box" navigation device proceeding<sup>89</sup> to its logical conclusion by announcing that the sunset provision set forth in Section 629(e) of the 1996 Act has been

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<sup>86</sup> See Megan McCluskey, "Ads Are Officially Coming to Netflix. Here's What That Means for You," *Time* (Jun. 23, 2022), at: <https://time.com/6175837/netflix-ads-coming/>.

<sup>87</sup> See Todd Spangler, "Disney Expects Most Disney+ Subscribers Will Take Its Cheaper Ad-Based Plan," *Variety* (May 18, 2022), at: <https://variety.com/2022/digital/news/disney-plus-advertising-plan-majorit-1235271205/>.

<sup>88</sup> Public Notice, The State of Competition in the Communications Marketplace, GN Docket No. 22-203 (May 16, 2022), at 7.

<sup>89</sup> See Expanding Consumers' Video Navigation Choices, MB Docket No. 16-42; Commercial Availability of Navigation Devices, CS Docket No. 97-80, Report and Order, FCC 20-124 (Sept. 4, 2020), at: <https://docs.fcc.gov/public/attachments/FCC-20-124A1.pdf>.

satisfied.<sup>90</sup> Consumers today purchase a range of devices – TVs, dedicated streaming boxes, smartphones, video game consoles, computers, and more – upon which they access video content, including the services of traditional MVPDs, in ways well beyond the wildest dreams of the lawmakers who passed Section 629 over a quarter-century ago. Another attempt to create out of thin air a retail marketplace for hardware able to access MVPD services would, like those that preceded it, fail miserably and waste limited agency resources.<sup>91</sup>

#### **IV. Conclusion**

For the foregoing reasons, the Commission should act in accordance with the views expressed herein.

Respectfully submitted,

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<sup>90</sup> See 47 U.S.C. § 549(e). See also Andrew Long, "Closing the Lid on 'Unlock the Box' Should End Video Device Regulation," *Perspectives from FSF Scholars*, Vol. 15, No. 50 (Sept. 25, 2020), at: <https://freestatefoundation.org/wp-content/uploads/2020/09/Closing-the-Lid-on-Unlock-the-Box-Should-End-Video-Device-Regulation-092520.pdf>, at 10-11 (arguing that "[t]he FCC now should embrace the inevitable consequences of its findings and invoke the sunset provision").

<sup>91</sup> The Public Notice specifically seeks comment on "the related market for set-top boxes and devices." Public Notice, *The State of Competition in the Communications Marketplace*, GN Docket No. 22-203 (May 16, 2022), at 8. Regarding the former, the practical reality is that no such market exists.