### Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

| In the Matter of                      | ) |                      |
|---------------------------------------|---|----------------------|
| Data Caps in Consumer Broadband Plans | ) | WC Docket No. 23-199 |
| 1                                     | ý |                      |
|                                       | ) |                      |

## **COMMENTS OF FREE PRESS**

S. Derek Turner, Senior Advisor Matthew F. Wood, VP of Policy Yanni Chen, Policy Counsel Free Press 1025 Connecticut Avenue, NW Suite 1110 Washington, DC 20036 202-265-1490

November 14, 2024

#### **EXECUTIVE SUMMARY**

Families should think about the Federal Communications Commission as they gather around the kitchen table staring at a pile of bills. That's because the FCC oversees the media and telecom industries that are responsible for a good share of the average household's monthly expenditures. The FCC's policies can and do have a large impact on communications marketplace competition, which means that the Commission's actions can lead to lower prices, and its inaction can contribute to harmful inflation.

Amongst the jumble of punditry and analysis coming out of last week's election, U.S. voters sent at least one clear message to the government: the prices are too damn high. According to national exit polls, 75 percent of voters said that inflation was a hardship for their families during the last year, with 74 percent of those voting for President-elect Trump saying inflation caused a "severe" hardship for their families.

It is therefore fortuitous that the Commission had already launched this inquiry to "better understand the current state of data caps and whether data caps cause harm to competition or consumers' ability to access broadband Internet services." Though it is unclear who will lead the agency next year, the clear message sent by voters concerning inflation indicates a strong expectation that the FCC should be laser-focused on lowering prices. Bringing prices down should be the top goal of this agency and the entire incoming federal government, as anything less would be a betrayal.

Communications services are essential but unfortunately less competitive than services in many other markets, in part because of the natural monopoly characteristics of communications networks. Because of this, Congress created the FCC and directed it to ensure "all people of the United States [have access to] adequate facilities at reasonable charges." That oversight duty requires constant, rigorous and independent analysis. We should therefore expect that this inquiry would aid the Commission's and the incoming administration's efforts to properly understand the market, diagnose any issues, and take action to bring consumers the benefits of meaningful broadband competition.

To satisfy the voters' demands to tackle rising prices, the Commission first needs to collect much more detailed data, particularly concerning the impact of competition on ISPs' pricing terms and conditions. Free Press has not, and is not calling on the Commission in this Comment, to ban cap-and-fee pricing. We are not calling for price regulation at all—though the FCC should be aware that large majorities of Americans explicitly support broadband price caps.<sup>1</sup> We are merely calling on the Commission to gather the data it needs to fulfill its statutory duties to ensure "affordability . . . and maximum utilization of broadband infrastructure and service by the public."

In this Comment, we document the evolution of cap-and-fee pricing in the U.S. broadband market and discuss how this evolution has always served the ISPs' primary goal: profit

<sup>&</sup>lt;sup>1</sup> See Bobbi Dempsey, "Here's How Much Internet Costs (Then and Now) in the Most Populous States in America: Survey Report," US News & World Report (Oct. 21, 2024) ("Judging by our newest survey results, most consumers want some limits in place to keep internet costs from soaring uncontrollably. In particular, a majority (76%) of respondents from the most populous states want the U.S. government to cap what ISPs can charge Americans for internet service.").

maximization. We document how broadband providers were impacted by shifting market and policy incentives, and changes in technology and consumer preferences.

Prior to the 2015 *Open Internet Order*, ISPs maximized profits through triple- or double-play bundles that included multichannel video. These service bundles often came with data caps to discourage cord-cutting (or fees to recover some of the lost revenues from cord-cutting) so that customers would continue watching and paying for traditional pay-TV packages instead of streaming so much. But once the Commission restored Title II common carriage and adopted open internet rules in early 2015, the market transformed. By making clear that broadband providers could not discriminate unreasonably against streaming video (by blocking, throttling, or discriminating through paid-priority arrangements), the 2015 Order clarified ISPs' incentives and pointed them towards profiting through abundance rather than artificial scarcity.

Currently, most ISPs maximize profits by pushing users into more expensive unlimited gigabit tiers. But these ISPs will change strategy if the alternative is viewed as more profitable. However, while many ISPs have moved away from cap-and-fee pricing, there are major exceptions; and these exceptions reflect how firms exercise market power when facing less competition. ISPs like Cox and Comcast (outside of its northeast territory) continue to show that they want their customers to use as much data as possible, so long as they pay a monthly fee for unlimited data, and/or "upgrade" their service with an expensive monthly equipment rental.

We also demonstrate how cap-and-fee pricing cannot be credibly justified by network management or cost-recovery concerns. We show how ISPs are upgrading their networks while increasing profits without the use of data caps and overage fees. We discuss the Commission's Measuring Broadband America Reports, which consistently reflect the lack of congestion on U.S. broadband networks. Those experimental results are consistent with ISPs' own statements about their networks' ample capacities.

Given that Congress directed the Commission to pursue the national goal of "achieving affordability . . . and maximum utilization of broadband infrastructure," it is clear that there is a need for the Commission to have a better understanding of why some carriers continue to impose caps, what role competition plays in those decisions, and whether inadequate competition in middle mile markets leads to some providers imposing very low caps. We believe it is prudent at this stage for the Commission to collect all the data necessary for it (and the public) to monitor and analyze ISPs' pricing and packaging decisions, and the impact that competition has on consumer welfare. To that end, in this Comment we urge the Commission to finish implementing the National Broadband Plan's recommendations on data collection and analysis, including information about ISP use of data caps.

We then conclude these comments with discussion of the Commission's legal authority to collect data and if necessary, take action against where ISPs have used cap-and-fee pricing in an unjust or unreasonable manner.

## **TABLE OF CONTENTS**

| Executi | ive Sum   | mary   |  |
|---------|---|--|--|
| I.      | Introduction  |  |  |
| II.     | The Evolution of the Use of Data Caps and Overage Fees Demonstrates that ISPs' Main<br>Motivation is Maximizing Profits   |  |  |
| III.    | ISPs Are Currently Maximizing Profits by Pushing Users into More Expensive Tiers that Come with Unlimited Data  |  |  |
| IV.     | There A<br>Data Ca  | Are No Legitimate Network Management or Cost-Recovery Justifications for aps and Overage Fees  |  |
|         | A.  | ISPs Are Fully Recovering Deployment and Operating Costs and Exceeding<br>Financial Goals While Offering Unlimited Data Plans        |  |
|         | B.  | The Commission's Measuring Broadband America Reports Consistently Indicate that Congestion Is a Non-Issue in U.S. Broadband Networks |  |
|         | C.  | Wireless Carriers Face More Competition and Generally Do Not Impose Data<br>Caps with Overage Fees                                   |  |
| V.      | The Commission Must Collect More Detailed Data and Actively Monitor Broadband<br>Market Competition   |  |  |
| VI.     | The Commission Has Ample Legal Authority to Collect Broadband Market Data,<br>and Could Also Exercise Its Title II Authority to Protect Consumers from Unjust and<br>Unreasonable Practices |  |  |
| VII.    | Conclu  | sion   |  |

### I. Introduction

Free Press welcomes this inquiry, which will aid the Commission's efforts to "better understand the current state of data caps and whether data caps cause harm to competition or consumers' ability to access broadband Internet services."<sup>2</sup> The Commission is right to be concerned about any unjust, unreasonable or unnecessary barriers to maximal internet use. Indeed, when instructing the Commission to create the National Broadband Plan, Congress required the plan to include "a detailed strategy for <u>achieving affordability</u> of such service and <u>maximum utilization</u> of broadband infrastructure and service by the public."<sup>3</sup>

The National Broadband Plan recognized that the Commission's ability to fully carry out its statutory duties requires an evolving understanding of how data caps impact users, and how competition impacts ISPs' data limitation and pricing policies. The Plan rightly noted that "national priorities should not be restricted by caps on bandwidth,"<sup>4</sup> and recommended that if ISPs were to impose data cap-and-fee pricing, the Commission should "ensure that such decisions do not inhibit the use of broadband for public purposes such as education, health care, public safety, job training and general government uses."<sup>5</sup>

After the National Broadband Plan was published in 2010, cap-and-fee pricing usage rose in prevalence in the fixed broadband industry, but then declined following the Commission's 2015 *Open Internet Order*. Once it became clear that broadband providers would not be

<sup>&</sup>lt;sup>2</sup> Data Caps in Consumer Broadband Plans, WC Docket No. 23-199, Notice of Inquiry, FCC 24-106, ¶ 2 (rel. Oct. 15, 2024) ("Notice of Inquiry").

<sup>&</sup>lt;sup>3</sup> American Recovery and Reinvestment Act of 2009, 47 U.S.C. § 1305 (k)(2)(B) (2009) (emphases added).

<sup>&</sup>lt;sup>4</sup> See Federal Communications Commission, Connecting America: The National Broadband Plan, at 194 (2010) ("The National Broadband Plan" or "The Plan").

<sup>&</sup>lt;sup>5</sup> *Id*.

permitted to unlawfully discriminate against streaming video, many ISPs finally realized (some more slowly than others) that their long-term prosperity lies in abundance, not artificial scarcity.

We've come a long way from the days when ISPs lamented "bandwidth hogs."<sup>6</sup> As the president of Comcast recently stated, "[o]ur broadband-only customers are heavy data users . . . and we want it that way because our existing network can handle significant increases in bandwidth consumption at a very low marginal cost."<sup>7</sup> Yet there are millions of internet customers still subject to caps and fees, despite the fact that in most instances, these limitations cannot be justified for wired networks based on any legitimate congestion management or economic cost-recovery concerns. There is evidence that competition—or lack thereof—plays a role in whether an ISP imposes cap-and-fee pricing. Indeed, despite Comcast's own admission of its existing network capabilities and the fact that Comcast is in the process of upgrading even further to multigigabit symmetrical capability, the company continues to use cap-and-fee pricing in the parts of its footprint where it faces less competition.

In this Comment, we document the evolution of cap-and-fee pricing in the U.S. broadband industry. We explain why many ISPs moved away from the practice, and why some ISPs may return to this unnecessary pricing scheme. We also describe the limitations in existing data sets that monitor cap-and-fee pricing, and explain why such metering is rarely justified on network management or economic grounds. We then discuss policy recommendations that will better enable the Commission to monitor the competitive state of the broadband market, and the legal authority for these recommendations.

<sup>&</sup>lt;sup>6</sup> In 2008, when Comcast first imposed a data cap and overage fees, a Cisco representative stated that "today's 'bandwidth hog' is tomorrow's average user." Brian Stelter, "Comcast to Place a Cap on Internet Downloads," *New York Times* (Aug. 29, 2008).

<sup>&</sup>lt;sup>7</sup> Comments of Michael J. Cavanagh, President, Comcast Cable Communications, Q3 2024 Investor Call (Oct. 31, 2024).

II. The Evolution of the Use of Data Caps and Overage Fees Demonstrates that ISPs' Main Motivation is Maximizing Profits.

The COVID-19 pandemic made it quite clear that consumers, policymakers and ISPs themselves view unlimited home broadband connections as a necessary utility service. During much of 2020, most ISPs suspended their data cap-and-fee pricing structures, and usage rose at an unprecedented rate. Yet ISPs' networks handled this surge in demand without issue, while their profit margins continued to grow.<sup>8</sup> This was a natural experiment that demonstrated ISP data caps and overage fees are completely unnecessary for network management purposes or legitimate economic cost-recovery purposes.

The evolution of cap-and-fee pricing over the past decade-plus reflects an industry that is always pushing for profit growth, impacted by shifting market and policy incentives and changes in technology and consumer preferences. In 2014, most major fixed-line ISPs imposed caps, with Verizon's fiber-to-the-home ("FTTH") and Cablevision's New York City-area territory being notable exceptions.<sup>9</sup> While most carriers at that time had caps around the 250 gigabyte ("GB") per month level (and had kept these limits at this level for several years prior), others like Time Warner Cable had entry-level tiers with incredibly low limits, even for the time.<sup>10</sup> And even

<sup>&</sup>lt;sup>8</sup> The claim that U.S. networks only handled this surge thanks to Chairman Pai's FCC's Restoring Internet Freedom Order is patently false. As Free Press has demonstrated in copious detail in previous comments, fiber upgrades and deployments made from 2017 through 2020 were due to investment plans and decisions announced by ISPs in 2016 and earlier—as well as merger commitments made by ISPs to the Chairman Wheeler-led FCC. *See, e.g.*, Comments of Free Press, *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 20-269, at 32–35 (filed Sept. 18, 2020); *see also, e.g.*, Letter from S. Derek Turner, Yanni Chen and Matthew F. Wood, Free Press, *Safeguarding and Securing the Open Internet*, WC Docket No. 23-320 (filed Apr. 1, 2024) ("Free Press April 1, 2024 Letter").

<sup>&</sup>lt;sup>9</sup> See Kamran Asaf, "Survey of MSO HSD data caps as higher usage looms," S&P Global (July 25, 2014).

<sup>&</sup>lt;sup>10</sup> See *id.* (indicating that Time Warner's entry-level tier had a 5GB monthly cap, and that its next highest tier had 30GB of monthly data, charging \$1 for each GB used in excess of that cap).

though it was clear that online streaming was the key to breaking the cable programmer and multichannel distributor cartel, and finally ushering in a pro-consumer era, ISPs continued to act in anti-competitive ways to protect their pay-TV businesses and revenues—imposing low caps and high overage fees, while also exempting their own content from these artificial limits.<sup>11</sup>

But once the Commission restored Title II common carriage and adopted open internet rules in early 2015, the market transformed. By making clear that broadband providers could not discriminate unreasonably against streaming video (by blocking, throttling, or discriminating through paid-priority arrangements), the 2015 Order clarified ISPs' incentives and pointed them towards profiting through abundance rather than artificial scarcity. As we've repeatedly and meticulously documented, ISPs accelerated their deployments of next-generation, high-capacity broadband internet access services following the 2015 *Open Internet Order*.<sup>12</sup>

The virtuous cycle worked as intended. As consumer demand for streaming video grew, so too did consumer demand for higher-speed broadband connections. As ISPs met that demand, more and more consumers "cut the cord," dropping their traditional multichannel video service subscriptions in favor of online video. Video programmers continued to increase the fees they charged multichannel video programming distributors (MVPDs), which only further accelerated cord cutting. But with the Commission's restoration in 2015 of prohibitions against unjust

<sup>&</sup>lt;sup>11</sup> See, e.g., Kyle Orland, "Comcast: Xbox 360 On Demand streams won't count against data caps," *Ars Technica* (Mar. 26, 2012). We note that MSOs that deliver their multichannel video service through an application still do not count that traffic towards a customers monthly data cap, even if this application runs on a third-party device. *See, e.g.*, "Xfinity Stream app on Xfinity TV Partner Devices FAQs," *Comcast Corp.* (last accessed Oct. 30, 2024). MSOs call this a "managed service," and contend that it is not delivered via the public internet. Technical and legal questions aside, these exceptions will continue to distort multichannel video competition, in a manner that is likely to result in lower consumer surplus relative to what it might be in a market where no ISPs had incentives to favor their own services.

<sup>&</sup>lt;sup>12</sup> See, e.g., Free Press April 1, 2024 Letter.

discrimination, cable MVPDs were incentivized to look for profit growth in places other than caps and fees. These carriers were further incentivized towards abundance when incumbent local exchange carriers (ILECs) accelerated their FTTH deployments. While ILECs had long imposed caps on their DSL services, many offered FTTH without such limitations. For some this was, and still is, a way of differentiating their broadband services from those of their cable company competitors.<sup>13</sup> This growing competition and regulatory attention appears to have slowed cable's plans to rollout caps nationwide. Charter quietly removed its caps as of late 2014,<sup>14</sup> and Comcast began trialing a much higher 1 terabyte ("TB") cap. Notably, both Comcast and Charter had major transactions before the Commission during this period, and neither benefited their approval chances from expanding a practice widely seen as anti-consumer.<sup>15</sup>

<sup>14</sup> See Rob Pegoraro, "Charter to drop data caps, but other companies still use them," USA *Today* (May 1, 2016) ("But neither Charter, TWC or Bright House impose a data cap today. Charter did earlier have data-use restrictions, but it rarely if ever enforced them before scrubbing them from its fine print in late 2014.").

<sup>15</sup> See Phillip Dampier, "Source: FCC Will Get Serious About Data Caps if Comcast Moves to Impose Them Nationwide," *Stop the Cap* (May 12, 2015) ("Comcast introduced its usage cap market trial in Nashville, Tenn. in 2012 but gradually expanded it to include Huntsville and Mobile, Alabama; Atlanta, Augusta and Savannah, Georgia; Central Kentucky; Maine; Jackson, Mississippi; Knoxville and Memphis, Tennessee; Charleston, South Carolina; and Tucson, Arizona. 'Two and a half-years is exceptionally long for a "market trial," and we expected Comcast would avoid creating an issue for regulators by drawing attention to the data cap issue during its attempted merger with Time Warner Cable,' said our source. 'Now that the merger is

<sup>&</sup>lt;sup>13</sup> See, e.g., Comments of Anand Vadapalli, President, CEO & Director, Alaska Commc'ns Sys. Grp. Inc., Deutsche Bank's 21st Annual Leveraged Finance Conference (Oct. 1, 2023) ("You'll note in our results that consumer broadband actually has been doing well. We've been adding subscribers and we've been adding revenue. We see an opportunity there as we do [for] fiber-to-the-node for businesses. We'll certainly pass some residential neighborhoods. And we'll improve speeds and we'll sell more. We've been often asked, so why are you adding connections in the consumer broadband area? Why are you gaining revenues? It's not many telecoms that are doing that. Well, one of the main reasons is, ours is the only market where the cable company actually has data caps on wire line broadband on their cable modem service. So on one hand, we can talk about, as our cable company competitor does, of a low price for a high speed. When you put a 10 gig cap on the service, that's two movies. One Saturday evening and you reach your data cap and we are able to take advantage of that. It's still opportunistic, but look, it's a market segment that's holding its own and we like it.").

Understanding this history, and the rationale for why some ISPs did a 180-degree turn on cap-and-fee pricing, is critical for the Commission's duty to promote competition and the public interest in our nation's telecommunications service marketplace. Unfortunately, there is no systematic information on the prevalence of caps and fees, including information about how many consumers were subjected to plans with caps (and how many exceeded those limits) during the early days of the streaming media era. The best publicly available data comes from the software-as-a-service company OpenVault, which we discuss in detail below. This data only goes back to 2018, and OpenVault recently stopped reporting data on the different consumption patterns of users on usage-based billing plans ("UBB") versus those on flat-rate billing plans ("FRB").

In Figure 1, we present OpenVault's estimates of the average and median total data usage amongst fixed U.S. broadband customers from the first quarter of 2018 through the second quarter of 2024. This information indicates that broadband use is seasonal, with spikes in use during the last three months of a calendar year. It also reflects COVID-19's impact on home data consumption, with average usage during the fourth quarter of 2020 about 40 percent higher than it was during the same period in 2019.

off, there is growing expectation Comcast will make a decision about its "data usage plans" soon."").

#### Figure 1:



Average vs. Median Monthly U.S. Broadband Customer Data Usage Q1 2018–Q2 2024 (OpenVault)

As expected, median usage was consistently below average usage, though as we see in Figure 2, the gap between average and median narrowed between 2018 and 2022. This narrowing is indicative of a market that is settling into a new normal, where the heaviest users of today are closer to the median user than they were prior to the pandemic. It also reflects the fact that although home data usage continues to grow, it is growing at a <u>slower rate</u> (see Figure 3, showing that the rate of growth in both average and median monthly data use has dramatically slowed since the fourth quarter of 2021).

### Figure 2:

Ratio of Average to Median Monthly U.S. Broadband Customer Data Usage Q1 2018–Q2 2024 (OpenVault)



Source: OpenVault Quarterly Broadband Insight Reports

Figure 3:

### Annual Percentage Change in Average vs. Median Monthly U.S. Broadband Customer Data Usage Q1 2018–Q2 2024 (OpenVault)



This information is instructive as to overall data consumption trends, but the real value OpenVault's data brings to this proceeding is information concerning the differences in usage patterns for customers on usage-based billing plans versus those on flat-rate billing plans. As we see in Figure 4, according to OpenVault, customers on FRB plans historically used <u>slightly</u> more data on average than those on UBB plans, <u>but this trend reversed</u> as of the first quarter of 2023. OpenVault observed a similar trajectory for median data usage, though during 2021 the gap between median FRB and UBB consumption was wider than the gap between average FRB and UBB consumption (see Figure 5 below). As was the case with OpenVault's observation of average use, <u>the median data consumption of users on cap-and-fee plans overtook that of users on unlimited plans</u> as of the first quarter of 2023.

Figure 4:





#### Figure 5:



This seemingly counterintuitive shift has roots in the pandemic's "pull forward" of growth in both the broadband market's and online video market's adoption patterns. In its second quarter 2020 report, OpenVault noted that "UBB subscribers saw the largest percentage move in year-over-year usage trends, with average total usage in 2Q20 of 372.8 GB, up nearly 42 percent from 262.9 GB in 2Q19."<sup>16</sup> At the time, OpenVault described this larger growth in UBB plan data consumption as "largely due to the fact that most operators with UBB in place opted to relax usage quotas beginning in March in order to provide unlimited usage during the pandemic."<sup>17</sup> As we discuss below, this assessment that caps were the singular gating factor for customers' data usage did not capture how users and ISPs were evolving. Indeed, OpenVault—a company that (at

<sup>&</sup>lt;sup>16</sup> Broadband Insights Report 2Q 2020, OpenVault, at 4 (2020).

<sup>&</sup>lt;sup>17</sup> *Id*.

the time) emphasized its UBB services for ISPs—predicted that "as quotas are reinstituted OpenVault expects growth in usage for UBB providers to slow."<sup>18</sup>

A year later in its second quarter 2021 report, OpenVault was still predicting that usage-based pricing would work to deter heavier use, stating that the "use of UBB is slowing the growth trajectory of data usage on the network, as compared to FRB, in the new post-pandemic reality."<sup>19</sup> However, OpenVault's own data did not really support this notion. Year-over-year growth in second-quarter average data consumption was similar for both FRB (16 percent) and UBB (13 percent). And the typical second quarter seasonal decline was greater for the FRB average (-9 percent) than for the UBB average (-4 percent).<sup>20</sup>

Regardless, it was clear that UBB was <u>not</u> actually "slowing the growth trajectory of data usage on the network, as compared to FRB, in the new post-pandemic reality," as OpenVault mused.<sup>21</sup> As of the first quarter of 2023, average and median data consumption by users on cap-and-fee plans overtook that of users on unlimited plans, according to OpenVault's data.<sup>22</sup>

<sup>18</sup> Id.

 $^{21}$  *Id*.

<sup>&</sup>lt;sup>19</sup> See Broadband Insights Report 2Q 2021, OpenVault, at 4 (2021).

<sup>&</sup>lt;sup>20</sup> *Id.* Between the first and second quarters of 2021, average FRB consumption went from 494.9 GB to 451.6 GB (a 9 percent decline), while average UBB consumption went from 439.5 GB to 421.1 GB (a 4 percent decline). We note that OpenVault mistakenly reversed these two values in its narrative in this report, perhaps contributing to its conclusion that UBB was slowing the growth trajectory of data usage. OpenVault wrote that "the 9% quarter-over-quarter reduction in UBB subscriber usage was more than double the 4% rate for those on FRB (or unlimited usage) plans." But as noted, these values are reversed from the raw GB values OpenVault actually reported.

<sup>&</sup>lt;sup>22</sup> See Broadband Insights Report 1Q 2023, OpenVault, at 2 (2023) ("The 1Q23 edition of the OpenVault Broadband Insights (OVBI) report indicates that, for the first time, while differences remain in growth and speed tier composition, the amount of data consumed by subscribers effectively reached parity across both usage-based billing (UBB) and flat-rate billing (FRB) plans, even as overall usage continues to rise. The 1Q23 report shows that consumption by UBB

And this gap widened during the second and third quarters of 2023.<sup>23</sup> We are unable to describe the trends during and after the fourth quarter of 2023, because <u>after its third quarter 2023 report</u>, <u>OpenVault ceased publication of information comparing UBB and FRB data consumption</u>. The firm that once touted its "UBB programs for broadband providers" as helping to "generat[e] over \$150 million in incremental revenue annually"<sup>24</sup> for these ISPs seemed to deemphasize that aspect of its business after usage on metered plans overtook usage on unlimited plans. Whether this deemphasis was in response to the changing market and the evolving needs of ISPs, or for some other reason, we cannot say. What we can say, however, is that the loss of this publicly available time-series data set illustrates why the Commission itself needs to collect and publicize this type of information.

We think that there is a relatively simple explanation for why data consumption on UBB plans overtook usage on FRB plans: Many ISPs heavily promoted their faster throughput (and more expensive) tiers in recent years, and the caps associated with most of these plans are above the level of most customers' monthly data consumption. First, as Figure 6 shows, at the end of 2019 less than 7 percent of consumer broadband lines were rated above 500 megabits per second (Mbps), but connections above this speed accounted for 42 percent of all such lines as of the end of the first quarter of 2024. It is possible that customers on usage-based plans with caps above 1 TB who had upgraded to faster transmission speed plans (which were more expensive) were consuming more data in order to get their money's worth.

subscribers rose to 562.7 GB during the first quarter, slightly more than the 555.5 GB used by subscribers on FRB plans.").

<sup>&</sup>lt;sup>23</sup> See id. ("In 1Q23, average data usage growth among UBB subscribers was 12.2% versus 1Q22, almost 7x the growth rate of FRB subscribers.").

<sup>&</sup>lt;sup>24</sup> See Broadband Insights Report 1Q 2021, OpenVault, at 15 (2021).

#### Figure 6:



Second, OpenVault's publicly available data does not track the proportion of users that exceed a UBB cap. Yet the company did report that as of the third quarter of 2023, approximately 81 percent of all subscribers used less than 1 TB of monthly data, with only 3 percent using more than 2 TB (see Figure 7, which presents this data for FRB vs. UBB customers). Thus, somewhere between 81 and 97 percent of U.S. households used less data than the typical cap imposed today by U.S. cable and fiber internet providers. Indeed, most U.S. households would not hit a 1.2 TB cap, even if they replaced all of their traditional TV consumption with HD-quality streaming video.<sup>25</sup>

<sup>&</sup>lt;sup>25</sup> At a transmission rate of 5 Mbps, one hour of streaming video would use 2.25 GB. At 8 Mbps, this would equate to 3.6 GB per hour. According to Nielsen, "the average U.S. adult spends about 32 hours each week with TV during warmer months and an additional two or three when the weather gets colder." This equates to approximately 338 to 540 GB per month. The actual average total per household would be higher, accounting for different household members watching video separately. *See* "Amid the fragmented TV landscape, time spent with content is the best planning data there is," *Nielsen Insights* (Jan. 2024).

#### Figure 7:



Though it may come as a surprise to learn that data use on unlimited plans now trails use on capped plans, or that most fixed-line ISPs have moved away from caps altogether in recent years, these trends are simply reflective of the industry doing what it has always done: maximize profit. Over the past several years many ISPs that had usage caps on slower-speed plans used unlimited data as a method of attracting users to higher-priced gigabit per second (Gbps) plans.

It is instructive to look at OpenVault's data in concert with how AT&T in particular transformed from a DSL-first to an FTTH-first carrier during this time, and how it priced its fixed-line broadband services. When AT&T met its DirecTV-related merger condition in the second quarter of 2019 and slowed its FTTH deployment to "greenfield" levels, 23 percent of AT&T's consumer wireline broadband connections were FTTH (a service it first began

marketing in 2014).<sup>26</sup> When AT&T announced it would ramp up its fiber deployment pace in January 2021, FTTH connections accounted for approximately 36 percent of its consumer broadband connections. Prior to this renewed commitment to fiber in 2021, AT&T had only offered unlimited data as part of its base package on its gigabit (1 Gbps) tier. Users on AT&T's other FTTH plans such as the U-Verse 100 Mbps and U-Verse 300 Mbps tiers were subjected to a 1024 GB monthly cap (and charged \$10 per every 50 GB over the cap), or they could pay an additional \$30 per month for unlimited data.<sup>27</sup> But after AT&T shifted strategy in early 2021, it made all of its FTTH tiers unlimited.<sup>28</sup>

As Figure 8 shows, after AT&T had moved all fiber tiers to unlimited, FTTH grew to be nearly two-thirds of AT&T's consumer broadband connections as of the third quarter of 2024 (9 million out of 14 million total connections).<sup>29</sup> This trajectory is notable, as AT&T became the nation's largest FTTH provider during this time. And the move to make all of its fiber plans

<sup>27</sup> See Kamran Asaf, "Small cable ISPs tweak data allocations into 2020," S&P Global (Feb. 21, 2020).

<sup>28</sup> See Robbie Imes, "All Internet is Not Built the Same: What You Need to Know About Fiber Internet," AT&T (archived by Archive.org on Mar. 4, 2021) ("Internet 100 is an excellent AT&T Fiber option for you to easily, and more reliably, keep up with friends and family using your network. . . At \$35 per month with unlimited internet data included, no annual contract and no bundle required, this is a great option at a great price for a year.").

<sup>29</sup> During this time AT&T's total number of internet connections barely changed. In fact, it saw a net loss of internet customers consistently because of losses from its DSL business, with the exception of the period between the third quarter of 2020 and the first quarter of 2022, only returning to positive growth again in the second half of 2023. AT&T now has approximately 14 million consumer broadband connections, a level it had not seen since the end of 2019.

<sup>&</sup>lt;sup>26</sup> An examination of AT&T's public statements indicates its FTTH deployments slowed to a greenfield pace (approximately 350,000 to 500,000 new locations per year) after it achieved its DTV merger commitment in mid-2019, until it increased its deployment target in January of 2021. *See* Comments of John Stankey, AT&T, COO, Q4 2019 Investor Call (Jan. 29, 2020) ("On what we do in the fixed space, you should expect that we're going to continue to add to the ... fiber footprint . . . . You should expect, just by natural growth of the population, you'll probably see somewhere between 350,000 to 0.5 million new fiber locations coming into the portfolio. Right now, that is just kind of what I would call the natural growth rate that's going to happen.").

unlimited brought it more revenue per user. During the first quarter of 2021, AT&T's average monthly revenue per IP broadband customer was \$53.39. During the third quarter of 2024, this increased to \$67.71 per month, a 27 percent increase (or an annualized increase of 8 percent).



Figure 8:

AT&T's strategy of only offering "free" unlimited data to its gigabit-tier subscribers from 2016 to early 2021 helped drive business to those higher-priced packages. OpenVault repeatedly noted this general trend in its prior reports. For example, during the third quarter of 2020, OpenVault reported that "UBB operators had roughly 25 percent more gigabit subscribers than FRB operators in 3Q20, perhaps due to the fact that UBB operators often provide higher usage quotas for the gigabit tier than the slower bandwidth tiers. This provides incentive to subscribers of UBB operators to upgrade to the faster speeds."<sup>30</sup> Nearly two years later, OpenVault wrote that "better penetration of higher ARPU gigabit speed tiers for UBB operators occurs primarily due to UBB operators including an unlimited usage benefit to their gigabit speed tier."<sup>31</sup> And it noted:

<sup>&</sup>lt;sup>30</sup> Broadband Insights Report 3Q 2020, OpenVault, at 6 (2020).

<sup>&</sup>lt;sup>31</sup> Broadband Insights Report 1Q 2022, OpenVault, at 9 (2022).

"In 1Q22, UBB networks had 27 percent more gigabit speed tier subscribers than FRB networks."<sup>32</sup>

It's evident from OpenVault's data and ISPs' own actions that pushing users into more expensive unlimited gigabit tiers is <u>currently</u> a more profitable path than trying to use cap-and-fee pricing to nickel-and-dime users on slower, less expensive tiers.<sup>33</sup> We qualify this statement with "currently" because ISPs will change strategy if the alternative is viewed as more profitable.

Indeed, it appears from OpenVault's data that there are plenty of users on unlimited plans that have little interest in paying for faster transmission speeds. A figure from OpenVault's second quarter 2022 report (shown below as Figure 9) reflects this. As OpenVault noted at the time, "FRB networks have 3-times as many low-ARPU subscribers in the 100 Mbps or lower tiers than UBB networks."<sup>34</sup> This trend has only grown. At the end of 2022, OpenVault reported that 35 percent of UBB subscribers were on a gigabit tier, compared to just 14 percent of subscribers on FRB plans.<sup>35</sup> As of the third quarter of 2023 (the last time OpenVault released

<sup>&</sup>lt;sup>32</sup> *Id.* "ARPU" is an acronym that stands for average revenue per user.

<sup>&</sup>lt;sup>33</sup> See Broadband Insights Report 4Q 2022, OpenVault, at 5 (2023) ("It is clear from the distribution of package adoption that the ARPU for UBB operators continues to significantly exceed the ARPU of FRB operators.").

<sup>&</sup>lt;sup>34</sup> Broadband Insights Report 2Q 2022, OpenVault, at 13 (2022).

<sup>&</sup>lt;sup>35</sup> See Broadband Insights Report 4Q 2022, OpenVault, at 8 (2023) ("More than one in three UBB subscribers (34.6%) now are provisioned for gigabit speeds or faster. This far outpaces FRB subscribers (13.9%)."); see also id. at 15, Figure 7 ("As noted in previous OVBI reports, a factor driving the acceleration of data usage and the increase in power users (by 22%) among UBB subscribers is the trend among many UBB operators to provide unlimited data to their gigabit subscribers.").

UBB vs. FRB data), nearly half of UBB customers (45.1 percent) were on a gigabit plan, compared to 13 percent of FRB subscribers.<sup>36</sup>



Figure 9:

This data reflects a market in flux, where carriers are figuring out their most profitable paths forward, and consumers are trying to figure out what services and pricing plans are best for them. ISPs like AT&T had success increasing penetration on their newly-deployed FTTH networks, first by using caps as an incentive to push users into more expensive gigabit tiers, and then by dropping caps for fiber users (along with new, "simplified" prices that resulted in higher ARPU). While cap-and-fee pricing may not currently be the go-to method for boosting revenues, if ISPs continue to have a large base of users uninterested in paying more for higher transmission speeds that they do not feel they need, some of these carriers will surely look to caps as a tool to

<sup>&</sup>lt;sup>36</sup> See Broadband Insights Report 3Q 2023, OpenVault, at 7 (2023) ("The percentage of UBB subscribers provisioned for 1 Gbps or higher speeds is 45.1%, 3.5x more than the percentage of FRB subscribers provisioned for the same speed (13.2%). FRB operators have 9x more subscribers (13.5%) in the lowest-ARPU speed tiers of 50 Mbps or less compared to UBB operators (1.5%).").

maintain profit growth by holding caps low as usage increases—once again incentivizing users to move to a more expensive tier or risk overage fees. ISPs' ability to do so will of course be impacted by the state of local broadband market competition. We discuss these and other ISP incentives that impact pricing structures below in Part III.

# **III.** ISPs Are Currently Maximizing Profits by Pushing Users into More Expensive Tiers that Come with Unlimited Data.

Two developments over the past 18 months illustrate how cap-and-fee pricing has, for now, fallen out of favor with many ISPs. First, despite asking the FCC in 2020 to let it out of its merger commitment to not impose data caps,<sup>37</sup> Charter indicated in April 2023 that it had "[n]o plans to change when the condition sunsets."<sup>38</sup> Then late last year, Cable One quietly dropped its cap-and-fee pricing for new customers.<sup>39</sup> This was notable, as Cable One long had relatively low caps, which were cheered by Wall Street analysts as a way to boost ARPU.<sup>40</sup> However, Cable

<sup>37</sup> Petition of Charter Communications, Inc., WC Docket No. 16-197 (filed June 18, 2020).

<sup>38</sup> See Jeff Baumgartner, "Charter has no plans to add data caps when FCC ban lifts," *Light Reading* (Apr. 4, 2023).

<sup>39</sup> Prior to dropping caps at the start of 2024, Cable One's entry-level tier came with a 700 GB cap. Cable One offered customers an unlimited data option for \$30 per month (or charged customers up to \$40 per month for exceeding their data cap). *See* Mau Rodriguez and Lynnette Luna, "Data limits refuse to relax amid continuous data usage growth," *S&P Global* (Jan. 26, 2023); *see also* Comments of Julia M. Laulis, Chairwoman, President & CEO, Cable One, Inc., Q4 2023 Investor Call (Feb. 22, 2024) ("Beginning in the fourth quarter, we increased efforts to broaden our reach by marketing to value-conscious customers in ways we haven't previously emphasized. We also introduced value-added benefits such as free unlimited data to retain the customers we have served exceptionally well for decades. And we have surgically implemented changes to our pricing and packaging to broaden our appeal among new and existing customers.").

<sup>40</sup> See, e.g., Gerry Smith, "Netflix's biggest bingers get hit with higher internet costs," *Bloomberg* (Aug. 13, 2019) ("So far, the number of cable consumers who choose to pay for higher data limits is relatively small. Cable One Inc., a smaller operator serving 21 states, says about 10% of customers pay for unlimited data, which costs \$40 more each month. Cox, the third-largest U.S. cable operator, said 2% of internet customers choose unlimited data. 'It's a nice source of additional ARPU,' Moffett said, using the industry term for 'average revenue per user.'").

One made it clear that it now believes this shift to unlimited is the best way to continue to grow its business.<sup>41</sup> Other ISPs have also moved away from caps in recent months, reflecting a shifting industry consensus about the best way to grow revenues and reduce churn.<sup>42</sup>

Though this current move away from caps may surprise some, the trend simply reflects broadband providers responding to changing marketplace conditions (including the wider availability of unlimited FTTH and Fixed Wireless Access ("FWA") options). ISPs acting as rational economic actors will seek to maximize profit, not necessarily in the next transaction, but over a certain time horizon. This means not only charging a certain price, but also selling the right combination of services in the manner that will maximize customer lifetime value ("CLV"). This approach to maximizing CLV results in offerings designed to increase ARPU and reduce churn.<sup>43</sup>

<sup>&</sup>lt;sup>41</sup> See Comments of Julia M. Laulis, Chairwoman, President & CEO, Cable One, Inc., Q2 2024 Investor Call (Aug. 1, 2024) ("So in Q4 and Q1, you saw the results of the things that I just talked about. Now we know more, we know better and we're going to do better. I think we have a lot of puts and takes going on in ARPU. If you look year-over-year, the largest ARPU drop is attributable to competitive pressure responses in a few systems. But offsetting that was a positive impact of customers migrating to higher tiers. They're still doing that. Customers are choosing. They are choosing [of] their own volition to take higher speed packages. Now that was blunted by us taking some items that we charged for previously, like usage-based billing, or unlimited data going away. But I feel good about that because those items are high-value items for higher ARPU price overall. So we think that positions us well for the future.").

<sup>&</sup>lt;sup>42</sup> See, e.g., Shelby Brown, "WOW! Internet Quietly Removed Its Data Caps on Some Internet Plans To Compete With 5G Home Internet," *Cord Cutters News* (Feb. 5, 2024); Comments of Teresa L. Elder, CEO, President & Director, WideOpenWest, Inc., Q2 2024 Investor Call (Aug. 8, 2024) ("We introduced speed upgrades and our simplified pricing plan, which includes an optional price lock, modem included, no data cap and no contracts. Continued success of these strategies has given us additional confidence in the progress we are making to strengthen our subscriber numbers in our legacy footprint.") ("Elder Q2 2024 Comments").

<sup>&</sup>lt;sup>43</sup> See, e.g., Comments of Michael Cavanagh, President, Comcast Cable Communications, Q1 2024 Investor Call (Apr. 25, 2024) ("We continue to see the benefit of bundling broadband and mobile, which decreases churn and improves customer lifetime value."); Comments of Christopher Stansbury, CFO, Lumen, Q1 2024 Investor Call (Apr. 30, 2024) ("We continue to take proactive steps to migrate customers to newer technologies, and these actions improve our customers' experience and provide an uplift in customer lifetime value for Lumen."); Comments

Prior to the 2015 *Open Internet Order*, which unleashed the positive market forces that propelled the streaming media market into its golden era, ISPs were very wedded to the prospect of maximizing profits through triple- or double-play bundles that included multichannel video. These service bundles often came with data caps to discourage cord-cutting (or fees to recover some of the lost revenues from cord-cutting) so that customers would continue watching and paying for traditional pay-TV packages instead of streaming so much. Many ISPs also experimented with "zero-rating," where they would refrain from imposing caps on their own vertically owned video content. Yet once it was clear that the streaming media market was here to stay, many carriers realized their path to maximal profitability lay in higher-priced, very high-speed transmission services.<sup>44</sup>

Though there are some signs that fixed broadband market competition has increased slightly from its days as a cable-telco duopoly, competition still is very imperfect. This imperfect competition means that carriers are incentivized to upsell users into higher-priced, higher-speed tiers, as this creates high cash flow that leads to quicker recovery of fixed costs, and therefore growing margins over time. Moving to unlimited is also (for now) a way for many ISPs to increase CLV, particularly those who face some moderate level of competition.<sup>45</sup> But from a

of Marc Sirota, CFO, Altice USA, Q4 2023 Investor Call (Feb. 14, 2024) ("We saw both churn reductions and lower contact rates in customers who were upgraded compared to a measured control group. These results underscore that moving customers to higher speed tiers strengthens the price/value equation, leading to lower churn and improved customer satisfaction, which will ultimately translate to stronger customer lifetime value for the business.").

<sup>&</sup>lt;sup>44</sup> See, e.g., Comments of Jeffery Scott McElfresh, CEO, AT&T Communications LLC, AT&T Investor Day (Mar. 12, 2021) ("And with no data cap and no annual contracts, our AT&T fiber customers get award-winning service on their terms. Customers love it. And where we have it, we are share leaders, 10 percent better than competitors, with 70 percent of our gross adds new to AT&T.").

<sup>&</sup>lt;sup>45</sup> See, e.g., Comments of Ian Olgeirson, Research Director & Lead Multichannel Analyst, S&P Global, Building the Gigabit Internet: Broadband Infrastructure in the U.S. Latin America and Western Europe Conference (May 17, 2021) ("So let's move on to the polling question. As

consumer's perspective, there may be little practical difference between paying more for an unlimited gigabit tier <u>to avoid</u> ever hitting a cap, and paying less for a slower service that is subject to overage fees. It appears there is a cohort of internet customers that would prefer lower prices over faster speeds.<sup>46</sup> But these price-conscious buyers increasingly have fewer options as the duopoly marketplace continues to maximize CLV through higher-priced, higher-speed entry-level packages.

It has always been the case that higher data users tend to self-sort into (and/or are upsold into) higher transmission speed tiers, which more than adequately allow ISPs to recover capital and operational expenditures commensurate with use of the network and cost-causation principles (see Part IV for discussion of cost-recovery and network management). Indeed, according to fourth quarter 2023 OpenVault data, data usage is highly-correlated with speed tier (see Figure 10). OpenVault did not publish this type of data in its two subsequent quarterly reports. It now states that "speed and usage are no longer correlated as they were in the past, when faster speeds were harbingers of higher data consumption."<sup>47</sup>

broadband usage soars, how might wireline ISPs adjust their data cap policies? ISPs should set hard caps with overage fees; ISPs should set soft caps and throttle beyond specified usage limits, which is a strategy we've certainly seen from mobile carriers; or ISPs should maintain the status quo by adjusting existing caps upward and offering unlimited data. This is a question that does not seem to go away, whether the operators are leaving incremental revenue on the table by not setting hard caps or whether the operators are risking loss to the competition as they look for that—look for the incremental revenue piece. . . . So the results are in: Hard data caps. <u>That is a hard no on hard data caps with 0 percent</u>. . . . [T]hrottling came in at about 1/5 of the respondents and the overwhelming majority say that they should maintain the status quo by adjusting existing data caps. <u>That tells me that the—you guys feel like that whatever incremental revenue that might be out there isn't worth risking the overall connection</u>.") (emphasis added).

<sup>&</sup>lt;sup>46</sup> See Broadband Insights Report 1Q 2022, OpenVault, at 11 (2022) ("While UBB networks saw a 42.3% decline in lower-ARPU 50 Mbps and below subscribers from last year, FRB networks actually grew in that category by 16.7%.").

<sup>&</sup>lt;sup>47</sup> Broadband Insights Report 2Q 2024, OpenVault, at 7 (2024).



For now, it appears from ISPs' public statements that they continue to see success pushing users into gigabit tiers.<sup>48</sup> There is also a general sense among industry analysts that broadband carriers subject to a moderate level of competition are less likely to impose and enforce caps.<sup>49</sup> This competition to legacy cable companies has historically come from FTTH operators, whose presence may have caused some cable ISPs to either forgo expanding their caps

<sup>&</sup>lt;sup>48</sup> See Comments of John Stankey, CEO, AT&T, Q3 2024 Investor Call (Oct. 23, 2024) ("Despite a 30-day work stoppage in the Southeast portion of our footprint, we've now had more than 200,000 AT&T Fiber net adds for 19 consecutive quarters, which shows the strong underlying customer demand for fiber. In the quarter, Consumer Wireline delivered more than 8 percent EBITDA growth, driven by nearly 17 percent growth in fiber revenues. These consistent results make it clear that our fiber investment is generating attractive returns with improved operating leverage as we transition from legacy networks.").

<sup>&</sup>lt;sup>49</sup> See, e.g., Mau Rodriguez and Lynnette Luna, "Data limits refuse to relax amid continuous data usage growth," *S&P Global* (Jan. 26, 2023) ("However, in the face of competition with providers that do not throttle speeds or impose overage fees, ISPs could follow what the market wants to retain its subscribers. <u>This is evidenced by Comcast Corp.'s decision to let go of the cap in its Northeast markets</u>, where it competes with Verizon's unlimited data within its Fios offerings.") (emphasis added).

(as was the case with Comcast in its northeast territory) or to increase the amount of data included in their caps. Though it is still too early to tell, it is possible that T-Mobile's and Verizon's emphasis on unlimited data in marketing their respective FWA offerings is causing competing ISPs to rethink their caps.<sup>50</sup>

However, if this "decoupling" of data usage and speed tiers is indeed happening (or starting to happen), it would not be unexpected. As streaming becomes more commonplace, and as even entry-level tiers offer 100 Mbps or higher transmission speeds, users on these entry-level tiers will consume more data. The cost-conscious among them may see no need to upgrade to more expensive gigabit plans, which could lead ISPs to once again return to cap-and-fee pricing.

Some ISPs are currently changing their pricing practices in a manner that may impact their future decision either to return to, or continue to eschew, cap-and-fee pricing. For example, traditional cable company ISPs were incentivized to embrace streaming video over their broadband networks once it became clear that cable and broadcast channel owners would likely continue demanding perpetual increases in retransmission and carriage fees. While cable ISPs may have formerly viewed cap-and-fee pricing as a way of disincentivizing cord cutting, today many of these providers understand that they generate higher margins and higher CLV from single-play broadband subscribers on expensive gigabit tiers than they might from a double-play subscribers on slower, less expensive internet plans—subscribers who may also churn out faster if they become frustrated with periodic cable TV carriage disputes.

<sup>&</sup>lt;sup>50</sup> See, e.g., Comments of Edwige Robinson, Senior VP of Network Engineering & Operations in the Central Region, T-Mobile US, T-Mobile Special Call (Apr. 7, 2021) ("And we are not just bringing a great 5G network to most parts of America. We are bringing everything the Un-carrier offers. Too many of our real friends and neighbors are locked into plans that come with slow speed[s], high bill[s], data cap[s] and [overage] fees. At T-Mobile, we eliminated those things for urban and suburban customers years ago. Rural America, now it's your turn. Time to get unlimited data, no outages and tax[es] or fee[s] included in most of our plans.").

But there are still tens of millions of households that do purchase linear cable video, and these subscribers generate ever-increasing ARPU. Charter is an example of a large cable multiple-system operator (MSO) that is not yet willing to completely give up on the video distribution business. The company recently struck retransmission consent and carriage deals that include various programmers' streaming video services.<sup>51</sup> This is in essence just a new coat of paint on the old channel distribution model, but with internet-delivered streaming services in place of linear channels. But unlike the old linear channel model, these "free" streaming services are delivered via the public internet, and would normally count against a customer's monthly data cap (if they were subject to one). Thus, Charter would find itself in a strange position were it to encourage customers to subscribe to its video product, which includes these "free" streaming video services, while also charging overage fees for use of those services. If Charter's ISP competitors offered unlimited data services, that might discourage Charter from even trying to reimpose cap-and-fee pricing. But if Charter's main competitors return to cap-and-fee pricing, and if there's no legal prohibition against unjustly discriminatory practices,<sup>52</sup> Charter may choose to return to cap-and-fee pricing while zero-rating the streaming content it includes in its cable

<sup>&</sup>lt;sup>51</sup> See Comments of Christopher Winfrey, CEO, Charter Communications, Q3 2024 Investor Call (Nov. 1, 2024) ("Winfrey Q3 2024 Comments") ("We also had the renewed support from our programming partners to get behind each other's product and distribution for a healthier video ecosystem and better choice and value for customers. More to come on this, but the inclusion of MAX with its HBO content in TV Select and how we plan to promote MAX to our broadband customers and vice versa will show how we and the programmers more broadly can support one another with our customers front and center. By early 2025, we'll be providing our TV Select customers up to \$80 per month of retail streaming app value at no additional cost, including the ad-supported versions of MAX, Disney+, Peacock Premium, Paramount+, ESPN+, AMC+, Discovery+, BET+ and ViX.").

<sup>&</sup>lt;sup>52</sup> See Part VI, *infra* page 44 (discussing current efforts to challenge the Commission's Title II authority over broadband).

TV packages. That would be an example of a carrier using its market power in the last mile to distort competition, which in turn would harm customers and deter innovation.

Much of the above discussion of ISP incentives reflects the <u>current</u> state of the market, where ILECs are finally upgrading most DSL lines to FTTH, which in turn is pushing cable ISPs into accelerated DOCSIS enhancements. We expect that this current phase will end in the next several years as FTTH and DOCSIS 4 upgrade projects are completed. After that, we will enter a period where ISPs have tremendous amounts of excess capacity, but an ever-shrinking pool of customers willing to pay more for higher transmission speeds that they do not need. ISPs that find their ARPU growth stalling out will likely re-evaluate their unlimited strategies as the fixed market becomes saturated, and cap-and-fee pricing could return to favor.

To be clear, while many ISPs have moved away from cap-and-fee pricing, there are major exceptions; and these exceptions reflect how firms exercise market power when facing less competition. ISPs like Cox and Comcast (outside of its northeast territory) continue to show that they want their customers to use as much data as possible, so long as they pay a monthly fee for unlimited data, and/or "upgrade" their service with an expensive monthly equipment rental.<sup>53</sup> Comcast's continued use of cap-and-fee pricing is particularly egregious because it repeatedly gloats about how robust its network is relative to others in terms of handling heavy traffic

<sup>&</sup>lt;sup>53</sup> For example, both Comcast and Cox offer customers unlimited data if they select a plan that comes with these ISPs' premium home gateway equipment. *See, e.g.*, "xFi Complete: our best in-home WiFi", *Comcast Corp.* (accessed Nov. 1, 2024) ("Go beyond your internet plan's 1.2 TB of monthly internet data by upgrading to xFi Complete. Have peace of mind doing everything you love online with unlimited data—a \$30/mo value, included.").

volume,<sup>54</sup> and it does not impose caps in the parts of its service area where it faces more robust FTTH competition from FTTH providers.

Comcast's decision to retain its cap outside of its northeast territory is a strong sign of imperfect market competition. Comcast is embracing streaming video because doing so under its current pricing structure allows it to profit maximize on <u>both</u> speed and capacity. Currently, Comcast pushes users into more expensive, higher speed tiers and then charges some of those customers data overage fees (or an unlimited data fee); it is able to do so because it has market power and, in some portions of its territory, is incentivized to use that market power to reduce output and charge higher prices.<sup>55</sup>

In the next section, we address the two most common ISP justifications for data caps: cost-recovery and network management, demonstrating how neither currently serves as a

<sup>&</sup>lt;sup>54</sup> See, e.g., Michael J. Cavanagh, President, Comcast Cable Communications, Goldman Sachs Communacopia + Technology Conference (Sept. 10, 2024) ("But what we see in our network is unbelievable usage. Five years ago, the average data consumption for our broadband customer was 200 gigs a month and the top 10 percent were consuming 700 gigs a month. Now where the median is at 700 gigs a month and the high end is that much higher. And that's been the direction of travel. And as we're talking about when you look at something like the Olympics through the lens of sports. More sports are going to come streaming. There's going to be more versions, the Manningcast of Monday Night Football in addition to the regular broadcast, the ability to just take more and present it like the technology the Olympics showed against one type of event, <u>I think, gives us confidence that the consumption patterns for the consumer on broadband are going to continue to go higher and higher and higher. And that simply is going to be a challenge for anything other than a network like ours to serve.") (emphasis added).</u>

<sup>&</sup>lt;sup>55</sup> See, e.g., Michael J. Cavanagh, President, Comcast Cable Communications, Q2 2024 Investor Call (July 23, 2024) ("We are investing in additional network capacity, multi-gig speeds and in-home WiFi technology to capitalize on the Internet consumption trends we are seeing. One of the most important metrics we monitor is the magnitude of data traffic flowing across our network. And again, we saw a double-digit year-over-year growth this quarter, with broadband-only households consuming over 700 gigabytes of data each month. And our customers continue to take faster speeds, with around 70 percent of our residential subscribers receiving speeds of 500 megabits per second or higher, and 1/3 getting a gigabit or more. These positive consumer trends play to our strengths and will only accelerate with the shift of live sports to streaming, which, together with entertainment on streaming, accounts for nearly 70 percent of our network traffic today.").

legitimate basis for cap-and-fee pricing, and how they are even less likely to be justified in the DOCSIS 4 and FTTH era.

# IV. There Are No Legitimate Network Management or Cost-Recovery Justifications for Data Caps and Overage Fees.

Every time data cap-and-fee pricing becomes a topic of debate, ISPs and their defenders come out in force to argue that cap-and-fee pricing is the right tool for managing network congestion, or that caps are merely a way of ensuring fairness (or both). We fully expect to see these arguments made in this proceeding, as they were when the Commission sought comment on Charter's (withdrawn) petition to end its merger commitment to not impose caps two years early.<sup>56</sup>

That is not to say that there can <u>never</u> be a legitimate reason for a fixed-line ISP to consider alternatives to unlimited data pricing, or that cap-and-fee systems are by definition unjust and unreasonable. But the history of caps and overage fees in the U.S. makes it clear that

<sup>&</sup>lt;sup>56</sup> See, e.g., Comments of Information Technology & Innovation Foundation, WC Docket No. 16-197, at 2 (filed July 22, 2020). ITIF recognized in its comment that usage-based pricing does not serve as a useful tool for managing network congestion, but still suggested that using "[c]aps and usage-based pricing, when implemented appropriately, is simply a fairer, and often more socially progressive, way to price the use of network resources," going so far as to argue that "[t]his kind of price discrimination could help reduce the digital divide by enabling lower income users to pay less for Internet access than they would in the absence of these tools." Id. The implication is that usage-based pricing schemes would allow lower-income users to reduce their network usage in order to keep their bills lower. Besides subjecting lower-income users to an inequitable burden that would discourage innovative and beneficial broadband usage, this hypothetical scenario is at best wishful thinking. As we've documented in this comment and in numerous other proceedings, there is nowhere near enough fixed-line competition to incentivize ISPs to serve all parts of the demand curve. ISPs' profit maximization efforts would not be as successful if they catered to price-conscious customers. In this industry, prices go up, and ISPs market those price hikes as "increasing value," without regard to whether users forced into pricier tiers actually derive value from faster transmission speeds. Indeed, though there may be millions of users who would be willing to pay a little less money for lower speeds, ISPs' entry-level tiers are increasingly coming with higher transmission speeds, but for a higher price.

ISPs price their services in this manner in order to profit-maximize, and are less likely to impose these conditions when faced with more meaningful competition.

Therefore, the main question that the Commission must answer is not whether there is a fair way to implement usage-based billing; the task for the Commission is to determine the most efficient and equitable ways for ISPs to charge for internet access. That is, what pricing practices should be expected in a truly competitive marketplace? Also, are cap-and-fee plans a legitimate network management tool, or are there better, more efficient and equitable ways to deal with congestion when it occurs? To answer these questions, the Commission needs to develop a deeper understanding of how competition has worked in the U.S. broadband markets during the broadband era, and how the market's duopoly structure will impact ISP incentives in the future.

# A. ISPs Are Fully Recovering Deployment and Operating Costs and Exceeding Financial Goals While Offering Unlimited Data Plans.

As AT&T's CEO recently stated, when "you're an owner operator of infrastructure, you want to run yourself as close to max capacity as you possibly can. That's how you maximize returns."<sup>57</sup> Made in the context of AT&T considering opening up some of its FTTH network to other ISPs on a wholesale basis, this comment is dramatically different from the company's historical stance on fixed-line wholesaling. Rather, this sentiment comes from AT&T as an

<sup>&</sup>lt;sup>57</sup> Comments of John Stankey, CEO, AT&T, JP Morgan Global Technology, Media & Communications Conference (May 21, 2024) ("I think when you get into these networks and you're an owner operator of infrastructure, you want to run yourself as close to max capacity as you possibly can. That's how you maximize returns. And I think when you start to think about what's out there when you build a fiber network and the amount of capacity that's there, it opens up some new models as you move forward. And those models ultimately could be accretive in a converged dynamic. So I think we'll see some evolution, but I don't think we're going to immediately see everybody move to an open access model moving forward, and that's kind of the direction, unless there's a regulatory pivot in the United States that's been different than what we've seen over the last 10 or 15 years.").

underdog provider that now finds itself trying to gain back fixed-line market share after years of losing DSL customers as it focused most of its attention on its wireless business.

AT&T's comments about infrastructure owners' incentives to maximize capacity utilization are correct, at least under the classic microeconomic model that presumes perfect competition. The broadband telecommunications services industry is one characterized by very high fixed costs and very low marginal costs. Firms in this situation need a minimum number of customers to generate a minimum level of cash flow that produces an internal rate-of-return (IRR) needed to recover fixed costs in a 5 to 10 year time frame.<sup>58</sup> Adding customers who pay a recurring monthly fee to access the network generates a higher IRR over a shorter time frame, which results in ever-increasing operating margins. But whether or not an ISP is then incentivized to operate at near-maximum capacity is greatly impacted by competition.

The history of wholesale in the mobile wireless market illustrates the impact of competition on carriers' incentives to maximize network utilization. Wholesale/resale developed in the cellular market absent a specific regulatory mandate, in part because of the higher number of facilities-based carriers that had incentives to sell wholesale capacity instead of letting their networks lie fallow. This incentive (along with a critical FCC merger condition imposed on Verizon) is in part why the mobile wireless industry is finally seeing more meaningful competition from cable company ISPs. In contrast, there is little reselling in the fixed-line residential broadband market. A duopoly market structure does not create the same incentives to resell, even as the market matured and DSL carriers lost significant customer share to cable ISPs.

<sup>&</sup>lt;sup>58</sup> For a detailed discussion of IRR in the context of FTTH deployment, see Comments of Free Press, *Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination*, GN Docket No. 22-69 (filed Feb. 21, 2023).

Because a duopoly market will not necessarily allocate resources and price in the most efficient manner, any ISP justification for cap-and-fee pricing alleged on economic grounds requires heavy scrutiny. As we've documented in these comments and elsewhere, ISPs are more than adequately recovering costs and generating profits using unlimited pricing. Adding additional capacity to the network is a relatively low cost compared to other industries,<sup>59</sup> particularly for cable company ISPs.<sup>60</sup> As we documented for the Commission earlier this year, all major publicly traded ISPs are investing in their networks and reaping the financial rewards of doing so.<sup>61</sup> There's zero evidence—either from their own words or from their operational and financial performance—that ISPs need caps to achieve financial goals. For example, EBITDA margins for the "Big 4" ISPs during the past decade were healthy and steady, between 30 percent and 40 percent.<sup>62</sup> Looking at that margin history, it would be impossible to discern which carriers were offering unlimited service at what times versus which ones imposed cap-and-fee pricing.

<sup>&</sup>lt;sup>59</sup> See Comments of John Stankey, CEO, AT&T, Q3 2024 Investor Call (Oct. 23, 2024) ("I obviously believe that we should not be at the sustained levels of investment that we're at right now forever. Our point of view is we're building infrastructure that's sustainable infrastructure that will build a franchise that will last for many years to come. The fiber investment is a hard one to do at the front end, but it's an incredibly durable investment. The depreciation levels on this go out a long time for a reason. And the beauty of the technology is improving capacity on it is a relatively light lift incrementally once you got the glass in the ground.") (emphasis added).

<sup>&</sup>lt;sup>60</sup> DOCSIS 3.1 upgrade costs averaged less than \$10 per passing, while DOCSIS 4.0 upgrades are projected to run between \$100 and \$200 per passing. *See, e.g.*, Comments of Thomas M. Rutledge, CEO, Charter Commc'ns Inc., Q1 2019 Earnings Call (Apr. 30, 2019) ("[I]n only 14 months, we launched DOCSIS 3.1, which took our speeds up to 1 gigabit across our entire footprint at a cost of just \$9 per passing, enabling . . . 51 million passings to receive this service."); Winfrey Q3 2024 Comments ("We're making progress on step 2 DAA and Remote PHY markets, and we've deliberately slowed these markets to get the software fully certified to our speeds. That has pushed back equipment purchasing and operational deployment, and we now expect our network evolution initiative project to be completed in 2027. Excluding the benefit of future capital and operating cost savings, our network evolution has and will cost a very low incremental \$100 per passing. We have full visibility to that outcome.").

<sup>&</sup>lt;sup>61</sup> See generally Free Press April 1, 2024 Letter.

<sup>&</sup>lt;sup>62</sup> *Id.* at 31, Figure 20.

Furthermore, there's no evidence to suggest that ISPs that impose cap-and-fee pricing are upgrading their networks any differently than those offering only unlimited data plans. Indeed, we can compare Charter and Comcast directly after 2016, when Charter ceased all cap-and-fee pricing. Both companies invested about the same percent of their revenues back into their network (with Charter's 2023 investment being the outlier as it makes its rural fiber push).<sup>63</sup> Similarly, Altice (which also does not impose cap-and-fee pricing) had virtually the same capital intensity trajectory as the bigger MSOs (increasing in 2022 as Altice also deployed full fiber, which it says can "easily support . . . increased data usage).<sup>64</sup>

# **B.** The Commission's Measuring Broadband America Reports Consistently Indicate that Congestion Is a Non-Issue in U.S. Broadband Networks.

Proponents of cap-and-fee pricing have long argued that it is a good way to deter "bandwidth hogs" and thereby benefit most users by reducing network congestion. But this argument is overly simplistic, and is belied by real-world network data.

First, congestion is not controlled very well by usage-based pricing, because congestion (where it does exist in an impactful way) is a time-specific phenomenon. Congestion certainly would not be efficiently controlled by the cap-and-fee system, which only imposes fees on a

<sup>&</sup>lt;sup>63</sup> *Id.* at 57-58, Figures 29 and 32. Charter's capital intensities were elevated as it integrated the Time Warner Cable and Bright House Network systems. Regardless, there's zero evidence that Comcast's imposition of cap-and-fee pricing resulted in it deploying additional capacity, as its deployment trajectory is virtually identical to Charter's.

<sup>&</sup>lt;sup>64</sup> *Id.* at 62, Figure 36; *see also* Marc Sirota, CFO, Altice USA, 3Q 2024 Investor Call (Nov. 4, 2024) ("Fiber customers generate 10 percent higher gross add ARPU compared to HFC customers as they subscribe to faster speeds. Our fiber network is designed with robust capacity easily supporting these faster speeds and increased data usage. 45 percent of our new fiber customers take 1 gig or faster speeds, and 28 percent of our broadband-only fiber customers use over 1 terabyte of data per month. Our fiber network is even more powerful when bundled with mobile, driving deeper customer engagement and retention.").

small portion of users for their monthly usage, ignoring the contribution of other users during times of <u>actual</u> congestion.

Second, and most important, <u>congestion is largely a non-issue in modern consumer</u> <u>broadband networks</u>. This is not conjecture; it is the consistent result shown every year in the Commission's "Measuring Broadband America" ("MBA") reports. The most recent edition released in August 2024 once again shows that ISPs are delivering advertised speeds.<sup>65</sup> And this is reflected in numerous metrics in the MBA reports. For example, the Commission's testing also includes a test of "80/80 consistent speed," which refers "to the minimum speed that was experienced by at least 80% of panelists for at least 80% of the time during the peak periods."<sup>66</sup> Here, we again see that for the vast majority of ISP customers, congestion is not an issue.<sup>67</sup> The MBA also investigated packet loss, and again found little evidence of congestion impacting users.<sup>68</sup>

<sup>66</sup> See 13th MBA Report.

<sup>&</sup>lt;sup>65</sup> See Thirteenth Measuring Broadband America Fixed Broadband Report: A Report on Consumer Fixed Broadband Performance in the United States, Federal Communications Commission Office of Engineering and Technology (Aug. 9, 2024) ("13th MBA Report"). The thirteenth report, like prior studies, indicates that DSL carriers routinely turn in median values around 90 percent of maximum advertised speed. However, this sub-100 percent performance is not due to congestion, but the inherent distance limitation in the xDSL protocol, as well as "overhead." The longer a loop from the central office (or node) to the customer's premise, the lower the maximum achievable transmission speed. Overhead refers to "the various control and signaling data required to achieve the reliable transmission of internet access data." "Performance Characteristics," *AT&T Newsroom* (accessed Oct. 20, 2024).

<sup>&</sup>lt;sup>67</sup> See id. ("As can be seen in Chart 5, cable and fiber ISPs generally performed better than DSL ISPs with respect to their provision of consistent speeds. Most customers using cable and fiber technologies experienced median download speeds that were fairly consistent; i.e., these ISPs provided 100% or greater than the advertised speed during peak usage period to more than 80% of their panelists for more than 80% of the time.").

<sup>&</sup>lt;sup>68</sup> See id. ("Chart 8 shows that ISPs using fiber technology have the lowest packet loss. As shown in this chart, 0% to 4% of DSL subscribers experience 1% or greater packet loss. The corresponding numbers of subscribers experiencing 1% or greater packet loss for cable and fiber are 1% to 4% and 0% to 3%, respectively. Within a given technology class, packet loss also

Taken as a whole, it's clear from these meticulously designed data measurements that congestion simply is not an issue for modern fixed-line technologies (cable modem and fiber), and is at most only a minor issue some of the time for DSL lines, of which there are fewer and fewer over time (less than 9 percent of all residential fixed lines, and less than 5 percent of all residential fixed lines above the 25/3 Mbps threshold).<sup>69</sup> We note that many of these residential DSL lines are subject to data caps. Whether those caps are reasonable is debatable, given that DSL is not a shared resource in the last mile, and that its bandwidth limitations are primarily based on the connection from the node or central office to the internet exchange point. Nevertheless, it is clear that for the vast majority of residential internet connections, congestion simply is not a material issue, and certainly not one that would warrant application of the blunt instrument that is the combination of data caps and overage fees.

# C. Wireless Carriers Face More Competition and Generally Do Not Impose Data Caps with Overage Fees.

While the focus of our comments is primarily on the fixed-line market, we note that mobile carriers largely apply caps to the "hot spot" component of their services. When those caps are exceeded most mobile carriers slow the user's connection instead of charging overage fees. This suggests that these carriers believe cap-and-throttle is a better way to maximize profits while managing the potential congestion issues unique to mobile cellular (as compared to wireline).

The growth of Fixed Wireless Access services in recent years has had a noticeable (though still quite limited) impact on broadband market competition. This impact has largely

varies among ISPs.").

<sup>&</sup>lt;sup>69</sup> According to the most-recent Form 477 Subscribership Data (as of December 31, 2023), only 8.8 percent of all residential lines above 200 kilobits per second in one direction were "copper wire" lines.

been borne by cable company ISPs,<sup>70</sup> and may have contributed to some MSOs' decisions to drop cap-and-fee pricing.<sup>71</sup> Verizon does not impose any caps on its FWA service. T-Mobile and US Cellular also do not impose caps on their flagship FWA service tiers, though both offer less expensive tiers that do have caps; but instead of imposing overage fees, users are throttled during times of congestion if they exceed their cap. The use of user-specific throttling during times of congestion is an indicator that these FWA carriers are actually concerned with congestion management, not solely profit maximization (though make no mistake, FWA, and 5G generally, are good businesses for CMRS providers).<sup>72</sup>

This is in contrast to smaller FWAs, many of which do impose caps, some as low as 10 GB per month.<sup>73</sup> We do not have strong insight into why some of these FWA carriers continue to impose caps that hobble the utility of these connections, which could in no way be considered to

<sup>71</sup> See, e.g., Elder Q2 2024 Comments, *supra* note 42 ("I think we've seen a softening of any competitive impact from fixed wireless, as has been widely reported throughout the industry. I see, I guess, two reasons for that. One is just the fixed wireless providers themselves. I don't know if they're getting to saturation on that, so what their issues are. But specifically, I can point to competitive strategies we took starting February 1 of this year. Specifically, on our customer base, we upgraded the 200 meg subscribers to 300 meg and our 500 meg customers to 600 meg. And I think our customers have appreciated that surprise and delight and appreciate the speeds that they're getting. We also rolled out on September 1 simplified pricing that provides no contract, no data fees, no hidden fees. We also have an optional price lock that gives that certainty to customers of what their bill will be over time as an option.").

<sup>72</sup> See Comments of G. Michael Sievert, President, CEO & Director, T-Mobile US, Q3 2024 Investor Call (Oct. 24, 2024) ("One of the things I've talked about in the past is that yet while 5G has been costly for some, overall, you see industry cash flows at or around all-time highs. And yet you see consumers benefiting with 3 to 4-times more speed and 3 to 4-times more data usage at similar price points to 5 or 6 years ago. So consumers are giant winners from the 5G cycle, but the industry remains quite healthy as well.").

<sup>73</sup> See, e.g., "Internet Providers with Data Caps," Broadband Now (last visited Oct. 31, 2024).

<sup>&</sup>lt;sup>70</sup> See, e.g., Comments of Jason Armstrong, CFO, Comcast, Q3 2024 Investor Call (Oct. 31, 2024) ("Fixed wireless has obviously taken its toll. We think that's a market that's going to continue to exist, continue to be around, but it's for the value-conscious consumer. It has carved out a niche in the market that—whether it's 10 percent, 15 percent, I'm not sure we've got a crystal ball, but it is a niche.").

be "reasonably comparable" in quality to those offered by top ISPs. It is possible that these smaller FWA providers are unable to access competitive and reasonably priced backhaul services, which they need in order to transmit the streaming video content that their customers may wish to consume, but-for the low data caps. Answering this question requires information and further analysis, a task that the Commission should undertake.

# V. The Commission Must Collect More Detailed Data and Actively Monitor Broadband Market Competition.

Based on the cap-and-fee policies of most ISPs that have them, it seems that competition plays a major role in a carrier's decision to impose caps. The evidence also suggests that where caps are applied, it is a financial decision, not a network management issue. Given that Congress directed the Commission to pursue the national goal of "achieving affordability . . . and maximum utilization of broadband infrastructure,"<sup>74</sup> it is clear that there is a need for the Commission to have a better understanding of why some carriers continue to impose caps, what role competition plays in those decisions, and whether inadequate competition in middle mile markets leads to some FWA providers imposing very low caps (or if there are legitimate capacity issues, and how public policy could address the root cause of these decisions to maintain very low caps).

As we noted above, while the U.S. market is still in a data consumption growth phase, that growth has been increasing at a slower rate for years. There are some early signs that the 2020 spike in data consumption was an anomaly, and that data growth may soon level off.<sup>75</sup>

<sup>&</sup>lt;sup>74</sup> National Broadband Plan at 3.

<sup>&</sup>lt;sup>75</sup> See Ian Morris, "Telecom glory days are over – bad news for Nokia, worse for Ericsson," *Light Reading* (Oct. 21, 2024) ("Unfortunately, a slump in demand for gigabytes could have a devaluing effect on traffic. It would certainly not help telcos in their misguided campaign to extract payments from Big Tech's 'large traffic generators,' as they are disparagingly and unfairly described. Modest traffic growth and falling capital intensity will further undermine that case. Somewhere between a charging meter for every kilobyte and the all-you-can-eat tariff lie

Carriers will adjust their pricing strategies based on the changing marketplace. ISPs that face declining data growth rates will look to caps as a monetization tool, something that becomes more likely when there's less competition. Carriers' actions have made it clear that they have pricing power and are willing to use it.<sup>76</sup> Caps may be out of favor right now with many leading ISPs, but that doesn't mean they won't return.

Unfortunately, the Commission's ability to understand how competition impacts ISPs' strategic pricing decisions is hamstrung by the lack of information and analysis. While the OpenVault data presented herein is incredibly useful, that firm's move away from reporting differences in data consumption by users on UBB plans compared to FRB plans illustrates the problems with reliance on proprietary data collection. Proprietary data is often locked behind expensive subscriptions, or if publicized, only done so in a limited manner. OpenVault is a business, one that once emphasized aiding ISPs move to UBB,<sup>77</sup> and now appears to be more centered on network management software that helps ISPs identify which users should be

various pricing possibilities now under consideration. 'One thing I would say is the telco industry historically has had these all-you-can-eat business models and I think the world is moving more toward consumption-based business models versus all-you-can-eat business models and so we're going to have to adapt to that reality,' said Jeremy Legg, the chief technology officer of AT&T, at the Digital Transformation World tradeshow earlier this year. Monetizing traffic, though, will inevitably be harder if there is less of it on the network than telcos previously expected.").

<sup>&</sup>lt;sup>76</sup> On T-Mobile's third quarter 2024 investor call, an analyst asked a question with a framing that made it clear there's a shared understanding that mobile carriers raised prices in 2023 with no negative consequences. *See* Comments of Kannan Venkateshwar, Director & Senior Research Analyst, Barclays Bank PLC, Research Division, T-Mobile US 3Q 2024 Investor Call (Oct. 23, 2024) ("Mike, when you look at pricing across the industry right now, it just seems like it's taking much better than expected. I mean, churn is not as high when these price increases are taken and we've seen multiple price increases, of course, from your peers.").

<sup>&</sup>lt;sup>77</sup> Broadband Insights Report 3Q 2020, OpenVault, n. 2 (2020) ("OpenVault offers a suite of solutions that enable broadband providers to model the revenue upside of introducing UBB packages and then target those subscribers with the greatest likelihood of benefiting from and moving to UBB plans. This can result in greater ARPU and network efficiency.").

targeted for upsells.<sup>78</sup> OpenVault has its own business incentives and motivations, and those are not the same as the Commission's. This *Notice of Inquiry* reflects the lack of availability of systematic, unbiased and public data that the Commission needs to adequately monitor market competition and the impact of carriers' pricing practices on consumers and on national policy priorities.

The recent trend of ISPs moving away from cap-and-fee pricing in favor of pushing customers towards more expensive and uncapped gigabit tiers illustrates just how difficult it would be for the Commission to design any single policy on ISP use of data caps (other than enforcing Title II's general prohibition of unjust, unreasonable, or unreasonably discriminatory practices). Free Press believes it is prudent at this stage for the Commission to collect all the data necessary for it (and the public) to monitor and analyze ISPs' pricing and packaging decisions, and the impact that competition has on consumer welfare. To that end, we urge the Commission to finish implementing the National Broadband Plan's recommendations on data collection and analysis, in part by collecting actual pricing and quality of service data (including information about ISP use of data caps, and the share and characteristics of their customers that exceed these limits).<sup>79</sup> And because collecting information is useless unless it is properly analyzed, we reiterate our call for the Commission to conduct meaningful and granular marketplace competition analysis (also a National Broadband Plan recommendation), an effort that requires

<sup>&</sup>lt;sup>78</sup> Broadband Insights Report 2Q 2024, OpenVault, n.15 (2024) ("OpenVault offers a tool to identify subscribers who are using (or approaching) the maximum speed available to them. This allows the operator to generate proactive upgrade campaigns, resulting in higher ARPU and a greater QoE for the subscriber.").

<sup>&</sup>lt;sup>79</sup> See National Broadband Plan at 38-44.

the Commission to grant outside researchers access to disaggregated Form 477 subscribership data and other data that the agency may collect pursuant to this proceeding.<sup>80</sup>

This ongoing data collection and competition analysis will be particularly helpful to the Commission's efforts to close the digital divide. OpenVault's data indicates that ACP subscribers used more data than non-ACP customers. This is not very surprising, given the ability of households to use free advertiser-supported TV services ("FAST") to completely replace traditional video.<sup>81</sup>

Finally, while much of the analysis in our comment was focused on the impact of data cap-and-fee policies on streaming video, it is important to note that data caps can also negatively impact other important national purposes. Access to quality health care increasingly requires a robust broadband connection. So much so that certain healthcare firms have noted their work is facilitated by customer access to uncapped broadband.<sup>82</sup>

<sup>&</sup>lt;sup>80</sup> The Commission has an open proceeding on implementing the National Broadband Plan's recommendation to allow third-party researchers to access raw Form 477 subscribership data under a highly confidential protective order. *See Comment Sought on Free Press Request to Review Form 477 Data and Request for Protective Order*, WC Docket No. 10-75, Public Notice (rel. Mar. 19, 2010).

<sup>&</sup>lt;sup>81</sup> See Broadband Insights Report 3Q 2022, OpenVault, at 9 (2022). This report noted that upload use by ACP subscribers was similar to non-ACP subscribers, but ACP recipients used 26 percent more downstream data than other internet subscribers.

<sup>&</sup>lt;sup>82</sup> See Comments of Gail Koziara Boudreaux, President, CEO & Director, Elevance Health, Inc., Q4 2023 Investor Call (Jan. 24, 2024) ("For example, in 2024, we will expand our community connected care model into eight additional states. This program assists Medicaid members with their health-related social needs by identifying gaps and connecting members to support services in their communities. We will also launch a program in alliance with the affordable connectivity program, major wireless carriers and Samsung that will help increase equitable access to digital and virtual health tools. The program will provide eligible Medicaid members with a curated selection of digital and virtual health tools via smartphone with no data cap at no cost along with training materials and ongoing guidance on how to use these tools.").

### VI. The Commission Has Ample Legal Authority to Collect Broadband Market Data, and Could Also Exercise Its Title II Authority to Protect Consumers from Unjust and Unreasonable Practices.

The *Notice of Inquiry* asks about legal authority for potential Commission action as it "considers the impact of data caps on consumers and competition."<sup>83</sup> In the first instance, the Commission has ample authority to collect the data requested in this Comment. For example, Section 706, by requiring the Commission to inquire about and monitor broadband deployment and capability, delegates the power to collect such data to the agency.<sup>84</sup> The Commission's ability to collect this sort of data is also a prerequisite to meeting the obligations imposed by Sections 251, 252, 257, and 271.<sup>85</sup> Additionally, the Broadband DATA Act requires the Commission to collect granular data on broadband availability and service.<sup>86</sup> This practice accords with previous FCC action and recommendations too. Much of the requested data collection outlined in this Comment has already been recommended by the Commission itself in the National Broadband Plan.<sup>87</sup> And this authority exists irrespective of broadband's classification under Title I or Title II; the power to collect such data has been exercised when broadband was classified under Title I.<sup>88</sup>

<sup>83</sup> Notice of Inquiry ¶ 45.

<sup>84</sup> 47 U.S.C. § 1302(b) (requiring the Commission to annually inquire into the availability and deployment of broadband to Americans in a reasonable and timely fashion); *see also id.* § 163 (requiring the Commission to assess broadband deployment and competition, specifically including "Internet service providers," and to publish such information on the Commission website and submit it to Congress).

<sup>85</sup> *Id.* §§ 251-52, 257, 271 (requiring the Commission to assess competition and availability in telecommunications markets). Notably, Section 257(a) for example calls upon the Commission to assess "market entry barriers for entrepreneurs and other small businesses in the provision and ownership of telecommunications services <u>and information services</u>." *Id.* § 257(a) (emphasis added).

<sup>86</sup> *Id.* §§ 641-46.

<sup>87</sup> National Broadband Plan at 38-44.

<sup>88</sup> See, e.g., Modernizing the FCC Form 477 Data Program, WC Docket No. 11-10, Report and Order, 28 FCC Rcd 9887, 9925-26 ¶ 88 (2013).

The Commission's authority over and above that—such as steps regulating data caps in the event that the Commission finds they are unjust or unreasonable to consumers—would squarely fall under its Title II powers. Section 201 prohibits unjust or unreasonable practices in connection with the provision of telecommunication services.<sup>89</sup> Section 202 provides similar protection against practices that unreasonably discriminate, or subject any individual or class to any undue or unreasonable prejudice or disadvantage.<sup>90</sup> But in light of industry challenge to the Commission's *Securing and Safeguarding the Open Internet Order*,<sup>91</sup> as well as the incoming administration shift,<sup>92</sup> Free Press is under no illusion that these core provisions of Title II are likely to be relied upon by the Commission in the new year.

That is the near-certain outcome in the short term; but by no means the correct one. Here, the Commission seeks to determine whether data caps harm competition or consumers. Acting upon that determination, if the record developed in response to this *Notice of Inquiry* demonstrates such harms, cleanly falls within Title II's requirements. Title II ensures that consumers are getting a fair deal. To the extent that they are not, and if there is evidence that broadband providers are engaging in unjust and unreasonable practices when imposing data caps on their customers, then the Commission has that statutory authority and obligation to address

<sup>&</sup>lt;sup>89</sup> 47 U.S.C. § 201(b); *see also Safeguarding and Securing the Open Internet*, WC Docket No. 23-320, Declaratory Ruling, Report and Order, and Order on Reconsideration, FCC 24-52, at 3 ¶ 2 (2024) ("*Safeguarding and Securing the Open Internet Order*") (classifying broadband internet service as a telecommunications service under Title II of the Communications Act).

<sup>&</sup>lt;sup>90</sup> 47 U.S.C. § 202(a).

<sup>&</sup>lt;sup>91</sup> See Brief for Petitioners at 15, In re MCP No. 185 et al., No. 24-7000 (6th Cir. Oct. 2, 2024).

<sup>&</sup>lt;sup>92</sup> See, e.g., Dissenting Statement of Commissioner Brendan Carr, Notice of Inquiry; see also, e.g., Dissenting Statement of Commissioner Brendan Carr, Safeguarding and Securing the Open Internet Order; Dissenting Statement of Commission Simington, Safeguarding and Securing the Open Internet Order.

the issue. Any disclaimer of such authority under Title II is a conscious abdication of basic duties to the American public in favor of a misguided ideological devotion to removing the modern era's essential communications platform from the oversight of the Federal Communications Commission.

### VII. Conclusion

Though most ISPs have temporarily moved away from cap-and-fee pricing, tens of millions of internet customers are still subject to this practice, despite the fact that in most instances, these limitations cannot be justified for wired networks based on any legitimate congestion management or economic cost-recovery concerns. Competition—or lack thereof—appears to play a role in whether an ISP imposes cap-and-fee pricing. This impact of competition on an ISP's decision to impose caps should be a chief concern for the Commission, as the U.S. home internet access market remains a weakly competitive duopoly. We call on the Commission to take its analytical role more seriously, in part by collecting much more detailed broadband market data, including information on the prevalence and impact of cap-and-fee pricing. This will help ensure the Congressional goal of "affordability . . . and maximum utilization of broadband infrastructure and service by the public."

Respectfully Submitted,

S. Derek Turner, Sr. Advisor Matthew F. Wood, VP of Policy Yanni Chen, Policy Counsel Free Press 1025 Connecticut Avenue NW Suite 1110 Washington, DC 20036 202-265-1490

November 14, 2024