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**The FCC's *Marketplace Report* Substantiates the Extent of Competition**

by

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**I. Introduction and Summary**

The Federal Communications Commission released its second biennial *Communications Marketplace Report* on the last day of 2020. This congressionally required *Report* convincingly demonstrates that effective competition exists within current discretely defined market segments: mobile wireless, fixed broadband, voice, and video. It is truly difficult to imagine a market study that is more data-driven than this one. Those that invariably downplay the existence of competition, no matter how substantial the marketplace changes, will have a tough time of it in the face of this report's factual evidence.

While the *Report* convincingly validates the consumer choices that are now available in the discrete market segments, it could have done a better job assessing the competition taking place between these market segments using different technologies and platforms. The overarching trendline in the communications marketplace, as Commissioner Brendan Carr emphasized in his separate statement, is marketplace convergence enabled by technological advances.

In future reports, the Commission should update its analytical approach to focus on convergence and intermodal competition. A modernized holistic approach would consider that 5G wireless

broadband capabilities increasingly match those of wireline broadband and also would regard mobile wireless video and bundling-related offerings as significant, even game-changing, marketplace developments from the all-important consumer benefits perspective.

As the Commission undergoes a transition under new leadership, and with a changed composition, the hefty December 2020 *Communications Marketplace Report* should be more than a valuable data-driven resource that doubles as a paperweight sitting on a desk. With its thorough demonstration of such dramatic marketplace change in the direction of more competition and more consumer choice, the *Report* should be a lodestar that informs the agency's decisions. Looking ahead, in light of the competition and consumer choice which the *Report* ably details, the Commission should continue to reduce or eliminate unnecessary regulations that impose costs and that outweigh their benefits.

There is much more data contained in the body of this *Perspectives*, but here are some key data points.

Between 2010 and the end of 2019, the average speed of 4G LTE downloads jumped from 1.3 Mbps to 41 Mbps. Median 4G LTE speeds climbed 64% from 16 Mbps in mid-year 2017 to 26.2 Mbps in mid-year 2019. Between 2017 and 2019, subscriber data usage jumped 39%, to 9.2 GB per month. Over that same time, the annual Wireless Telephone Services Consumer Price Index (CPI) decreased 5% and the Telephone Services CPI decreased 3%, while the overall CPI increased about 4%.

The 4G LTE networks of the three national facilities-based carriers – AT&T, T-Mobile, and Verizon Wireless – all cover at least 98% of the U.S. population. And whereas 5G deployments were minimal as of 2019, today all three national carriers provide nationwide 5G coverage. Also, cable operators Comcast and Charter are adding subscribers rapidly to their networks that combine operator Wi-Fi hotspots with third-party wholesale wireless connectivity.

Fixed high-speed Internet residential connections rose from 91 million in 2015 to 105 million at the end of 2019. The number of Americans with multiple options for broadband service is on the rise, as 74% have at least two options for 25/3 Mbps fixed terrestrial service; 67% have at least two options for 50/5 Mbps service; 55% have at least two options for 100/10 Mbps service; and 35% have at least two options for 250/25 Mbps service. And during the last five years, the most popular broadband plans have decreased in price by an average of over 20% while average speeds rose 16%.

For video services, most consumers have access to one cable multichannel video programming distributor (MVPD) and two direct broadcast satellite (DBS) MVPDs, and some consumers also have access to a telco MVPD. Yet the *Report* recognizes the trend since 2013 in MVPDs losing customers to upstart providers that deliver content over the Internet. MVPDs shed 6.4 million video subscribers between 2018 and 2019, ending 2019 with 83.4 million video subscribers. Meanwhile, online video distributors (OVDs) like Netflix, Hulu+ and Disney+ have continued to proliferate and grow in the past two years. And virtual MVPD (vMVPD) subscriptions increased by 31% in 2019 and 16.1% in 2020.

As impressive as these figures are in 2020, the FCC's traditional view of these product categories as entirely separate and distinct provides an incomplete picture of the competition that actually exists and is already benefitting consumers. Such an outdated outlook can lead the Commission mistakenly to cling to legacy regulation that should rightly be recognized as harmful to innovation and investment in new technologies and services.

As Free State Foundation scholars described in comments filed in this proceeding, examples of competition between once-disparate providers of mobile wireless, fixed broadband, voice, and video services are numerous and rapidly growing in significance. Perhaps the most obvious is voice. Consumers for decades have been able to choose between offerings from traditional wireline, fixed broadband, over-the-top, and mobile providers.

The *Report* does include data suggesting that mobile and fixed broadband services increasingly are substitutes for one another. For example, it highlights that 37% of those surveyed by Pew in 2019 (compared to only 19% in 2013) rely upon smartphones – devices which transition frequently and seamlessly between mobile data service and Wi-Fi networks that redistribute fixed broadband connections. Also, the *Report* concedes that 5G offerings "may have performance characteristics similar to fixed services in certain environments." Indeed, both 5G and Wi-Fi 6/6E promise improved speeds and other capabilities, such as reduced latency, that will enable them to complement and – most significantly – compete with fiber, the cable "10G" platform, and other emerging next-generation fixed networks.

Yet the *Report* undoubtedly understates the current and near-term extent to which mobile offerings, in particular 5G services, can satisfy in-home connectivity needs. It states in a conclusory fashion that "many households continue to subscribe to both fixed and mobile broadband service, suggesting that these separate services offer benefits that are either complementary or independent of each other."

Moreover, wireless carriers also make available video services that rival those offered by both traditional facilities-based MVPDs and increasingly popular online video distributors that stream content over the Internet. For example, T-Mobile's Magenta Plus plan includes a subscription to Netflix Standard and AT&T Unlimited Elite includes HBO. Additionally, in December, T-Mobile began offering its TVision live TV streaming services exclusively to its wireless customers. Thus, mobile carriers may prove to be a strong competitive source of bundled video content in the era of cord-cutting and Internet-streamed alternatives to traditional MVPDs.

Furthermore, today's digital broadcasting technology – and, in particular, the ATSC 3.0 standard – allow stations to transmit multiple-channel alternatives to the packages marketed by the multitude of traditional and virtual MVPDs already battling for customers. The ATSC 3.0 standard, which is Internet Protocol-based, soon will enable broadcast Internet services, as well.

Technological and strategic evolution occur in the communications industry at an ever-increasing pace. Motivated by profit and driven by the need to compete successfully against their many equally agile rivals, firms must act quickly to identify and seize upon opportunities to leverage their existing resources and competencies into adjacent product categories. On the other hand, the process by which regulators respond is slow and deliberate. A forward-thinking

perspective is essential to successful policymaking that is consumer-oriented. Going forward, FCC oversight and decisionmaking will benefit from a greater appreciation of the extent and degree to which traditional boundaries between both products and providers are eroding.

To move past the old silos, the Commission ought to consider adopting a broader product market definition for broadband Internet services that encompasses fixed, mobile, and satellite services meeting speed thresholds of 25 Mbps download/3 Mbps upload for "advanced telecommunications capability." At the very least, the evidence of intermodal competition that the *Report* validates should strongly caution the Commission against imposing new regulatory mandates on these broadband Internet services that continue to evolve in ways responsive to consumer demands in the present competitive, technologically dynamic marketplace.

## II. Robust Competition Exists Within Traditional Communications Markets

As the expert agency on communications matters, the FCC is tasked with reporting on the status of the marketplace. In the past, separate publications focused on market segments including wireless competition,<sup>1</sup> video competition,<sup>2</sup> and cable industry pricing.<sup>3</sup> RAY BAUM'S Act of 2018 requires the Commission to prepare a single, comprehensive *Communications Marketplace Report*<sup>4</sup> that:

Assess[es] the state of competition in the communications marketplace, including competition to deliver voice, video, audio, and data services among providers of telecommunications, providers of commercial mobile service ..., multichannel video programming distributors ..., broadcast stations, providers of satellite communications, Internet service providers, and other providers of communications services.<sup>5</sup>

The first *Communications Marketplace Report* was released on December 26, 2018.<sup>6</sup> Because the 2020 edition of the *Report* continues to confine the bulk of its competitive findings to these increasingly outdated silos – wireless, wireline, video, audio, and so on – this *Perspectives from FSF Scholars* utilizes those same silos to highlight the uniformly positive data points regarding the status of competition in communications products and services.

*Mobile Wireless*. As a result of mobile carrier investment, which totaled \$29.1 billion in 2019 and exceeded \$286 billion over the last decade, the *Report* concludes that "consumers have

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<sup>1</sup> See, e.g., Twentieth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, WT Docket No. 17-69, FCC 17-126 (2017).

<sup>2</sup> See, e.g., Eighteenth Report, *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 16-247, DA 17-71 (2017).

<sup>3</sup> See, e.g., Report on Cable Industry Prices, *Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992; Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment*, MM Docket No. 92-266, DA 18-128 (2018).

<sup>4</sup> See Section 401 of the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018 (RAY BAUM'S Act of 2018), Pub. L. No. 115-141, 132 Stat. 1087 (codified at 47 U.S.C. § 163).

<sup>5</sup> 47 U.S.C. § 163(b)(1).

<sup>6</sup> Report, *Communications Marketplace Report et al.*, GN Docket No. 18-231 *et al.*, 33 FCC Rcd 12558 (2018).

benefitted greatly from the resulting increase in higher data speeds, expanded network coverage, and increased network densification."<sup>7</sup> The metric of average speed well illustrates this point: from 2010 to the end of 2019, the average 4G download speeds jumped from 1.3 Mbps to 41 Mbps.<sup>8</sup> Median 4G LTE speeds rose 64% in just two years, from 16 Mbps (mid-year 2017) to 26.2 Mbps (mid-year 2019).<sup>9</sup>

In terms of the number of connected devices, and even more so the amount of data consumed, mobile usage continues to grow at an impressive rate. Between 2017 and 2019, connections increased 2% to 5% annually and subscriber data usage jumped 39%, to 9.2 GB per month.<sup>10</sup>

More broadly, the *Report* points to decreasing prices as "an indicator of strong competition in the mobile wireless marketplace."<sup>11</sup> According to Consumer Price Index (CPI) data spanning 2017-2019, "the annual Wireless Telephone Services CPI decreased by approximately 5%, the Telephone Services CPI decreased by approximately 3%" while the overall CPI increased about 4%.<sup>12</sup> Average revenue per GB of data is on the decline as well: "as of year-end 2019, ... estimates show a decrease of approximately 20% to 30% compared to 2018, and a decrease of approximately 62% to 68% compared to 2016."<sup>13</sup>

The 4G LTE networks of the three national facilities-based carriers – AT&T, T-Mobile, and Verizon Wireless – all cover at least 98% of the U.S. population.<sup>14</sup> And 5G deployments are proceeding quickly.<sup>15</sup> Today, all three carriers have deployed 5G nationwide.

The largest mobile virtual network operator (MVNO), TracFone, has 21 million subscribers. And cable operators, including Comcast and Charter, are adding subscribers rapidly to their hybrid-MVNO services, which rely on a combination of operator Wi-Fi hotspots and third-party wholesale wireless connectivity.<sup>16</sup>

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<sup>7</sup> 2020 Communications Marketplace Report, *Communications Marketplace Report*, GN Docket No. 20-60, FCC 20-188 (December 31, 2020), available at <https://docs.fcc.gov/public/attachments/FCC-20-188A1.pdf> (2020 Report), at ¶ 50.

<sup>8</sup> *Id.* at ¶ 52.

<sup>9</sup> *See id.* at ¶ 7, ¶ 62.

<sup>10</sup> *See id.* at ¶ 7. *See also id.* at ¶ 27 (reporting that "total network annual data usage increased by approximately 30% from 2018 to 2019, with a commensurate increase in total annual minutes of voice use (MOUs) of approximately 29%").

<sup>11</sup> *Id.* at ¶ 8 (noting that average revenue per unit (ARPU) dropped "from roughly \$39 in 2017 to approximately \$37 in 2019"). *See also id.* at ¶ 45 ("[T]he Wireless Telephone Services CPI shows that mobile wireless prices have declined significantly since the mid-1990s. According to the CPI data, the price (in constant dollars) of mobile wireless services has continued to decline: From 2018 to 2019, the annual Wireless Telephone Services CPI decreased by approximately 3% while the broader Telephone Services CPI fell by 1%, and the overall CPI increased by approximately 2%.").

<sup>12</sup> *Id.* at ¶ 45.

<sup>13</sup> *Id.* at ¶ 49.

<sup>14</sup> *See id.* at ¶ 9.

<sup>15</sup> *See id.* at ¶ 79 (reporting that, according to FCC Form 477 data, "[a]s of December 2019, ... T-Mobile covered 27.7% of U.S. square miles, 41.8% of road miles, and 63.5% of the population; Sprint covered 6.7% of the population").

<sup>16</sup> *See id.* at ¶ 13 (noting that Comcast's Xfinity Mobile offering added more than 2 million customers within just over two years of its launch and that Charter signed up 1.1 million subscribers in a little more than a year).

As discussed below, mobile broadband increasingly serves as a substitute for fixed high-speed Internet access. The *Report* states, according to Pew, that "17% of American adults are 'smartphone-only' Internet users" and, per the U.S. Census Bureau, "approximately 10% of total U.S. households subscribed to a cellular data plan with no other type of Internet subscription."<sup>17</sup>

*Fixed Broadband.* Though already prevalent, fixed high-speed Internet connections also continue to grow, with total residential connections rising from 91 million in 2015 to 105 million at the end of 2019.<sup>18</sup> This is the result of substantial private investment: \$80 billion in 2018, a \$5 billion increase from 2016, and over \$1.7 trillion since 1996.<sup>19</sup> Significantly, the number of Americans with multiple options for broadband service is on the rise:

[A]pproximately 84% of Americans have at least two options for 10/1 Mbps fixed terrestrial service; approximately 74% have at least two options for 25/3 Mbps fixed terrestrial service; approximately 67% have at least two options for 50/5 Mbps service; approximately 55% have at least two options for 100/10 Mbps service; and approximately 35% have at least two options for 250/25 Mbps service.<sup>20</sup>

In terms of a raw total, the number of broadband providers exceeded 2,000 at the end of last year, an increase of 26% from June 2014.<sup>21</sup> This, of course, includes fixed-satellite services, which "play a role in closing the digital divide across the United States" and "now serve a combined approximately 2 million subscribers."<sup>22</sup>

As a direct consequence, consumer prices are on the decline. During the last five years, the most popular plans have decreased in price by an average of over 20% – while at the same time featuring 16% higher speeds.<sup>23</sup>

*Video.* The *Report* recognizes the longstanding trend in video distribution: regulated, facilities-based providers are losing customers to upstart providers that deliver content over the Internet. It notes that (1) "[c]ontinuing a downward trend that began in 2013, [multichannel video programming distributors (MVPDs)] shed 6.4 million video subscribers between 2018 and 2019, ending 2019 with 83.4 million video subscribers,"<sup>24</sup> and (2) online video distributors (OVDs) "have continued to proliferate and grow in the past two years."<sup>25</sup> Consumers still have numerous

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<sup>17</sup> *Id.* at ¶ 28.

<sup>18</sup> *Id.* at ¶ 99.

<sup>19</sup> *Id.* at ¶ 106.

<sup>20</sup> *Id.* at ¶ 84. *See also id.* ("[C]onnections capable of 100 Mbps have increased by a factor of six since 2015."); *id.* at ¶ 122 ("[A]lmost 66.4 million connections had access to download speeds of 100 Mbps in December 2019, which is more than 5.5 times the number of connections capable of 100 Mbps in June 2015.").

<sup>21</sup> *Id.* at ¶ 92.

<sup>22</sup> *Id.* at ¶ 98. *See also id.* at ¶ 127 ("If we were to include satellite broadband ..., the FCC Form 477 data indicate that nearly all areas in the country have access to satellite broadband as an alternative for fixed terrestrial broadband service at both the 10/1 Mbps and 25/3 Mbps levels....").

<sup>23</sup> *Id.* at ¶ 109. *See also id.* at ¶ 127 ("Comparing the data year over year ... shows an increase in the service options available for all speed tiers, where, for example, between 2018 and 2019, the percentage of the population with two or more provider options offering 25/3 Mbps service increased from approximately 68% to approximately 74%.").

<sup>24</sup> *Id.* at ¶ 151.

<sup>25</sup> *Id.* at ¶ 152.

options among traditional MVPDs: "most consumers have access to one cable MVPD and two [direct broadcast satellite (DBS)] MVPDs, and some consumers additionally have access to a telephone company MVPD."<sup>26</sup> But the real story is the rise of streaming options: "[s]ubscription based OVDs and [virtual MVPD (vMVPD)] subscriptions have risen in recent years, appearing to capture attention from consumers at the expense of traditional MVPDs."<sup>27</sup>

Perhaps most notable is the subscriber growth experienced by vMVPDs, which increased by 31% in 2019 and 16.1% in 2020.<sup>28</sup> As more consumers opt for Internet-based alternatives delivered via mobile and home video device apps, both the relevance and penetration of leased navigation devices (that is, set-top boxes) continues to plummet: "in 2019, 'only 47 percent of all TV sets were connected to an MVPD leased set-top box, the lowest figure ever in the era of all-digital cable television.'"<sup>29</sup> This serves to confirm the wisdom of the Commission's recent decision to terminate officially the so-called "unlock the box" proceeding initiated in 2016 by then-Chairman Tom Wheeler.<sup>30</sup>

### III. The Report Does Not Fully Capture the Significance of Intermodal Competition

As the *Report* states at the outset,<sup>31</sup> RAY BAUM'S Act directs "the Commission [to] consider all forms of competition, *including the effect of intermodal competition*, facilities-based competition, and competition from new and emergent communications services, including the provision of content and communications using the Internet."<sup>32</sup> Free State Foundation scholars discussed at length the existence of intermodal competition in comments filed in this proceeding.<sup>33</sup> As noted in the previous section, however, the *Report* generally adheres to a status quo approach that is confined to legacy regulatory classifications.

But in 2020, the view of competition in discrete communications markets through this traditional lens provides an incomplete picture. Once upon a time it was the case that the underlying

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<sup>26</sup> *Id.* at ¶ 155.

<sup>27</sup> *Id.* at ¶ 152.

<sup>28</sup> *See id.* at Fig. II.D.12. *See also* Andrew Long, "Online Video Subscriber Growth Compels Further Deregulation," *Perspectives from FSF Scholars*, Vol. 15, No. 66 (December 11, 2020), available at <https://freestatefoundation.org/wp-content/uploads/2020/12/Online-Video-Subscriber-Growth-Compels-Further-Deregulation-121120.pdf>, at 3 (noting that "the months of July, August, and September [of 2020] produced vMVPDs' 'best-ever quarter' in terms of subscriber growth").

<sup>29</sup> *2020 Report* at ¶ 171. *See also id.* at ¶ 170 ("[O]ur review of relevant comments and other available information revealed: A decline in consumer rental of set-top-boxes; increased usage of apps to watch MVPD programming on devices other than set-top-boxes; and increased availability of video programming services that resemble traditional MVPD products but do not require use of a set-top-box."); Andrew Long, "Closing the Lid on 'Unlock the Box' Should End Video Device Regulation," *Perspectives from FSF Scholars*, Vol. 15, No. 50 (September 25, 2020), available at <https://freestatefoundation.org/wp-content/uploads/2020/09/Closing-the-Lid-on-Unlock-the-Box-Should-End-Video-Device-Regulation-092520.pdf>.

<sup>30</sup> Report and Order, *Expanding Consumers' Video Navigation Choices*, MB Docket No. 16-42; *Commercial Availability of Navigation Devices*, CS Docket No. 97-80, FCC 20-124 (September 4, 2020), available at <https://docs.fcc.gov/public/attachments/FCC-20-124A1.pdf>.

<sup>31</sup> *See 2020 Report* at ¶ 1.

<sup>32</sup> 47 U.S.C. § 163(d)(1)(emphasis added).

<sup>33</sup> *See* Comments of the Free State Foundation, *The State of Competition in the Communications Marketplace*, GN Docket No. 20-60 (filed April 27, 2020), available at <https://freestatefoundation.org/wp-content/uploads/2020/04/FSF-Comments-Communications-Marketplace-Competition-042720.pdf>.

transmission medium largely determined the product category. Twisted copper pairs meant voice. Coaxial cable meant multichannel video. Broadcast spectrum meant local network affiliates. Wireless frequencies meant mobile voice. The ubiquitous migration to digital services and Internet Protocol (IP) delivery has erased those product boundaries largely set previously by technological constructs. This has facilitated and accelerated cross-silo competition, because anything and everything virtual can be packetized and provided over the Internet – and every transmission path increasingly is IP-enabled.

It is for this reason that Commissioner Brendan Carr merely concurs in part of the Commission's decision to approve the *Report*, emphasizing that:

I would go even further than the Report does in recognizing the converged market for connectivity that now exists. The Commission's decades-old approach of viewing different technologies – including mobile, fixed, satellite, and broadcast offerings – as competing in distinct and separate markets no longer matches the way that Americans consume these services.<sup>34</sup>

Intermodal competition in the provision of voice is the most obvious example. The *Report* mentions that at this point the majority of U.S. adults – 59%<sup>35</sup> – reside in households that do not subscribe to a traditional landline phone service regulated under Title II of the Communications Act and the revenue basis for Universal Service Fund subsidies.<sup>36</sup> What were once viewed merely as the "phone companies" today compete with wireless carriers, broadband providers, and so-called "over-the-top" rivals that offer rival VoIP phone service – not to mention texting, messaging apps, social media platforms, video conferencing, and a relentlessly expanding universe of additional forms of IP-enabled communication.

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<sup>34</sup> Statement of Commissioner Brendan Carr Approving in Part and Concurring in Part, 2020 Communications Marketplace Report, *Communications Marketplace Report*, GN Docket No. 20-60, FCC 20-188 (December 31, 2020), available at <https://docs.fcc.gov/public/attachments/FCC-20-188A1.pdf> (citing Keynote Remarks of FCC Commissioner Brendan Carr at the Phoenix Center's 19th Annual U.S. Telecoms Symposium, "Keeping Pace with Dynamic Industries," Washington, DC (December 3, 2019), available at <https://docs.fcc.gov/public/attachments/DOC-361147A1.pdf>, at 1-2 ("[T]he challenge on the competition policy side is not to see the world as it was in the 3G past or even how it is today, but to anticipate where competition is going. Put simply, competition authorities must keep pace with the industries they regulate. Failing to do so risks turning the authorities themselves into restraints on competition and denying the public the full benefits that the free market can deliver.")).

<sup>35</sup> 2020 Report at ¶ 28 (citing CDC, NCHS, Stephen J. Blumberg and Julian V. Luke, *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey*, January-June 2019, National Center for Health Statistics (May 2020), <https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless202005-508.pdf>).

<sup>36</sup> See, e.g., Randolph J. May, "MEDIA ADVISORY: USF Contribution Factor Tops 31% and May Be Nearing a Tipping Point," *FSF Blog* (December 16, 2020), available at <https://freestatefoundation.blogspot.com/2020/12/media-advisory-usf-contribution-factor.html> ("The steady increase over time in the amount of the USF 'tax,' which is the surcharge added to every consumer's telecom bill for interstate and international calls, is shocking and ought to receive far more widespread attention that it has."); Randolph J. May et al., "A PRIMER: COMMUNICATIONS POLICY PRIORITIES FOR 2021 Do's and Don'ts for Policymakers," *Perspectives from FSF Scholars*, Vol. 16, No. 1 (January 6, 2021), available at <https://freestatefoundation.org/wp-content/uploads/2021/01/A-PRIMER---COMMUNICATIONS-POLICY-PRIORITIES-FOR-2021-Dos-and-Donts-for-Policymakers-010621.pdf> ("The current Universal Service Fund (USF), dependent on the ever-dwindling purchase of 'telecommunications services,' which has led to the present surtax of 31% on all interstate and international calls, is at or near the breaking point.").

However, the form of cross-silo competition that receives probably the most attention in the *Report* is that which exists between mobile and fixed broadband offerings. Yet it undoubtedly understates the current and near-term extent to which mobile offerings, in particular 5G services, can satisfy in-home connectivity needs, stating in a conclusory fashion that "many households continue to subscribe to both fixed and mobile broadband service, suggesting that these separate services offer benefits that are either complementary or independent of each other."<sup>37</sup>

Nevertheless, the *Report* does include data points suggesting that mobile and fixed broadband services increasingly are substitutes for one another. For example, it highlights that 37% of those surveyed by Pew in 2019 (compared to only 19% in 2013) rely upon smartphones – devices which transition frequently and seamlessly between mobile data service and Wi-Fi networks that redistribute fixed broadband connections.<sup>38</sup>

The *Report* also concedes that 5G offerings "may have performance characteristics similar to fixed services in certain environments."<sup>39</sup> That, without question, is true. Indeed, both 5G and Wi-Fi 6/6E promise improved speeds and other capabilities, such as reduced latency, that will enable them to complement and – most significantly – compete with fiber, the cable "10G" platform, and other emerging next-generation fixed networks.<sup>40</sup>

Another example is video bundled with mobile subscriptions. The *Report* notes that T-Mobile's Magenta Plus plan includes a subscription to Netflix Standard;<sup>41</sup> that AT&T Unlimited Elite includes HBO;<sup>42</sup> that the prepaid Metro by T-Mobile offerings comes with Amazon Prime;<sup>43</sup> and more broadly that "[m]id-level plans typically offer ... discounted or free subscription to an online video service (e.g., Netflix or Disney+)."<sup>44</sup> Additional examples regularly emerge: T-Mobile in December began offering its TVision live TV streaming services exclusively to its wireless customers.<sup>45</sup> Thus, it appears that mobile carriers may well prove to be a significant source of bundled video content, particularly in the current environment where cord-cutting and the reliance on Internet-streamed alternatives to traditional MVPDs increasingly are the norm.

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<sup>37</sup> *2020 Report* at ¶ 131. *See also id.* at ¶ 136 (noting that "[a] majority of Internet users subscribe to both fixed and mobile service").

<sup>38</sup> *See id.* at ¶ 134. *See also id.* at ¶ 135 (reporting that "additional Pew data suggest that many smartphone-only subscribers view mobile broadband as a substitute" and that "80% [of non-fixed-broadband users] say they would not be interested in having fixed broadband at home in the future").

<sup>39</sup> *Id.* at ¶ 141.

<sup>40</sup> *See* Andrew Long, "'10G' Can Help Future-Proof Broadband Infrastructure," *Perspectives from FSF Scholars*, Vol. 15, No. 47 (September 11, 2020), available at <https://freestatefoundation.org/wp-content/uploads/2020/09/10G-Can-Help-Future-Proof-Broadband-Infrastructure-091120.pdf>.

<sup>41</sup> *2020 Report* at ¶ 39.

<sup>42</sup> *See id.* at ¶ 40.

<sup>43</sup> *See id.* at ¶ 43.

<sup>44</sup> *Id.* at ¶ 44. *See also* Verizon Wireless, "Disney Plus: First Year, On Us," available at <https://www.verizon.com/solutions-and-services/disneyplus/> (noting that select Unlimited plans include six months of free Disney+ and other plans include Disney+, Hulu, and ESPN+).

<sup>45</sup> *See* Ty Pendlebury, "T-Mobile's TVision live TV hands-on: Worth \$10 if you're already a customer," *CNET* (December 14, 2020), available at <https://www.cnet.com/news/t-mobiles-tvision-live-tv-hands-on-worth-10-if-youre-already-a-customer/>.

An up-to-date analytical approach that focuses on the present realities of convergence and intermodal competition appropriately would regard these video- and bundling-related developments as significant, likely even game-changing, particularly from the all-important consumer choice perspective. The *Report*, however, defined as it is by an outdated, siloed mindset, mentions mobile providers' entry into video distribution only as an instance of non-price product differentiation in the narrow context of wireless competition.

Conversely, technological advancements, specified in the IP-based ATSC 3.0 standard that local television stations are in the process of deploying, make possible the provision of Internet services using broadcast spectrum.<sup>46</sup> As a consequence, we might soon see not just mobile broadband providers entering the video space, but also local broadcasters making waves on the data front. However, the *Report* does not consider this looming and positive pro-competitive possibility.

ATSC 3.0 also expands the ability of TV stations to deliver multichannel video offerings over the air, thereby allowing them to compete more effectively with both traditional and virtual MVPDs.<sup>47</sup> The \$2.65 billion E.W. Scripps Company/ION Media transaction highlights the growing significance of multicasting to the broadcast industry.<sup>48</sup> One innovative service capitalizing on the capabilities of ATSC 3.0 is Evoca, which launched in Boise, Idaho, last September with over 60 channels.<sup>49</sup>

The above description inevitably is incomplete, and over time will become even more so. That is the point: convergence is facilitating radical and rapid change of the communications marketplace, and a consumer-oriented regulatory perspective that properly accounts for this evolution requires policymakers to think outside the silo.

#### **IV. Future FCC Reports Should Take Intermodal Competition Seriously**

A much-needed first step toward undertaking a serious analysis of intermodal competition in the communications marketplace requires that the Commission adopt a new market definition for its analyses. As the Free State Foundation's comments in this proceeding stated:

It is likely that wireless and wireline broadband services properly are part of an overall broadband communications market – a broader broadband Internet services product market, if you will. This product market for competitive

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<sup>46</sup> See Seth L. Cooper, "FCC Adopts Order to Promote 'Next Gen TV' and 'Broadcast Internet Services,'" *FSF Blog* (December 23, 2020), available at <http://freestatefoundation.blogspot.com/2020/12/fcc-adopts-order-to-promote-next-gen-tv.html>.

<sup>47</sup> See Andrew Long, "Multicasts, ATSC 3.0 Turn Broadcasting Into a Multichannel Platform," *Perspectives from FSF Scholars*, Vol. 15, No. 53 (October 12, 2020), available at <https://freestatefoundation.org/wp-content/uploads/2020/10/Multicasts-ATSC-3.0-Turn-Broadcasting-Into-a-Multichannel-Platform-101220.pdf>.

<sup>48</sup> See generally "Scripps creates national television networks business with acquisition of ION Media," PR Newswire (September 24, 2020), available at <https://www.prnewswire.com/news-releases/scripps-creates-national-television-networks-business-with-acquisition-of-ion-media-301137357.html>.

<sup>49</sup> See Geoffrey Morrison, "Cable TV channels and 4K from an antenna? It's rolling out to this US city for \$49," CNET (September 4, 2020), available at <https://www.cnet.com/news/cable-tv-channels-and-4k-from-an-antenna-its-rolling-out-to-this-us-city-for-49/>.

broadband Internet services should encompass fixed, mobile, and satellite broadband services that can meet the Commission's speed benchmark threshold of 25 Mbps download/3 Mbps upload for "advanced telecommunications capability." The policy implications of recognizing this broader and more realistic product market could be developed over the course of future Commission proceedings.<sup>50</sup>

## V. Conclusion

To its considerable credit, and as the result of much hard empirical work, the *2020 Communications Marketplace Report* unquestionably presents demonstrable evidence of recent pro-competitive developments in the realms of connectivity and content delivery. Nevertheless, the agency, with bureaus still compartmentalized into increasingly outdated and arbitrary silos, still struggles to appreciate the full extent to which convergence – in terms of providers, product offerings, and most notably delivery via various Internet Protocol networks – is reshaping the communications marketplace. As the newly-composed Commission moves forward under new leadership, a fresh perspective, along with a purposeful modernization of the analytical framework applied, would go a long way toward harmonizing regulation and marketplace reality.

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### Further Readings

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Andrew Long, "[Online Video Subscriber Growth Compels Further Deregulation](#)," *Perspectives from FSF Scholars*, Vol. 15, No. 66 (December 11, 2020).

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<sup>50</sup> Comments of the Free State Foundation, *The State of Competition in the Communications Marketplace*, GN Docket No. 20-60 (filed April 27, 2020), at 15.

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