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**REDACTED – FOR PUBLIC INSPECTION**

**Accepted / Filed**

**August 27, 2018**

**AUG 27 2018**

**Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, DC 20554**

**Federal Communications Commission  
Office of the Secretary**

**DOCKET FILE COPY ORIGINAL**

**Re: *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer  
Control of Licenses and Authorizations, WT Docket No. 18-197***

**Dear Ms. Dortch:**

Pursuant to the procedures outlined in the Protective Order (DA 18-624) issued in this docket, please find attached hereto a redacted copy for public inspection of the Petition to Deny of Free Press.

We have also today served, as indicated in the attached certificate of service, unredacted copies of the petition on the Commission and on the Applicants.

**Respectfully Submitted,**

**/s/ Matthew F. Wood.**

**Matthew F. Wood  
Policy Director**

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Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of )  
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Applications of T-Mobile US, Inc. and )  
Sprint Corporation )  
 )  
For Consent to Transfer )  
Control of Licenses and Authorizations )

WT Docket No. 18-197

Accepted / Filed

AUG 27 2018

Federal Communications Commission  
Office of the Secretary

**PETITION TO DENY OF FREE PRESS**

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August 27, 2018

### Executive Summary

On April 29, 2018, T-Mobile US, Inc. (“T-Mobile”) and Sprint Corporation (“Sprint,” together, “Applicants”) formally announced their intent to merge, with T-Mobile the surviving entity. On June 18, 2018, Applicants filed their public interest statement purporting to outline the public interest benefits of the proposed merger.<sup>1</sup>

As detailed herein, Applicants have failed to meet their burden of demonstrating that this merger would serve the public interest, which is required for Federal Communications Commission (“Commission”) approval to transfer spectrum licenses and authorizations. They have not shown that the deal would not lessen competition, far less that it could enhance competition. In fact, the merger would massively increase concentration in the U.S. wireless market and in critical market segments too. For these reasons, it would violate the antitrust laws of the United States as well, and should be rejected based on Department of Justice (“DOJ”) guidelines and past precedent.

Applicants’ claimed public interest benefits for this proposed horizontal merger are negligible at best, and upon close scrutiny appear to be non-existent. Even if those claimed benefits were legitimate, they are not merger specific, and not nearly enough to offset the harms from the loss of a competitor in an already highly concentrated market.

There is nothing about this deal that would begin to offset the harms from the merger of the two primary carriers that serve the price-sensitive cellular market segment. This deal’s irreversible harms to competition would be most acutely felt by subscribers who rely on the availability of lower-priced wireless options, and in particular by those

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<sup>1</sup> *Applications T-Mobile US, Inc. and Sprint Corporation For Consent To Transfer Control of Licenses and Authorizations*, WT Docket No. 18-197, Description of Transaction, Public Interest Statement, and Related Demonstrations (“Application”).

who have low incomes – with people of color disproportionately represented in that low-income demographic and on the wrong side of the digital divide. The deal would especially harm wireless subscribers living in many of our nation's largest markets. At a time when the modicum of wireless competition we see in today's market has finally yielded some trickle-down benefits for the average customer, approval of this merger should be unthinkable.

As we outline in this Petition to Deny, the available evidence demonstrates:

- The relevant product markets are the nationwide cellular service market and the nationwide wholesale cellular service market.
- Both of these markets are already highly concentrated, and the proposed merger of T-Mobile and Sprint would substantially increase concentration even further in both.
- This merger would result in substantial unilateral harms to consumers and competition. It would reverse the competitive progress made since the U.S. Government's 2011 rejection of the proposed AT&T/T-Mobile merger.
- T-Mobile and Sprint each independently exert competitive pressures on the market's "premium" carriers, AT&T and Verizon. But T-Mobile and Sprint also compete with each other for the market segment comprising more value-conscious customers.
- T-Mobile and Sprint are critical suppliers of wholesale access to Mobile Virtual Network Operators ("MVNOs") serving the most price-sensitive customers. This merger would substantially increase concentration in the already highly concentrated wholesale market, imparting substantial, disproportionate harms on low-income wireless users.
- The market is already vulnerable to coordinated conduct, and this merger would drastically exacerbate that harm.
- There is no prospect of competitive entry that could mitigate the unilateral harms and coordinated effects of this transaction.
- The claimed efficiencies of this merger are speculative, non-merger specific, non-cognizable, and would not outweigh the adverse competitive impact of this transaction. The merging parties' claimed benefits about accelerated 5G deployment are vastly overstated and cannot possibly outweigh the

permanent harms resulting from the contraction of the market from four to three facilities-based carriers.

- Local market divestiture would not remedy the adverse competitive impacts this transaction would have on the nationwide product market. The local markets where Applicants have the highest combined market shares are disproportionately composed of lower-income households. Divesting these customers to remaining national carriers would be harmful, as those carriers have substantially higher prices than T-Mobile or Sprint.

This consolidation certainly would serve the interests of Softbank and Deutsche Telekom (the entities that control Sprint and T-Mobile). The resulting lessened competition also would benefit AT&T and Verizon. But the elimination of what modicum of wireless competition currently exists in the U.S. marketplace absolutely would not serve the public interest. The Commission should not grant the Application, and instead should continue to work to ensure that all people in America get the full benefits of meaningful competition in the wireless market. People need real competition that results in affordable service, and they also need advanced wireless services. They need not, and should not be asked by these Applicants, to trade the few options they have for affordable service just for illusory promises about better technology.

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## I. Introduction

The competition that T-Mobile and Sprint each bring to the highly concentrated U.S. wireless marketplace is invaluable. U.S. mobile telecommunications users would be subject to rampant abuses from the market's two largest carriers – AT&T and Verizon – if not for the competitive pressures brought by T-Mobile and Sprint, each independently. And T-Mobile and Sprint customers (and the customers of their associated resale partners) would be far worse off if not for the competition between Sprint and T-Mobile – competition centered around attracting and retaining the value-focused customer.

Less than a decade ago, the U.S. wireless market was in a bad place. Competition was virtually non-existent. Anti-consumer practices like \$0.20 per-text fees and bill shock were commonplace, even as market demand grew with the arrival of the smartphone era. Carriers were reluctant to invest and innovate, choosing instead to reap supra-competitive profits in a marketplace where consumers were locked to onerous contracts. This all changed following Commission and DOJ rejection of the proposed AT&T/T-Mobile merger. Forced to go it alone, T-Mobile had no choice but to invest and compete, and it did so by taking aim at the value-focused market segment. T-Mobile's competitive moves prompted responses, from Sprint (which had been the best option among national carriers for value-focused users till then), and AT&T and Verizon as well (which could no longer simply rely on their legacy Baby Bell-created advantages).

But with the Application before the Commission, T-Mobile and Sprint propose to put a stop to this positive competitive momentum. The Applicants want to grow their profits and profit margins to the heights historically enjoyed by AT&T and Verizon, and

the only way for them to achieve that goal is to merge the market into a triopoly where no provider feels any meaningful pressures to compete on price.

Fortunately for wireless users, mergers cannot lawfully be blessed merely on the basis of grand promises made by merging companies and their hired experts. In order to gain the Commission's approval for this staggering consolidation of the nation's only two lower-cost facilities-based service providers, Applicants must demonstrate that approving the acquisition serves the public interest.<sup>2</sup> They simply cannot meet that burden.

The merger would create serious anticompetitive, consumer, and public interest harms. It would devastate the wholesale market and the lower-income customers of low-margin firms that resell service using it. There is no credible evidence to support Applicants' claims that without Sprint nibbling at its heels, T-Mobile still would not exercise its newfound market power. Nor is there any valid evidence to indicate that the consolidated market would not produce coordinated effects in the absence of the low-end and middle-market competition produced by Sprint and T-Mobile vying for share of these important market segments. And there's ample evidence conclusively demonstrating that Sprint and T-Mobile each will deploy competitive 5G networks if they are not permitted to merge. Though they are vastly overstated, Applicants could achieve the limited, speculative capacity benefits of this transaction without resorting to combination. The Commission should not grant the Application and should reject this transaction.

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<sup>2</sup> See, e.g., *News Corp. and DirecTV Group, Inc., and Liberty Media Corp. for Authority to Transfer Control*, MB Docket No. 07-18, Memorandum Opinion and Order, 23 FCC Rcd 3265, ¶ 22 (2008) ("*News Corp./DirecTV Order*").



## II. Statement of Interest

Free Press is a national nonpartisan organization working to promote access to affordable and open telecommunications services and broadband internet access. Free Press also aims to increase informed public participation in crucial media and telecommunications policy debates. Free Press has participated in numerous merger proceedings before the Federal Communications Commission.<sup>3</sup> In each such proceeding, Free Press has advocated for policies that promote competition and serve the public interest. As such, Free Press constitutes a “party in interest” within the meaning of Section 309(d) of the Communications Act of 1934, as amended.

Free Press also has standing to challenge this transaction. The organization uses cellular services, including voice, text messaging, and data services, to disseminate our advocacy content and to communicate with our nearly 1.5 million members. While the organization does not itself subscribe to Applicants’ services, the proposed merger would result in substantial unilateral harms and exacerbate the prospect of coordinated conduct in the cellular market. Moreover, tens of thousands of Free Press members undoubtedly do subscribe to T-Mobile and Sprint, the nation’s third- and fourth-largest wireless carriers serving well over 100 million customers between them. As the attached declarations illustrate, specific Free Press members and employees are T-Mobile and Sprint subscribers.

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<sup>3</sup> For example, Free Press has filed petitions to deny and extensive comments in merger proceedings before the Commission stretching back twelve years or more, in proceedings including but not limited to those regarding Charter/Time Warner Cable, MB Docket No. 15-149; AT&T/DIRECTV, MB Docket No. 14-90; Comcast/Time Warner Cable, MB Docket 14-57; Verizon/SpectrumCo, WT Docket No. 12-4; AT&T/T-Mobile, WT Docket No. 11-65; Comcast/NBC Universal, MB Docket No. 10-56; XM/Sirius, MB Docket No. 07-57; and AT&T Inc./BellSouth, WC Docket No. 06-74.

**III. The Proposed Transaction Would Not Serve the Public Interest Because It Would Massively Concentrate an Already Highly Concentrated Wireless Market, Eliminating That Market's Primary Source of Price Competition.**

The proposed transaction between T-Mobile and Sprint is a large horizontal merger that would combine the operations of the nation's third- and fourth-largest cellular service providers, in a market in which there are only four national carriers. The Commission's and DOJ's merger reviews both are centered in antitrust analysis. However, though the Commission considers a transaction's competitive effects to help determine whether that transaction would serve the public interest,<sup>4</sup> its analysis is not limited to antitrust principles.<sup>5</sup> This broader scope of review is particularly important for transactions in which merging firms utilize public spectrum and public rights of way.

However, an antitrust analysis alone conclusively demonstrates the certain and substantial competitive harm this merger would cause. The first step in such an analysis involves identification of the relevant product market and its geographic scope. In prior similar reviews, the Commission determined that the relevant product market is broadly the "mobile telephony/broadband services" market, which contains other distinct product markets in which a transaction may impart particular competitive effects (*e.g.*, retail,

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<sup>4</sup> See, *e.g.*, *News Corp./DirecTV Order* §§ 23-24; *id.* § 23 ("The Commission's public interest evaluation necessarily encompasses . . . a deeply rooted preference for preserving and enhancing competition in relevant markets[.]"); see also *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations*, WT Docket No. 04-70, Memorandum Opinion & Order, 19 FCC Rcd 21522, § 41 (2004).

<sup>5</sup> See, *e.g.*, *News Corp./DirecTV Order* § 24 ("Our competitive analysis, which forms an important part of the public interest evaluation, is informed by, but not limited to, traditional antitrust principles.").

wholesale, enterprise and government wireless services).<sup>6</sup> DOJ's reviews identified the same broad market and additional markets of focus.<sup>7</sup> These same product market definitions remain appropriate for this transaction. However, consistent with prior reviews that devote attention to market segments that might be particularly impacted by the transaction, the Commission should also assess the competitive impact this transaction would have on the "value-focused" wireless customer segment.<sup>8</sup>

**A. The Relevant Product Markets Are the Nationwide Cellular Service Market and Nationwide Wholesale Cellular Service Market, Which Contain Market Segments that the Merger Would Acutely Impact.**

At the highest level, this merger proposes the combination of two companies that operate in the broad "cellular" market. Yet we believe the data demonstrates that formally, the relevant product and geographic markets affected by this transaction would be the 1) nationwide cellular service market,<sup>9</sup> and 2) nationwide wholesale cellular

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<sup>6</sup> See, e.g., *Bureau Dismissal Without Prejudice of AT&T's Applications for Transfer of Control of T-Mobile USA, Inc.*, WT Docket No. 11-65, Staff Analysis and Findings, 26 FCC Rcd 16184, ¶ 31 (2011) ("FCC Staff Report").

<sup>7</sup> See *U.S. v AT&T Inc. & T-Mobile USA, Inc.*, Second Amended Complaint, Civil Action No. 11-01560 (ESH), ¶¶ 12-13 (D.D.C. Sept. 30, 2011) ("DOJ Second Amended Complaint").

<sup>8</sup> Press reports suggest DOJ's initial inquiry of this transaction did focus on the wholesale market. See, e.g., Sheila Dang, "Exclusive: U.S. Justice Department probes T-Mobile-Sprint merger effect on smaller wireless companies - sources," *Reuters* (June 7, 2018). But a review of the wholesale wireless services market will only capture part of the transaction's impact on the value-focused market segment. Wholesale customers that operate as MVNOs primarily target the price-conscious customer base. But T-Mobile and Sprint (and their wholly-owned affiliates MetroPCS, Boost Mobile, and Virgin Mobile) all market to, and compete for this value-focused market segment too.

<sup>9</sup> Today's cellular market largely consists of monthly service plans (pre-paid or post-paid) that deliver combined mobile voice telephony, mobile universal messaging ("SMS"), and mobile internet access services. This market has customer segments that do not purchase mobile internet access, but those are in secular decline. Conversely, the so-called "Internet of Things" ("IoT") market segment involves data-only services, many of which are sold wholesale (e.g., connected car data subscriptions). See discussion *infra*.

service market. This is the same conclusion reached by DOJ and the Commission during those agencies' reviews of AT&T's failed attempt to acquire T-Mobile in 2011.<sup>10</sup> We also believe that the market functions at the national level, but because of differences in how services are marketed (*e.g.*, where carriers place retail stores, place advertising, and target customer segments like the value-focused segment), this merger also would have particularly acute effects on competition in certain local geographic markets.

#### **i. Product Market Definition**

The first task for the Commission and DOJ when conducting their respective merger reviews is to determine the relevant product market. When defining the boundaries of the relevant product market, the agencies will investigate how and to what extent consumers can and would substitute other products in response to price increases in the candidate market.<sup>11</sup> For cellular telecommunications consumers, there are no viable

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<sup>10</sup> See *U.S. v AT&T Inc. & T-Mobile USA, Inc.*, Amended Complaint, Civil Action No. 11-01560 (ESH), ¶ 20 (D.D.C. Sept. 16, 2011) (“DOJ First Amended Complaint”) (“[T]he Big Four carriers compete against each other on a nationwide basis and AT&T's acquisition of T-Mobile will have nationwide competitive effects across local markets.”); see also FCC Staff Report ¶ 34 (“[T]wo key competitive variables – prices and service plan offerings – do not vary for most providers across most geographic markets where they sell services . . . . AT&T, Verizon Wireless, Sprint, and T-Mobile[ ] set the same rates for a given plan wherever they sell service and do not alter the plans they offer depending on the location. . . . Because of these important national characteristics, a loss of competition that occurs at the local level is likely to have only a small adverse effect on, for example, the pricing and plans that the nationwide providers offer . . . . Accordingly, we do not find it necessary to assess the competitive effects in retail wireless services individually in each local market to determine the likely consequences of the proposed transaction for competition.”).

<sup>11</sup> See U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, at 11 (Aug. 19, 2010) (“*Horizontal Merger Guidelines*”) (“In considering customers' likely responses to higher prices, the Agencies take into account any reasonably available and reliable evidence, including, but not limited to . . . objective information about product characteristics and the costs and delays of switching products, especially switching from products in the candidate market to products outside the candidate market . . .”).

substitutes for combined, all-in-one mobile telephony and computing via mobile broadband networks. A smartphone consumer facing sustained price increases in this mobile telecommunications market controlled by the hypothetical monopolist has no choice but to pay the increased rate, or instead to exit the cellular market to use fixed telecommunications networks. Most cellular users would not substitute in that manner, and thus would not exit.

Antitrust analysis uses the hypothetical monopolist test to assess the likelihood of that kind of substitution: that is, to determine whether a small but significant and non-transitory increase in price ("SSNIP") in the Applicants' merged offerings actually would result in customers substituting fixed voice and data services (such as a DSL/VoIP service package) for mobile communications services.<sup>12</sup> There is simply no evidence to suggest that a critical level of customers would do so.

Moreover, there are substantial switching barriers. Although after the failed AT&T/T-Mobile merger the national carriers moved away from the practice of locking their customers in with two-year contracts, many wireless users remain effectively locked to their carrier for a two-year period due to the now-common industry practice of carriers collecting device-payments rather than subsidizing handsets. Despite the reduction in the

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<sup>12</sup> See *id.* at 8-9 ("The Agencies employ the hypothetical monopolist test to evaluate whether groups of products in candidate markets are sufficiently broad to constitute relevant antitrust markets. . . . The hypothetical monopolist test requires that a product market contain enough substitute products so that it could be subject to post-merger exercise of market power significantly exceeding that existing absent the merger. Specifically, the test requires that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future seller of those products ('hypothetical monopolist') likely would impose at least a small but significant and non-transitory increase in price ('SSNIP') on at least one product in the market, including at least one product sold by one of the merging firms. . . . The SSNIP is employed solely as a methodological tool for performing the hypothetical monopolist test; it is not a tolerance level for price increases resulting from a merger.").

prevalence of those lock-in contracts, the need to pay off the device still makes exit a very costly option for customers making such payments. These high costs (which include a customer either paying off the balance for the device or needing to purchase a new one) mean that consumer switching within the market to another carrier is also prohibitive.<sup>13</sup>

Antitrust analysis also indicates the existence of distinct product markets beyond the broad “mobile” telecommunications market, for consumers and resellers alike. For example, MVNOs that purchase wholesale network access from Applicants and other facilities-based carriers clearly have no viable substitutes in adjacent product markets.

However substantial the harms it would cause in general, this merger’s increased concentration in the retail and wholesale mobile wireless markets would have disparate competitive impacts on particular market segments, such as the value-focused and pre-paid customer segments. As we discuss in greater detail below, these market segments that may not be formally defined as separate product markets, but nonetheless are differentiated enough that concentration would likely confer additional market power on Applicants that non-merging firms in the broad mobile market would not act to negate.

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<sup>13</sup> For these and other reasons, we believe the most appropriate product market definition would be the national market for integrated mobile voice and data telecommunications services. This is particularly true today, when service plans that do not include data are relegated to the realm of niche resellers or national carriers’ pre-paid tiers. However, this also would mean that there is no longer any practical distinction between the integrated voice and data mobile services market and the more general mobile services market. Regardless, the Commission or DOJ has the ability to perform its analysis on a subset of customers (*e.g.*, prepaid smartphone customers) if it determines that the particular subset could be targeted by a hypothetical monopolist for price increases. *See id.* at 12 (“If a hypothetical monopolist could profitably target a subset of customers for price increases, the Agencies may identify relevant markets defined around those targeted customers, to whom a hypothetical monopolist would profitably and separately impose at least a SSNIP. Markets to serve targeted customers are also known as price discrimination markets. In practice, the Agencies identify price discrimination markets only where they believe there is a realistic prospect of an adverse competitive effect on a group of targeted customers.”).

For example, both T-Mobile and Sprint (and their affiliated pre-paid brands MetroPCS, Virgin Mobile, and Boost Mobile) market services specifically to the segment of cellular customers primarily concerned with price. In contrast, AT&T and Verizon market services to the segment of cellular customers primarily concerned with service quality (including geographic scope). This market segmentation is reflected in the prices of each national carrier, with AT&T's and Verizon's well above T-Mobile's and Sprint's.

## ii. Geographic Market Definition

The Commission's and DOJ's second major task is to determine the relevant geographic market for the product sold by the merging firms. All available evidence – supported by DOJ and Commission precedent – indicates that the services offered by carriers with a national footprint are in a separate and distinct market from those offered by regional carriers. That is a change from the wireless market and wireless mergers of decades past, but it is one that was cemented in place once smartphones utilizing LTE data networks became the dominant cellular product.

Indeed, the four national carriers controlled 98 percent of the nation's mobile wireless service revenue in 2016, and their share of smartphone revenues is likely higher.<sup>14</sup> While the regional carriers had more consumer relevance a decade ago, it is clear that today's market is a national market.<sup>15</sup>

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<sup>14</sup> *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 17-69, Twentieth Report, 32 FCC Rcd 8968, ¶ 32 (2017) (“*Twentieth Report*”).

<sup>15</sup> In 2001, most of the wireless market consisted of regional carriers that in some cases offered nationwide service through roaming agreements. Since then, the major national carriers have gone on a buying spree, each building a nationwide footprint through mergers and acquisitions and turning the market from a regional to a national one. In 2001, the top four cellular providers controlled 69 percent of all subscriptions,

With the relevant product market appropriately defined as the nationwide cellular service market, the harms of this merger will be impossible to ignore. Regional carriers' offerings have diminished in importance. The smattering of "Wi-Fi-first" wireless services sold by traditional cable companies – that rely largely on wholesale access to Verizon's network – have not yet reached the level of disciplining national cellular service carriers' behavior. These cable companies' market their wireless offerings to their high-value bundling customers rather than as potential substitutes for wireless carriers' mobile-only offerings,<sup>16</sup> and cable companies like Comcast are by definition regional carriers.<sup>17</sup> Indeed, two month's prior to publicly announcing the deal to merge with Sprint, T-Mobile's CEO stated that as he considered expectations for T-Mobile's growth in 2018, "the furthest thing from my mind is any concern about the impact of cable."<sup>18</sup>

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compared with 92 percent at the end of the first quarter of 2018. *See 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*, Seventh Report, 17 FCC Rcd 12985, App. C, Table 4 (2002) ("*Seventh Report*"). With regard to first quarter 2018 shares, we note that the Commission's annual wireless competition reports no longer included such data after 2011. Free Press estimated values for subsequent years as described below, *infra* note 23.

<sup>16</sup> See "The XFINITY Mobile Plan," <https://www.xfinity.com/mobile/plan> (last visited Aug. 26, 2018) ("Included with your XFINITY Internet service . . . XFINITY Mobile is available to Internet customers.")

<sup>17</sup> T-Mobile's Chief Financial Officer Braxton Carter made this clear in his comments at 2017's Morgan Stanley European Technology, Media & Telecom Conference when asked about the possibility of cable competition. Carter stated, "It's going to be really tough for them to make any meaningful penetration given the regulatory environment, which is much different than Europe with an MVNO-type relationship. And the other big difference between the U.S. and Europe is the cable broadband footprint is regional. There is no national platform." *See* Comments of J. Braxton Carter, Chief Financial Officer, Executive Vice President and Treasurer, T-Mobile US, Inc., Morgan Stanley European Technology, Media & Telecom Conference (Nov. 16, 2017).

<sup>18</sup> Comments of John Legere, T-Mobile US, Inc., Fourth Quarter 2017 Analyst Call (Feb. 8, 2018) ("Legere 4Q 2017 Comments").



The Commission's analysis of the evidence will surely show that customers' substitution of any fixed services and/or regional carriers' cellular services would not be substantial enough to prevent abuses of market power in the national post-paid market.<sup>19</sup>

Nevertheless, consistent with Commission and DOJ precedent, the transactions effects should be examined both at the national level as well as the local level.<sup>20</sup> This is particularly important in the examination of certain market segments, such as the value-focused and pre-paid customer segments. As we discuss below, Sprint and T-Mobile – along with their affiliated brands, and the resale carriers that purchase each Applicant's wholesale capacity – have significantly larger market shares in certain local geographic markets. While pricing decisions are made on a national basis, there can be substantial regional variability in marketing and selling mobile telecommunications services. If there are local markets where this transaction would visit particularly large increases in concentration, those areas should receive particular focus.

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<sup>19</sup> The question of geographic market boundaries will be important to consider; but given the fundamental shift of the wireless market from a regional to a national carrier market, this consideration becomes less relevant, because the harms from the merger would be national not local. Certainly consumers' buying decisions in this market are influenced by what services are available in the geographic area in which those particular consumers live and work, but supplier behavior is solely at the national level. Data plans are priced nationally regardless of the level of local competition. Smartphone devices are procured and introduced to the national market, not regionally. And there is no geographic characteristic to innovation in the wireless market: the harms to innovation from unilateral and coordinated effects will be felt nationally, regardless of what individual carrier choices a consumer has in a given local market. Indeed, DOJ has in the past recognized that "[t]he existence of local [purchasing] markets does not preclude the possibility of competitive effects in a broader geographic area, such as a regional or national area." See *U.S. v. Verizon Communications Inc. and Alltel Corp.*, Competitive Impact Statement, Case No. 1:08-cv-01878 (EGS), at 7 n.2 (D.D.C. Oct. 30, 2008).

<sup>20</sup> See, e.g., FCC Staff Report ¶ 31; see also, e.g., DOJ Second Amended Complaint ¶¶ 14-21.

**B. The Relevant Product Markets Are Already Highly Concentrated, And the Proposed Merger of T-Mobile and Sprint Would Result In Formation of an Uncompetitive Oligopoly.**

The U.S. wireless market has long been highly concentrated by any measurable standards. Waves of consolidation went hand-in-hand with increasing prices and onerous contracts. Yet in recent years, competition from T-Mobile and Sprint has finally elicited a competitive response from AT&T and Verizon, the market's two dominant firms. This competition has resulted in several consumer benefits: lower-priced service plans, the elimination of the two-year contract as an industry-standard, a return of unlimited data plans, elimination of metering for both voice calls and SMS texts, increased availability of innovative and low-cost MVNO carriers, increased marketing of pre-paid plans, widespread availability of data-only service plans, accelerated deployment of advanced network technologies (*e.g.*, LTE and LTE-Advanced), more frequent customer equipment upgrade options, the end of carrier handset exclusives, the end of device-locking, free international roaming, promotions that help to lower switching barriers (*e.g.*, carriers buying out a customer's existing contract), increased service add-ons (*e.g.*, free subscriptions to online video services), simplified pricing (*e.g.*, elimination of below-the-line fees), and many other pro-user developments.

We may now view these pro-competitive carrier actions and counter-actions as routine. But it is critical to note that this increased competition trend only began after the government rejected AT&T's attempt to acquire T-Mobile and consolidate the market in 2011, and only continued after the government signaled that it would not approve a merger between Sprint and T-Mobile in 2014 and on other occasions when this unwelcome marriage was proposed.

Prior to those events, the market was characterized instead by increasing prices, elimination of unlimited data plans, exorbitant rates on SMS messages, “bill shock” from metered plan overages, substantial below-the-line fees, arcane limitations on voice calls (*e.g.*, plans that allotted a limited number of minutes for calls during daytime hours), increasing contract-termination fees, carrier exclusives on popular handsets, carrier device-locking, slow carrier deployment of network upgrades, limited marketing and availability of pre-paid plans and MVNOs, and other anticompetitive behavior that should be expected in a highly concentrated market dominated by the legacy Bell Companies.

As we demonstrate below, this earlier history of declining competitive outcomes coincided with increased market concentration, while the recent increase in competitive outcomes coincided with decreased market concentration. To be clear, the market has not reached an optimal state of competition. Many of the carriers’ recent competitive moves – particularly those undertaken by AT&T and Verizon – are designed to increase the value of their services while avoiding more drastic price competition. However, the history and current data strongly illustrate the critical role that an independent T-Mobile and Sprint both play in making the U.S. wireless market more competitive, and show how much there would be to lose if these two independent carriers were allowed to consummate their merger.

**i. The History of Concentration and Competition in the U.S. Wireless Market.**

Over the past two decades, the U.S. wireless market has transformed from one dominated at a regional level by a handful of carriers to one dominated at a national level by just two companies: the so-called “Twin Bells,” AT&T and Verizon. In 2001, the top

two carriers' combined share of total U.S. wireless subscriptions was 43 percent.<sup>21</sup> By the end of 2009, this two-firm share had risen to 62 percent.<sup>22</sup> We estimate that this two-firm share peaked at just under 66 percent of total U.S. wireless subscriptions in 2014, and declined to 63 percent as of the first quarter of 2018.<sup>23</sup> During this same period, as the large national carriers began creating a truly national footprint through mergers and acquisitions of smaller regional companies, the share of subscriptions for carriers other than the top-four national carriers shrank dramatically – from 34 percent in 2003 to less than 2 percent in 2014.<sup>24</sup>

This decline in the regional carriers' combined share, along with the share-growth of the Twin Bells, resulted of course in a steady increase in market concentration. Below in Figure 1, we reproduce the Commission's calculations of the Herfindahl-Hirschman Index ("HHI") for the total U.S. wireless market from 2003 to 2017. These values represent the population-weighted average for the HHIs of each local market, using Economic Areas ("EAs"). This data reflects a decade-plus of continued mergers and acquisitions. Yet it shows a slight decline in overall concentration after 2014, which

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<sup>21</sup> *Seventh Report*, App. C, Table 4.

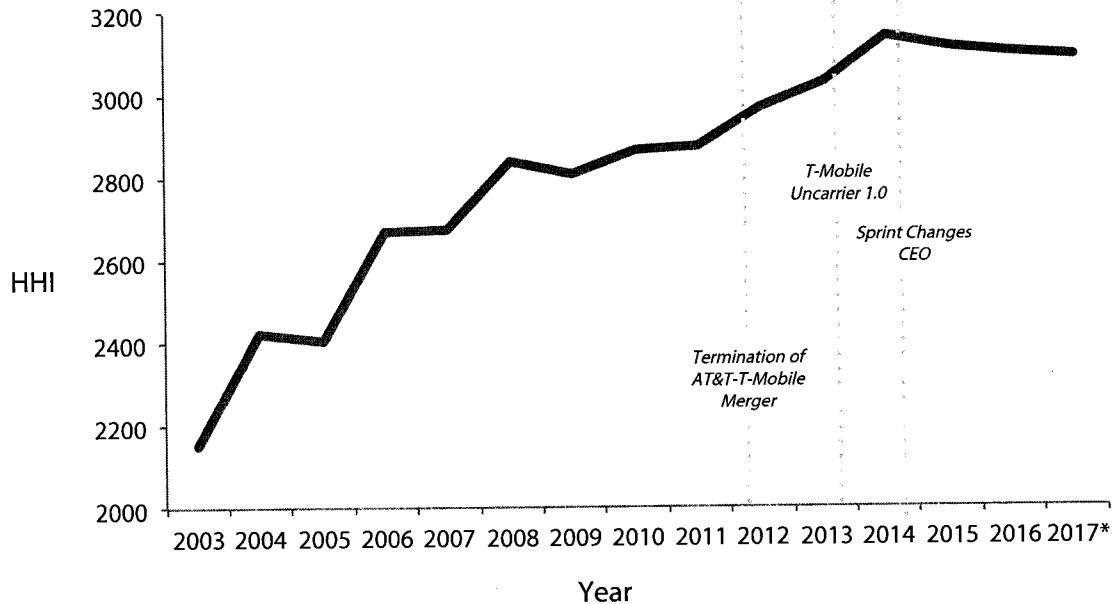
<sup>22</sup> *Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, WT Docket 10-133, Fifteenth Report, 26 FCC Rcd 9664, ¶ 31, Table 4 (2011) ("*Fifteenth Report*").

<sup>23</sup> As noted above, *supra* note 15, the 2009 values cited in the *Fifteenth Report* marked the last time the FCC produced this information in its annual wireless competition reports. Free Press estimated the values for subsequent years based on data from the FCC, CTIA, UBS, SNL Kagan, and companies' SEC filings. Our methodology, like the FCC's, attributes wholesale connections to the facilities-based provider.

<sup>24</sup> *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. 15-125, Eighteenth Report, 30 FCC Rcd 14515, ¶ 22 (2015).

reflects the small but meaningful growth in market share of T-Mobile and Sprint (relative to the Twin Bells' share) after the government's rejection of the AT&T/T-Mobile merger.

**Figure 1: U.S. Wireless Market Concentration (2003-2017)**  
**Economic Area Population-Weighted HHI**



Source: FCC Annual Mobile Wireless Competition Reports. \* 2017 Value is a Free Press estimate.

Figure 1 shows the Commission's population-weighted average of local cellular market concentration, based on its data for North American Numbering Plan allocation across all carriers. However, as we explained above, the primary relevant geographic and product market in question for this transaction is the national cellular services market. This market is comprised of just four facilities-based carriers: AT&T, Verizon, T-Mobile and Sprint. As we show below in Figure 2, the national wireless market was likewise becoming increasingly concentrated prior to the government's rejection of the AT&T/T-Mobile merger. It then also de-concentrated in the following years.

The period of most dramatic concentration increase in the national market came at a time when the top two carriers – AT&T and Verizon – were gaining market share at the expense of the bottom two carriers, particularly Sprint. Yet this 2009-2012 period also

saw T-Mobile losing share relative to the other carriers, with Sprint's share eventually rebounding slightly. This is the same time period when smartphones became ascendant, and when AT&T and Verizon dominated the smartphone market segment.<sup>25</sup> And that dominance was achieved in part through the Twin Bells' exclusive agreements to sell the most popular handsets at the time (Apple's iPhone and Motorola's Droid). It was also a time during which the Twin Bells exercised their market power to implement price increases.<sup>26</sup> Not only did the unlimited data plans that had been common at the dawn of the smartphone era disappear from the market, but wireless users were increasingly hit with surprise overage fees. This problem was so widespread the Commission had to expend substantial resources to help consumers whom an ineffectively competitive marketplace had clearly failed.<sup>27</sup>

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<sup>25</sup> See, e.g., "AT&T to Offer iPhone 3G S on June 19," *PR Newswire* (June 8, 2009) (proclaiming that AT&T had "twice as many smartphone users . . . as any other U.S. carrier").

<sup>26</sup> In early 2010, Verizon implemented an effective price increase by forcing all customers of feature phones and smartphones to purchase a data plan. AT&T shortly followed suit. Also in 2010, AT&T eliminated its unlimited data plan for smartphones, forcing new customers into capped plans with overage charges. See, e.g., Karl Bode, "Verizon Announces Wireless Pricing Changes," *DSLReports* (Jan. 15, 2010) ("The biggest news of course is that Verizon's 25 megabyte for \$9.99 per month plan (the one we're sure Verizon makes the most money from) is now mandatory for all of Verizon's '3G Multimedia' phones."); Marguerite Reardon, "AT&T-Verizon price war debunked (FAQ)," *CNET News* (Jan. 20, 2010) ("In fact, both AT&T and Verizon Wireless are extending data plans to a whole slew of customers who formerly were not subscribing to any data plans. And it is likely these are the customers who will see a bigger phone bill when they upgrade their phones or renew their contracts."); Jeffry Bartash, "AT&T to end unlimited plans for wireless data," *MarketWatch* (June 2, 2010).

<sup>27</sup> See, e.g., Federal Communications Commission, Consumer and Governmental Affairs Bureau, "White Paper on Bill Shock," at 3 (Oct. 13, 2010) ("[I]n a survey done in April-May 2010, the FCC found that 17 percent of all Americans with cell phones – a total of 30 million people – had experienced a sudden increase in their bill that occurred even when they had not changed their calling or texting plan.").

The national market de-concentrated during the 2013-2017 time period, when many of the prior period's anti-consumer practices faded away.<sup>28</sup> Concerns about bill shock ebbed as carriers moved towards larger metered allocations (eventually ending the metering of voice and SMS on most plans), rollover data, and quasi-unlimited plans.<sup>29</sup> Customers found new ways of saving money, such as the discounted multi-line offerings that became common after T-Mobile's introduction of its "Simple Choice" plans, followed shortly by Sprint's "Framily" plans (and then followed by T-Mobile beating Sprint's multi-line price).<sup>30</sup>

These back-and-forth salvos are crucial for competition – not just those in which T-Mobile or Sprint spur on the Twin Bells, but also these battles between T-Mobile and Sprint competing against each other. The many cycles of offers and response offers continue to this day.

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<sup>28</sup> See, e.g., Federal Communications Commission, Press Release, "FCC Launches New 'Bill Shock' Website to Help Consumers Track Wireless Carriers' Implementation of Voice, Data & Text Usage Alerts" (Apr. 19, 2012).

<sup>29</sup> T-Mobile's first Simple Choice plans included metered 4G LTE data, and unlimited data transfer at 2G speeds thereafter. See, e.g., David Beren, "T-Mobile Adds New Monthly4G Plans, Special \$30 Plan Now Live," *TmoNews* (Oct. 16, 2011) (announcing "new \$60/month plan featuring Unlimited Talk, Text and Unlimited Web (first 2GB of data at 4G speeds)"); Jonathan Ping, "Best Value in Smartphone Plans? T-Mobile \$30/Month Prepaid 4G with Unlimited Data," *MyMoneyBlog* (Dec. 17, 2012).

<sup>30</sup> See, e.g., Marguerite Reardon, "Sprint's new 'Family Plans' offers big savings," *CNET* (Jan. 7, 2014); T-Mobile US, Inc., Press Release, "T-Mobile Doubles Down on Flagship Simple Choice Plan with More 4G LTE Data, Tethering – and Unlimited International Texting" (Mar. 6, 2014). Sprint's actions in this more recent de-concentrating time period also illustrate how important Sprint is, independent from T-Mobile, to price competition between all of the carriers. When Sprint first launched its "Framily" plans, users had to have seven or more lines in order to pay \$25 per month per line for unlimited talk and text with just one gigabyte of data. Sprint's "Unlimited Freedom" plan update in early 2018 prices four lines of unlimited voice, text and data at the same \$25 per-line monthly fee. See Jerry Hildenbrand and Joseph Keller, "Everything you need to know about Sprint's Unlimited Freedom Plan," *iMore* (Jan. 7, 2018).

It is critical to note the change in each carrier's market shares during these more competitive periods, and how such changes also reveal the importance of competition between Sprint and T-Mobile to the entire wireless market. As shown in Figure 2, the Twin Bells grew their collective market share relative to Sprint and T-Mobile through 2012, with the Twin Bells' share of the "big four" carriers' national wireless market peaking then at 71.8 percent. AT&T and Verizon collectively lost share to T-Mobile and Sprint in 2013 (declining to 69.8 percent for the Twin Bells), and that top-two firms' combined share of the national market has stayed relatively constant in the years since.

But some of the most important pro-consumer developments occurred after this period, such as the late 2016/early 2017 return of unlimited data plans to all carriers.<sup>31</sup> This return and numerous other positive developments occurred primarily because of direct competition between Sprint and T-Mobile. As Figure 2 shows, after losing market share during 2008-2012, T-Mobile gained market share relative to Sprint beginning in 2013,<sup>32</sup> and overtook Sprint as the third-place carrier in 2015. (To be clear, about two-thirds of T-Mobile's 2013 share gain was from its acquisition of MetroPCS,<sup>33</sup> but it has continued to gain share largely from Sprint in every year since.)

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<sup>31</sup> See, e.g., Chaim Gartenberg, "Why every US carrier has a new unlimited plan," *The Verge* (Feb. 17, 2017) ("After years of moving away from offering unlimited plans after the rise of data-hungry smartphones, Verizon announced out of the blue on Sunday that it would be offering a new unlimited plan to customers again. T-Mobile, who had previously led the way by removing tiered data back in January, updated its own unlimited plan to match. The move was followed by Sprint and AT&T by the end of the week.").

<sup>32</sup> DOJ and the Commission will have access to confidential porting data, which will enable precise analysis of how existing customers are moving between the national carriers and/or their MVNO carriers.

<sup>33</sup> See Mat Smith, "It's official: T-Mobile closes deal to acquire MetroPCS," *Engadget* (May 1, 2013).



ii. **The Proposed Merger Would Vastly Increase Already High Concentration Levels, Beyond Even What the AT&T/T-Mobile Merger Would Have Caused.**

The market-share data discussed above and presented in Figure 2 below conservatively implies a national market HHI of 2,875, increasing 467 points to 3,342 if T-Mobile and Sprint merge. This post-merger market concentration would vastly exceed the level that would have resulted from the rejected AT&T/T-Mobile merger.<sup>34</sup> We expect that analysis of local market shares will reveal dozens of Cellular Market Areas (“CMAs”) where the level of concentration increase and post-merger concentration would be substantially higher than the national average.<sup>35</sup> Based on the survey data we present below in Figure 9, because the Applicants and their affiliates have significantly higher customer shares in certain markets, we expect that the merger would increase the level of market concentration by more than one thousand points in many CMAs with very large low- to middle-income populations, such as New York, Los Angeles, Chicago, Houston and others.<sup>36</sup>

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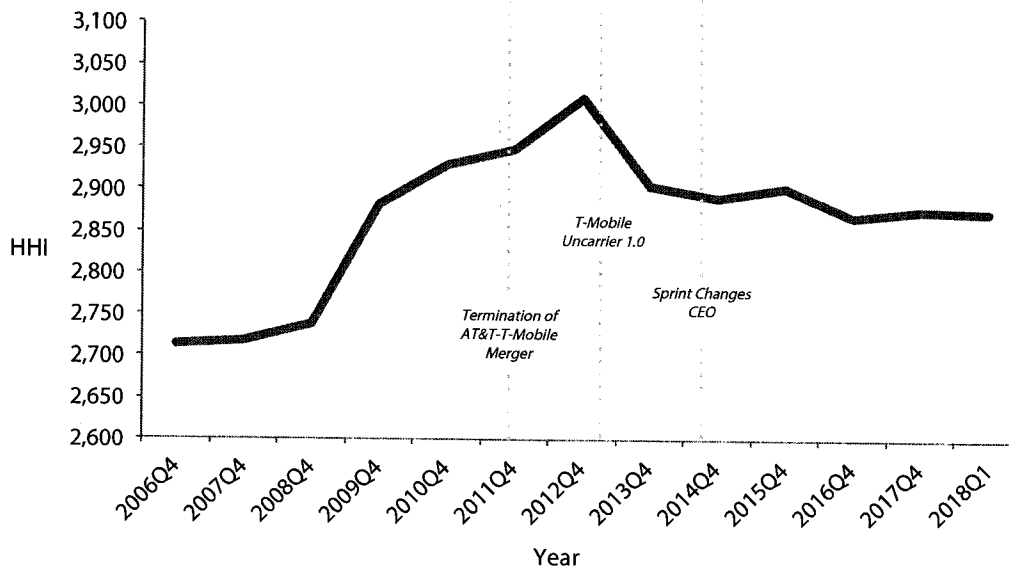
<sup>34</sup> See DOJ Second Amended Complaint ¶ 25 (“Nationally, the proposed merger would result in an HHI of more than 3,100 for mobile wireless telecommunications services, an increase of nearly 700 points. These numbers substantially exceed the thresholds at which mergers are presumed to be likely to enhance market power.”).

<sup>35</sup> Free Press was granted access to the Highly Confidential Numbering Resource Utilization and Forecast/Local Number Portability (“NRUF/LNP”) data on August 8, 2018. Our review of this information is ongoing, and we expect to file subsequent analysis that speaks to more precise national and local market concentration levels, as well as porting between and among the Applicants and other carriers.

<sup>36</sup> The data presented in Figure 9 are based on a consumer survey in which users self-reported their carriers. Because certain MVNOs purchase wholesale access from multiple carriers, we’ve presented an estimate of New T-Mobile’s market share that allocates certain proportions of each MVNO’s customers to each national carrier. Based on this analysis, the merger would increase market concentration by more than 1,000 points in most of the nations’ top 25 market areas. We will further explore this question of local market impact using the NRUF/LNP data in a subsequent filing.

The data and developments discussed above – along with T-Mobile’s and Sprint’s long histories of offering prices well below the Twin Bells’ prices, and T-Mobile’s and Sprint’s importance to the wholesale market – indicate that competition between Applicants is the primary reason wireless users have seen actual and quality-adjusted price declines in recent years. It is also a strong indicator that the relevant product market may in fact be narrower than the broader “cellular” market, and likely includes a “value” segment in which post-merger New T-Mobile would be able to exercise market power.<sup>37</sup>

**Figure 2: U.S. National Wireless Market Concentration (Q4 2006-Q1 2018)**



National Wireless Market Share	2006 - Q4	2007 - Q4	2008 - Q4	2009 - Q4	2010 - Q4	2011 - Q4	2012 - Q4	2013 - Q4	2014 - Q4	2015 - Q4	2016 - Q4	2017 - Q4	2018 - Q1
Verizon	29.8%	30.1%	31.2%	36.6%	36.3%	36.0%	38.0%	37.2%	36.6%	36.2%	35.2%	34.8%	34.5%
AT&T	30.8%	32.1%	33.3%	32.3%	33.9%	34.5%	33.8%	32.7%	33.0%	33.6%	33.7%	34.3%	34.6%
T-Mobile	12.6%	13.1%	14.2%	12.8%	12.0%	11.1%	10.6%	13.8%	15.1%	16.5%	17.8%	17.6%	17.8%
Sprint	26.8%	24.7%	21.3%	18.3%	17.7%	18.4%	17.6%	16.4%	15.3%	13.6%	13.3%	13.2%	13.1%

Source: Company SEC Reports

<sup>37</sup> See *Horizontal Merger Guidelines* at 12. As we noted above when discussing other potential market definitions and market segments: “If a hypothetical monopolist could profitably target a subset of customers for price increases, the Agencies may identify relevant markets defined around those targeted customers, to whom a hypothetical monopolist would profitably and separately impose at least a SSNIP. Markets to serve targeted customers are also known as price discrimination markets. In practice, the Agencies identify price discrimination markets only where they believe there is a realistic prospect of an adverse competitive effect on a group of targeted customers.” *Id.*

This concern about harm to the value segment of the cellular market is particularly acute given T-Mobile's and Sprint's substantial shares of the wholesale market. That market's buyers consist of MVNOs like Ting, Mint Mobile, Simple Mobile, Project Fi, and dozens of others that purchase wholesale network access from a national facilities-based carrier then resell that capacity – with service prices that are often far less expensive than those charged by the wholesaling carrier for its own similar retail plans.

Precise wholesale market share data is difficult to estimate, due to limitations in how each national facilities-based carrier reports its subscriber totals. For example, Verizon only reports retail connections, and does not report wholesale or connected device counts. AT&T does report “reseller” connections; but it is unclear how much, if any, of its connected device count is attributable to reseller connections. Sprint and T-Mobile also do report wholesale connections, but both companies no longer include such connections sold by a Lifeline reseller.

However, we initially estimate that post merger, New T-Mobile would control more than 45 percent of all wholesale connections, excluding so-called “connected devices” (meaning tablets, smart watches, connected cars, and other machine-to-machine connections that use only wireless data, rather than using integrated mobile voice and data telecommunications services the way most smartphones do). We initially estimate that the post-merger wholesale HHI (excluding such connected devices) would increase by more than one thousand points, to nearly 3,700. This estimate is similar to one produced by analyst firm Three Horizon Advisors.<sup>38</sup>

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<sup>38</sup> See Cheenu Seshadri, “Is the Sprint & T-Mobile Merger Too Risky?” *Light Reading* (June 14, 2018). The article shows a current wholesale market HHI of 2,815, increasing by 1,022 points to 3,838 post-merger. This estimate appears to be based on

And if we were to attribute 100 percent of AT&T's connected devices to AT&T itself, not a possible MVNO wholesale customer of AT&T, then New T-Mobile's total wholesale market share post merger would be above 70 percent, with the total wholesale market HHI increasing from just under 3,000 points to more than 5,500 points.

We expect accurate estimates of the wholesale market will be forthcoming as parties file confidential and highly confidential information with DOJ and the Commission. But it is clear from these and other reasonable estimates that this merger would dramatically increase wholesale market concentration, posing a grave threat to MVNOs and their price-sensitive customers.

**C. The Merger Would Result in Substantial Unilateral Harms in the Relevant Product Markets, Reversing The Positive Competitive Trends of the Past Half-Decade.**

Though the proposed transaction is not a merger to monopoly in the primary product markets, there would nonetheless be substantial unilateral harms. These harms include relative reduced long-term capital investment, reduced innovation, reduction in non-price competition, higher prices for certain services, and removal of certain products from the market.

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AT&T's reseller reported total, Sprint's wholesale and affiliate reported total (including wholesale connected devices), T-Mobile's reported wholesale total, and an unspecified count for Verizon that is about half the value of AT&T's reported total. That count for Verizon is in line with its history of having far fewer and less prominent MVNO partners than the other national carriers, though that has changed slightly in the past two years with Comcast's launch of XFINITY Mobile (which uses Verizon's network) and Credo Mobile's switch from Sprint to Verizon in late 2016. However, Sprint and T-Mobile's published wholesale figures no longer include millions of connections sold to Lifeline MVNOs. T-Mobile's wholesale count decreased by approximately 4 million lines after it stopped reporting wholesale Lifeline connections; and Sprint's declined by 3 million, though much of this decline likely came from Sprint's own Assurance Wireless Lifeline brand. Our estimate above does include these uncounted wholesale Lifeline connections.

The elimination of independent T-Mobile and Sprint would remove from the market firms that each have a track record of product innovation, produced by the pressures to compete not only with the Twin Bells but against each other.<sup>39</sup> T-Mobile's and Sprint's ability to compete effectively with AT&T and Verizon historically was hampered by those Twin Bells' market power and legacy monopoly advantages, including their dominance of the special access and enterprise transit markets as well as their historical ability to use their market dominance to lock in exclusive deals for the most popular handsets. But as discussed above, more recently and in the wake of government decisions to oppose prior wireless industry attempts to contract from four to three national carriers, both T-Mobile and Sprint have taken on the role of maverick competitors, and collectively gained share relative to the Twin Bells in the broader cellular market and in specific market segments as a result. Both have used product innovation and price promotions to differentiate and compete.

For example, even before the failed AT&T takeover attempt, T-Mobile was the first carrier to offer the now market-leading Android platform. T-Mobile beat other GSM carriers on the initial deployment of early 4G technologies (*e.g.*, HSPA+) and of course has a record of offering substantially lower prices than the Twin Bells.<sup>40</sup> T-Mobile also had a track record of offering its customers innovative service packages, including in-

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<sup>39</sup> See *Horizontal Merger Guidelines* at 23 ("The Agencies may consider whether a merger is likely to diminish innovation competition by encouraging the merged firm to curtail its innovative efforts below the level that would prevail in the absence of the merger. That curtailment of innovation could take the form of reduced incentive to continue with an existing product-development effort or reduced incentive to initiate development of new products.").

<sup>40</sup> See Petition to Deny of Free Press, WT Docket No. 11-65, at 33-34 (filed May 31, 2011) (internal citations omitted) ("Free Press AT&T/T-Mobile Petition to Deny").

home service and discounts for customers who do not purchase subsidized handsets – innovations quickly adopted by Sprint well ahead of the Twin Bells. Though Sprint was a late deployer of LTE, it pushed the (now-failed) early 4G wireless technology “WiMax” years before other carriers launched LTE.<sup>41</sup>

T-Mobile’s and Sprint’s independent track records of product innovation and price competition has only grown in the years following the rejected AT&T/T-Mobile deal. Flush with new spectrum and a clear direction that growth had to come from competition, not acquisition, T-Mobile launched a series of what it calls “Uncarrier” initiatives starting in 2013. These regular service and product changes have pushed the entire industry away from many anti-consumer practices. In August 2016, T-Mobile brought back unlimited data plans, and just hours later Sprint announced its own unlimited data offering.<sup>42</sup> It was a full six months later that Verizon responded with its own unlimited data plan, and three days after that AT&T extended its unlimited data offering to any customer<sup>43</sup> (AT&T had an unlimited data offering, but only for its DirecTV customers, starting in January 2016).<sup>44</sup> The return of market-wide unlimited data offerings had a substantial impact on the quality-adjusted price of wireless services, as shown in the Bureau of Labor Statistics Wireless Telephone Consumer Price Index.

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<sup>41</sup> “Sprint launches its first WiMax market,” *Reuters* (Sept. 29, 2008). For instance, this was three years before even AT&T launched LTE. See Phil Goldstein, “AT&T to launch LTE Sunday, Sept. 18,” *FierceWireless* (Sept. 15, 2011).

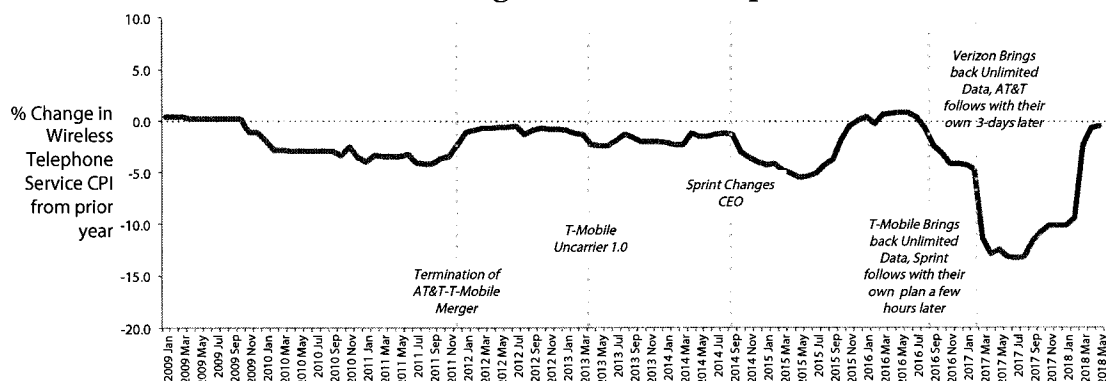
<sup>42</sup> See, e.g., Aaron Pressman, “Here’s How Sprint and T-Mobile Are Battling With New Unlimited Data Plans,” *Fortune* (Aug. 18, 2016).

<sup>43</sup> See, e.g., Raymond Wong, “AT&T caves in and opens its unlimited data plan to non DirecTV and U-Verse subscribers,” *Mashable* (Feb. 17, 2017).

<sup>44</sup> See, e.g., Roger Cheng, “AT&T revives the unlimited data plan, with a catch,” *CNET* (Jan. 11, 2016).

(See Figure 3 below, which shows the percentage change in the wireless telephone CPI from the year prior.)

**Figure 3:**  
**Wireless Telephone Services Consumer Price Index January 2009-May 2018**  
**Year-over-Year Percent Change in Wireless Telephone Services CPI-U**

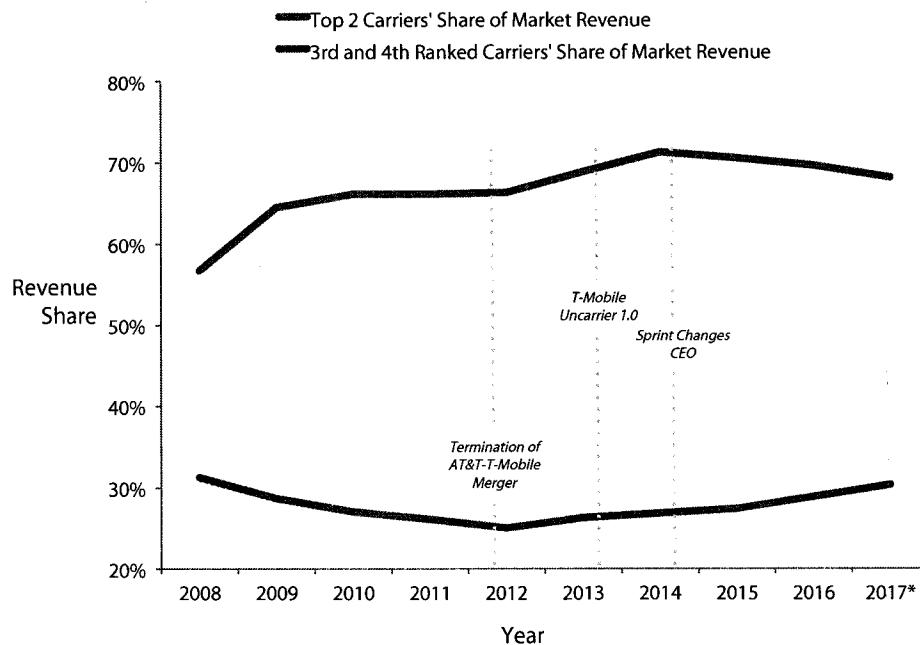


Source: U.S. Bureau of Labor Statistics

Metrics other than subscriber share also reflect the earlier history of growing dominance of the Twin Bells, then illustrate that their dominance has more recently been challenged by revitalized and independent T-Mobile and Sprint. As shown in Figure 4, prior to the government’s rejection of the AT&T/T-Mobile merger, Sprint’s and T-Mobile’s share of the wireless market’s service revenues steadily decreased from a combined 31 percent in 2008 to 25 percent in 2012. Then T-Mobile launched its “Uncarrier” competitive strategy and Sprint hired a new CEO (a move made in response to T-Mobile’s revitalization, which increased competitive pressures on Sprint; and also a hire which directly followed the U.S. government signaling to Sprint it would not favor Sprint’s 2014 attempted acquisition of T-Mobile).<sup>45</sup> In the wake of those moves, the Twin Bells’ share of the market’s service revenues finally started to decline from a peak of 71 percent in 2014 to 68 percent in 2017.

<sup>45</sup> See, e.g., Ross Rubin, “Sprint and T-Mobile’s failed merger: What went wrong – and what’s next,” *VentureBeat* (Aug. 6, 2014).

**Figure 4: Share of U.S. Wireless Market Service Revenues (2008-2017)**



Source: FCC Annual Mobile Wireless Competition Reports. \* 2017 Value is a Free Press estimate based on FCC methodology. Values exclude equipment revenues.

The service revenue data behind the percentages in Figure 4 reflects just how important Sprint's and T-Mobile's independent existence is, demonstrating that both their competition with one another and also against the Twin Bells all produces positive market outcomes (see Figure 5 below). Verizon's wireless service revenues increased by 91 percent between 2007 and 2014 (a \$34.6 billion increase), but declined by 13 percent between 2014 and 2017 (by nearly \$10 billion). Similarly, AT&T's domestic wireless service revenues increased by 59 percent between 2007 and 2013 (a \$22.9 billion increase), before declining 6 percent between 2013 and 2017 (a \$3.6 billion decline).

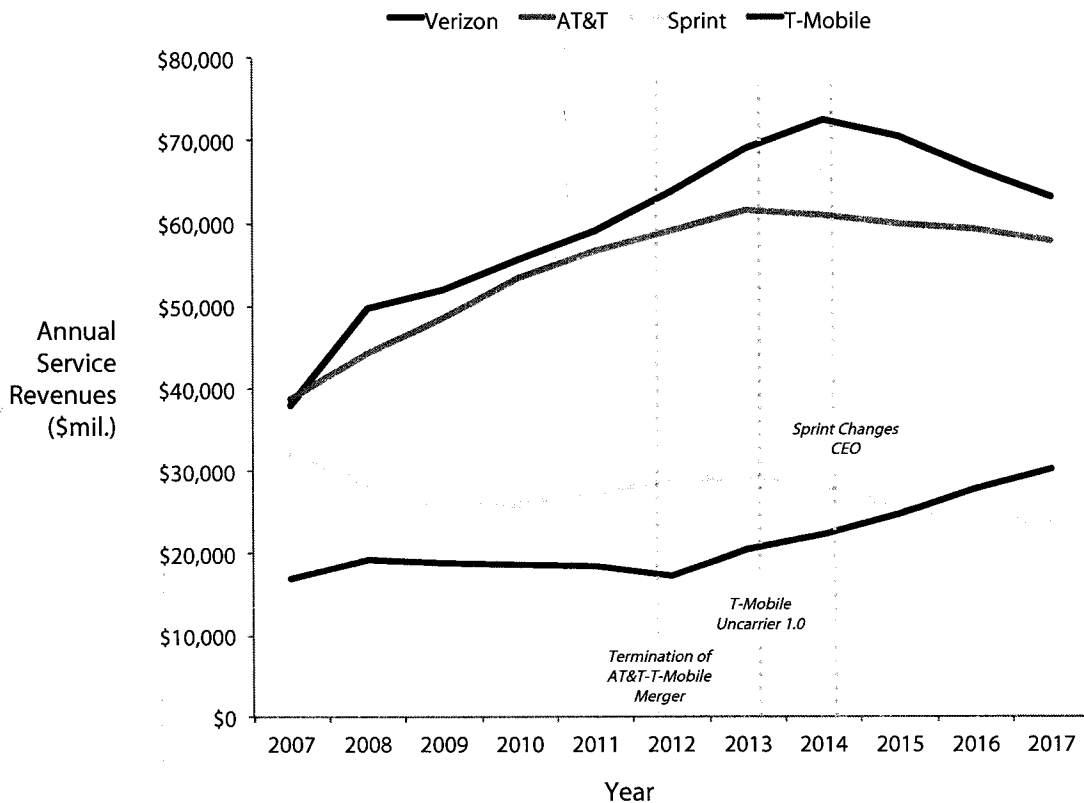
In contrast, T-Mobile's wireless service revenues declined from 2008 to 2012, then grew sharply through 2017 as T-Mobile grew share with pro-consumer innovations following the rejected AT&T takeover attempt. Sprint's wireless service revenues



declined during 2008-2011, increased from 2011-2013, but declined again from 2014-2017 as Sprint lowered prices to compete more effectively against a revitalized T-Mobile.

Service revenues for the four national wireless carriers combined increased steadily until peaking in 2014. They were \$125.7 billion in 2007, increased 46 percent to \$184 billion in 2014, then declined sequentially to \$175 billion in 2017 for nearly a 5 percent drop. This all reflects the fact that T-Mobile's independent "Uncarrier" moves elicited a competitive response not just from the Twin Bells, but from Sprint as well.

**Figure 5: Wireless Market Service Revenues (2007-2017)**



Source: Company annual SEC filings. Values exclude equipment revenues.

The data and the marketplace activities summarized above indicate a period of declining competitive outcomes prior to the government's rejection of the AT&T/T-Mobile merger in late 2011, then an increase in competitive outcomes following that

rejection, followed by strong government signals a few years later that it would not permit further national wireless market consolidation.<sup>46</sup>

However, an examination of the market's profitability data indicates that the increase in competition during the past half-decade has not harmed profitability – of the industry as a whole, or any individual carriers. Indeed, increased competition appears to be a rising tide that lifted all boats. The Twin Bells saw their profit margins (measured as wireless Earnings Before Income Tax, Depreciation and Amortization – “EBITDA” – as a percentage of wireless service revenues) grow slowly and steadily over the last decade, and their margins were appreciably higher than those of T-Mobile and Sprint. However, while Sprint and T-Mobile's profit margins had declined prior to the failed AT&T/T-Mobile merger, they too returned to growth in recent years (see Figure 6 below).

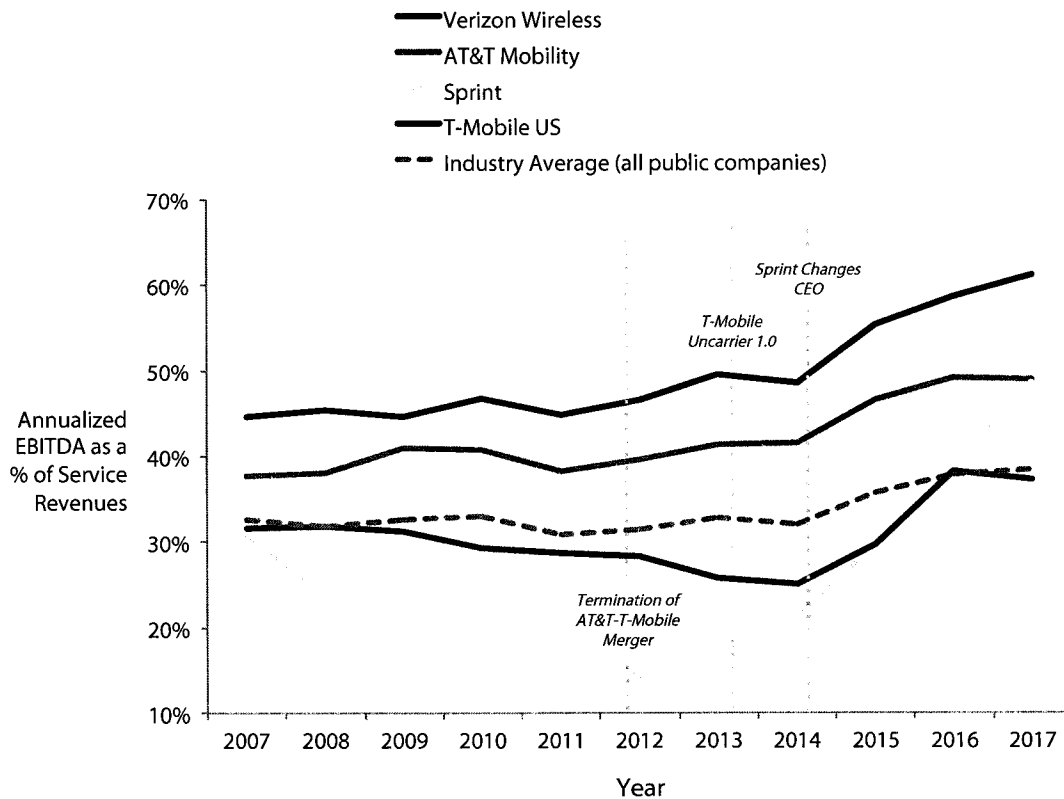
This profitability data is a reminder that although the wireless market has shown signs of competitive life in recent years, it remains in an oligopolistic state in which carriers are not sufficiently pressured by market forces to reduce profits through fierce

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<sup>46</sup> Indeed, Sprint's August 2014 move to replace its long-time CEO Dan Hesse and undertake a series of pro-consumer innovations (such as device leasing, service prices below T-Mobile's, and aggressive rollout of advanced LTE technology across its network footprint) came directly after it became clear that the U.S. government would not permit Sprint's parent company Softbank to acquire T-Mobile. See Ryan Knutson and Dana Mattioli, “Sprint Abandons Pursuit of T-Mobile, Replaces CEO,” *Wall Street Journal* (Aug. 5, 2014) (“After months of arguing that it couldn't compete effectively without a merger partner, Sprint Corp. is preparing to go it alone. The company decided Tuesday to end its pursuit of T-Mobile US Inc. in the face of stiff opposition from regulators and replace Chief Executive Dan Hesse with Marcelo Claure, a billionaire entrepreneur who is untested as a wireless operator.”) (emphasis added). We emphasized this passage because Sprint is now making the exact same argument, despite the fact that its post-2014 strategy worked to return the company to sustained profitability. See Sean Kinney, “Sprint profitable for first time in three years,” *RCR Wireless* (Aug. 1, 2017). Sprint recorded its most profitable quarter in the company's history earlier this year. See Jon Brodtkin, “Sprint announces highest profit ever after saying it needs T-Mobile merger,” *Ars Technica* (May 3, 2018).

price competition. Approval of the T-Mobile/Sprint merger proposed by Applicants here would only further decrease the small gains realized from competitive pressures that have benefited consumers for the past few years, largely through non-price promotions but also some modest price competition.

**Figure 6: Wireless Profit Margins (2007-2017)**



Source: S&P Global Market Intelligence.

What each of these carriers is charging their customers is of course one of the most important factors for the Commission and DOJ to consider when evaluating this proposed merger, as they assess whether or not New T-Mobile would have unilateral pricing power. However, collecting and comparing historical pricing data is not a simple task in this market. This is because carriers offer a large variety of plans at various price points, and certain aspects of the service make direct comparison difficult, particularly over time. For example, even with all four national carriers now offering “unlimited” data

plans again, each of them have different definitions of “unlimited,” and three of these national carriers have multiple different “unlimited” plans and prices too.<sup>47</sup>

One way to get a sense of pricing power and its trajectory is to examine Average Revenue per User (“ARPU”). However, even this metric is not as informative as it once was due to marketplace changes and changes in how carriers report this information. One consequence of T-Mobile’s pushing the rest of the industry to drop device subsidies in favor of device payment plans is that the ARPU timeline no longer reflects just the average service price per user, but (if a carrier reports it) might encompass both service revenues and equipment revenues. In addition, the proliferation of data-only connected devices has resulted in a decline in average service prices, which masks how the average price paid for a primary smartphone connection has changed over time.

To be clear then, contrary to what the Commission stated in its most recent wireless competition report, data showing declining ARPU does not necessarily indicate falling prices in the nationwide cellular service market. That is because the comparison and the link to historical ARPU measurements in the market was broken – both by the move to equipment installment plans (“EIPs”) rather than device subsidies, and by the proliferation of lower-cost/lower-capacity “connected device” plans.<sup>48</sup>

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<sup>47</sup> See, e.g., Patrick Holland, “Verizon, T-Mobile, AT&T and Sprint unlimited plans compared,” *CNET* (June 21, 2018) (discussing Verizon’s three different unlimited plans, AT&T’s two different unlimited plans, T-Mobile’s two different unlimited plans, and Sprint’s single unlimited plan, which all have different price points and are differentiated largely by how much data customers can use before they are throttled to below-4G speeds, as well as how much data each plan permits the customer to use when tethering).

<sup>48</sup> Contrast the boastful text of the *Twentieth Report* on this matter (“[B]ased on various price metrics, average prices have been falling”) with the more nuanced text of the *Nineteenth Report* (“[T]he separation of equipment revenues makes it difficult to determine if the decline in the ARPU is likely due to the changes in the reporting and/or the calculation of the metric.”). Compare *Twentieth Report* ¶ 94, with *Implementation of*

Other metrics such as Average Billings per User (which includes EIP revenues) or Average Revenues per Account (which flattens the impact of low-cost/low-data connected devices) may be more reflective of how market pricing is changing. However, not all carriers report similar metrics, and such data is only available for the past few years. The CPI data shown above in Figure 3 is also of limited use, since it was greatly impacted by the return of unlimited data plans, and as a quality-adjusted metric it does not speak directly to the issue of retail price competition. Nor do we have any useful information concerning how prices have changed over time in the wholesale market, and how that has impacted MVNO customers and their retail prices.

Annual Consumer Expenditure Survey data indicates that U.S. consumers increased their annual expenditures on cellular services at a Compound Annual Growth Rate (“CAGR”) of 9.6 percent between 2001 and 2016, and a CAGR of 5 percent since the dawn of the smartphone era in 2009 (see Figure 7 below). Average expenditures on cellular services jumped nearly 9 percent between 2015 and 2016, likely reflecting the carriers’ pushing more expensive unlimited plans.

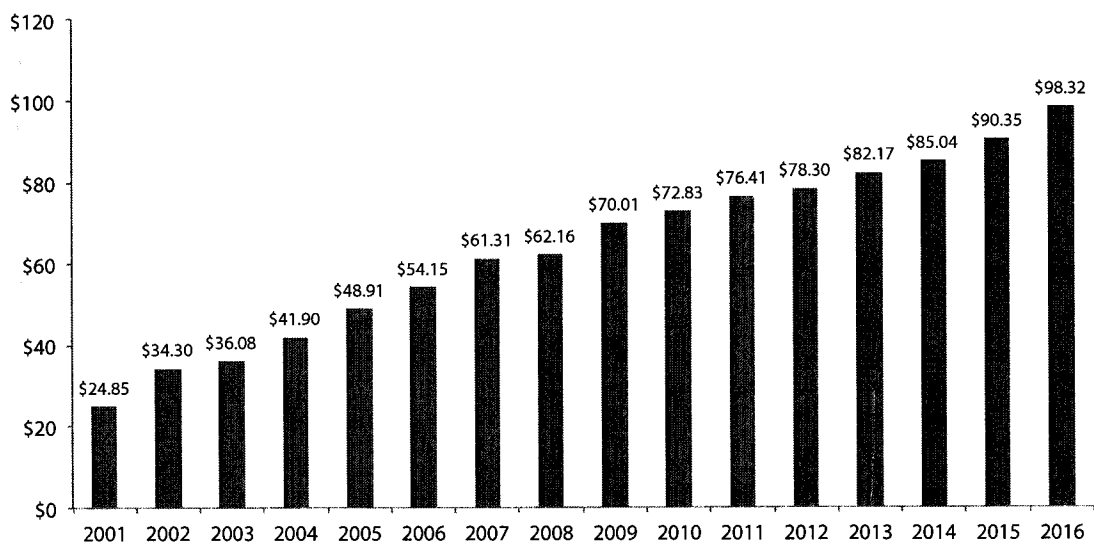
The data collectively shows that consumers are spending more and that carrier profits are increasing, all while carriers continue to offer certain quality improvements. It appears almost certain that the market’s competitive activity increased following the rejection of the AT&T/T-Mobile merger, but that this competition largely took the form of service enhancements and bulk discounts rather than direct price declines. This is the expected outcome from a highly concentrated market reaching customer saturation.

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*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. 16-137, Nineteenth Report, 31 FCC Rcd 10534, ¶ 27 (WTB 2016) (“Nineteenth Report”).*

Yet the competitive benefits that materialized over the past half-decade would not have occurred if there were not competition between the market's two smaller national carriers for value-seeking customers. That in turn produced responses from the market's two larger national carriers, because in a saturated market they could no longer grow from "natural" customer additions of individuals with no prior service.

**Figure 7:**  
**Monthly Expenditures for Cellular Phone Services per Consumer Unit (2001-2016)**  
**(May 2018 CPI-U Inflation-Adjusted Values)**



Source: Bureau of Labor Statistics Annual Consumer Expenditure Survey; Bureau of Labor Statistics CPI-U

But returning to the central question: Would the merger of T-Mobile and Sprint confer unilateral pricing power on the merged firm? We feel confident in concluding, based on all of the publicly available data, that Sprint and T-Mobile already possess unilateral pricing power in the "value" market segment, and their merger would vastly enhance this unilateral market power. Though the return to unlimited data plans as the market norm during 2016-2017 produced headlines about a "price war," the truth is that many carriers' bottom line prices have not declined at all. For example, pre-paid plans do not usually include EIPs, nor are they multi-line plans that include connected devices.

Sprint's prepaid ARPU has increased 11 percent over the past two years (from \$33.59 in the first quarter of 2016 to \$37.15 in the first quarter of 2018). T-Mobile's prepaid ARPU increased 4 percent during this time (from \$37.58 in the first quarter of 2016 to \$38.90 in the first quarter of 2018).

Another critical point to note in assessing potential unilateral effects is that Sprint, not T-Mobile, has acted more like a "maverick" in recent months. After T-Mobile surpassed Sprint as the third place carrier, it began to pull back somewhat on its more aggressive price promotions, focusing more on value-adds like free Netflix subscriptions. In contrast, Sprint continues to focus on aggressive price promotions, demonstrated by its early June 2018 offering of a \$15 monthly unlimited voice, SMS, and data plan to switching customers.<sup>49</sup> Sprint's price-focused efforts have exerted some price discipline on T-Mobile, primarily on T-Mobile's pre-paid MetroPCS subsidiary. But if T-Mobile is permitted to acquire Sprint, these pricing pressures disappear.

While the headlines about the return of unlimited from early 2017 still reverberate, the truth is much of the activity in the U.S. wireless market in recent years has been exactly what you'd expect from a weakly competitive oligopoly: non-price competition and attempts at differentiation that help stave off the transition to wireless as a commodity service.<sup>50</sup> The primary remaining bright spot in 2018 (*i.e.*, after the 2016/2017 return to unlimited or quasi-unlimited data plans) is Sprint's lower-cost offerings, which it had to make in order to remain viable.

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<sup>49</sup> See Chris Welch, "Sprint offering \$15 unlimited plan to those willing to switch carriers," *The Verge* (June 7, 2018).

<sup>50</sup> See, *e.g.*, Mike Dano, "Editor's Corner – The era of nickel-and-diming wireless customers is back," *Fierce Wireless* (Aug. 6, 2018).

These offerings have worked somewhat to discipline T-Mobile's ability to move away from more direct price competition. And because T-Mobile occupies a market position somewhere between a pure-value carrier and a pure-quality carrier, Sprint's price competition in 2018 has in turn disciplined the behavior of AT&T and Verizon.

In sum, there's no good argument that combining the market's only two value-focused facilities-based carriers would not lead to price increases and unilateral harms. And as we discuss below, there's ample reason to expect this 4-to-3 market contraction would create coordinated harms, relieving AT&T and Verizon from the modicum of competitive pressure they've felt from both Sprint and T-Mobile in recent years.

**D. The Merger of T-Mobile and Sprint Would Further Exacerbate Harmful Coordinated Effects in the Relevant Product Markets.**

There is evidence that AT&T and Verizon may already engage in and benefit from coordinated interaction.<sup>51</sup> This proposed merger, and the elimination of competition in the value-focused customer segment, would only exacerbate such harmful behavior. While assessing the potential for coordinated interaction is inherently a predictive exercise for the Commission and DOJ, the structure of the wireless marketplace is such that it is particularly vulnerable to this behavior. First, the potential product market (smartphone service plans) is largely homogeneous, with prices easily observed by competing firms. Carriers rarely offer new customer discounts or retention incentives, unlike in the wired broadband market, and they price their services nationally.<sup>52</sup>

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<sup>51</sup> See, e.g., Cecilia Kang, "U.S. Investigating AT&T and Verizon Over Wireless Collusion Claim," *New York Times* (Apr. 20, 2018).

<sup>52</sup> See *Horizontal Merger Guidelines* at 26 ("A market typically is more vulnerable to coordinated conduct if each competitively important firm's significant competitive initiatives can be promptly and confidently observed by that firm's rivals. This is more



The agencies will need to focus both on price and non-price competition when evaluating the potential for unilateral and coordinated conduct. Though some of the prior switching barriers (such as handset exclusivity, two-year contracts, or lack of handset portability) have gone away thanks to T-Mobile's and Sprint's competitive moves, free switching between carriers remains difficult. It is unlikely that a firm exercising market power through increased prices would immediately lose a substantial portion of customers to competing carriers.<sup>53</sup> This would especially be the case if New T-Mobile were to increase prices or reduce non-price competition, because its value-focused customers would have no better option. For the Twin Bells, coordination in response to New T-Mobile increasing prices or reducing non-price competition would be highly likely, as they would face less threat of defection from customers seeking greater value.

In a typical product market, the impact of coordination would be greatly reduced by smaller firms expanding output and capturing share.<sup>54</sup> But the cellular service market is not typical: Smaller firms no longer exist, and the few remaining regional facilities-based carriers could not rapidly expand their sales due to customer switching costs (*e.g.*, EIP buy-out costs) and regional carriers' lack of spectrum outside their regions. The threat of regional carrier expansion into the national market obviously could not mitigate

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likely to be the case if the terms offered to customers are relatively transparent. Price transparency can be greater for relatively homogeneous products.”).

<sup>53</sup> See *id.* (“A market is more apt to be vulnerable to coordinated conduct if the firm initiating a price increase will lose relatively few customers after rivals respond to the increase.”).

<sup>54</sup> See *id.* (“This collective market power is diminished by the presence of other market participants with small market shares and little stake in the outcome resulting from the coordinated conduct, if these firms can rapidly expand their sales in the relevant market.”). But as we mentioned above, the few remaining and vanishingly small regional and pre-paid firms are simply unable to rapidly expand sales, both due to constraints on supply (prime spectrum) and demand (switching costs).

coordinated action due to the high fixed costs and deployment time even if the few remaining regional carriers were inclined to try. Thus, the structure of the wireless market makes it particularly vulnerable to coordinated interaction.

This market is also particularly vulnerable to coordinated conduct because it is so top-heavy, with so much of the subscriber base and industry's revenues already concentrated between two firms (the Twin Bells control 69 percent of national market connections and 63 percent of all connections). Because of this duopoly, the harms from coordination would be substantial even if all firms did not engage in the behavior.<sup>55</sup> Further, because demand elasticity for service is relatively low, the coordinated behavior would be more profitable, increasing the likelihood of such harms post merger.<sup>56</sup>

Indeed, while this merger would exacerbate pressures for the top firms to engage in coordinating behavior, it is apparent that such activity is already occurring. The historically high margins earned by AT&T and Verizon relative to T-Mobile and Sprint are strong evidence of existing coordination. It is an open secret (and preference) among Wall Street analysts that the top carriers be careful to avoid setting off any actual price wars.<sup>57</sup> This merger would eliminate two maverick competitors (replacing them with a newly combined firm equal in size to the Twin Bells) and would lead to "a more stable

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<sup>55</sup> See *id.* ("Coordinated conduct can harm customers even if not all firms in the relevant market engage in the coordination, but significant harm normally is likely only if a substantial part of the market is subject to such conduct.").

<sup>56</sup> See *id.* ("Coordination generally is more profitable, the lower is the market elasticity of demand.").

<sup>57</sup> The avoidance of price wars is an indicator of coordinated interaction. See *id.* at 24 ("Coordinated interaction also can involve a similar common understanding that is not explicitly negotiated but would be enforced by the detection and punishment of deviations that would undermine the coordinated interaction.").

pricing environment,” which is the main reason that Wall Street has long clamored for greater wireless industry consolidation.<sup>58</sup>

In the attached Appendix, we present the results of Free Press’s empirical analysis of the short-term movements of certain telecom company stock prices in response to news events. These news events included a potential Sprint/T-Mobile merger or other deals involving these firms during the multi-year period when these rumors have been somewhat frequent. This analysis indicates that AT&T and Verizon stock prices did not show significant movements on the days of news that a T-Mobile/Sprint merger might happen, but showed strong and statistically significant declines on the days when news broke that such a merger was not going to happen or might not happen. This bifurcated result reflects the reality that the current U.S. wireless market already operates as a tight oligopoly, in which AT&T’s and Verizon’s supra-competitive profits can only be threatened by independent competition from both Sprint and T-Mobile.

AT&T and Verizon investors do not expect that a merged T-Mobile and Sprint would harm AT&T’s or Verizon’s future earnings. The investor class also does not expect the merged firm to materially enhance the Twin Bells’ prospects either – beyond what is already assumed – because AT&T and Verizon already occupy a space as the market’s “premium” providers and are already at the “monopoly-level pricing equilibrium.”<sup>59</sup> However, “the market” likely punished AT&T and Verizon on news that

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<sup>58</sup> Sheena Lee, “AT&T/T-Mobile Deal Won’t Hurt Verizon,” *Seeking Alpha* (Mar. 25, 2011).

<sup>59</sup> It is critical for the Commission to understand the potential impacts of a merger in a market that already functions as a tight oligopoly, and how this may result in economic models that do not indicate substantial post-merger price increases. That is, economic models may not predict coordinated behavior if such behavior is already occurring. *See, e.g.*, Juan Jiménez González and Jordi Perdigueró, “Mergers and difference-in-difference