Written Testimony of

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Before the

Congress of the United States
House of Representatives
Committee on the Judiciary
Subcommittee on Antitrust, Commercial,
and Administrative Law

Regarding

"The State of Competition in the Wireless Market: Examining the Impact of the Proposed Merger of T-Mobile and Sprint on Consumers, Workers, and the Internet"

March 12, 2019

Overview

Free Press, on behalf of its more than 1.4 million members across all fifty states, the District of Columbia, and Puerto Rico, strongly opposes the proposed merger between T-Mobile and Sprint that is the subject of this important hearing.

We've conducted extensive research on the proposed merger. Our filings[1] in the Federal Communications Commission ("FCC") proceeding to examine the transaction, which we have summarized and updated in the attached Exhibit A to this testimony, demonstrate conclusively the disproportionate harms this deal would cause to low-income communities and people of color, who are more likely to be on the wrong side of the digital divide, and who more often rely on mobile phones as their only means of connecting to the internet.

Other attorneys and analysts at Free Press signed the FCC's protective orders, and thus were able to assess the merger applicants' confidential filings, as well as proprietary industry data that more precisely indicates wireless carriers' market shares and customers' switching patterns between them. This testimony cannot and does not make use of material subject to the protective orders, and is thus based entirely on publicly available data and arguments. That does not change the conclusion that this deal's speculative benefits do not offset its obvious harms.

Sprint and T-Mobile (and their respective pre-paid brands: Sprint's Boost and Virgin affiliates, and Metro by T-Mobile) are the dominant providers of mobile telecommunications service for low-income people. For instance, more than 30 percent of Metro and Boost subscribers report yearly incomes of $25,000 or less.

[1] *See* Petition to Deny of Free Press, Redacted for Public Inspection, WT Docket No. 18-197 (filed Aug. 27, 2018) ("Petition to Deny"), https://www.freepress.net/sites/default/files/2018-08/free-press -petition-tmobile-sprint.pdf; Free Press, Reply to Opposition, Redacted for Public Inspection, WT Docket No. 18-197 (filed Oct. 31, 2018) ("Reply"), https://www.freepress.net/sites/default/files/2018-11/redacted_tmobile_sprint_reply_comments_free_press.pdf

Due to structural and systemic racism, people of color are disproportionately represented in these demographics. T-Mobile and Sprint customers are far more likely to be people of color than are AT&T's and Verizon's customers. For example, 56 percent of T-Mobile's subscribers in 2018 identified as people of color, as did 45 percent of Sprint's subscribers.

The reason that members of these communities choose Sprint and T-Mobile is very clear: <u>their plans cost less</u>. As Free Press and other merger opponents' research confirms, these two carriers compete with one another vigorously. They are each other's closest competitors. They serve price-conscious customers that AT&T and Verizon are both content to ignore and quite able to ignore profitably, as those larger carriers focus on quality-conscious and "premium" customers willing and able to pay more for wireless service.

Despite any suggestion that only T-Mobile has been able to compete with AT&T and Verizon, our filings trace all of the four nationwide carriers' performance to show that <u>both</u> T-Mobile and Sprint have been "mavericks," and both have been vital for the better competitive results seen over the past several years. Both T-Mobile and Sprint take customers from each other, and from each other's pre-paid brands. Yet T-Mobile and Sprint also both win customers away from the "big two" carriers as well. This pro-competitive behavior increased after, and was fueled by, the government's rejection of the previously proposed horizontal mergers like this very same T-Mobile/Sprint tie-up in 2014, and AT&T's failed 2011 T-Mobile takeover attempt.

Exhibit A discusses the parties' inflated efficiency claims, as well as greatly exaggerated rumors of Sprint's death put forward to justify this transaction. Both topics are covered even more thoroughly in our full FCC filings. Our focal point today is the harm to price-conscious customers in low-income communities, communities of color, and pre-paid market segments.

First: No matter how antitrust enforcers define the relevant product markets for purposes of their analysis here, our FCC filings illustrate the inescapable fact that this deal would further concentrate already highly-concentrated markets. In doing so, it would eliminate choices for people who want or need to pay less for essential communications services. Our filings document how T-Mobile and Sprint's pre-paid and post-paid offerings compete, with these two carriers frequently countering each other's moves in ways that benefit price-conscious customers and that exert some discipline on Verizon and AT&T as well.

Simply put, T-Mobile and Sprint both offer lower-priced options than their larger rivals do. That is because of their rivalry with each other. Their outlandish suggestion that having fewer competitors somehow strengthens competition is wrong in any case, but especially for price-conscious customers. Merger proponents' incomprehensible math tries to obscure the fact that this is a 4-to-3 merger, and 3-to-2 in pre-paid, with AT&T's Cricket brand the only other remaining facilities-based option there. This merger would reduce choices for lower-priced plans that don't typically require customers to pass credit checks or finance devices through the carrier.

Second: This merger would increase prices. In their filings, Sprint and T-Mobile don't even hide the likelihood that prices would go up for their post-paid and pre-paid customers alike. That bears repeating and special emphasis: their own economic models say prices would go up.

Our FCC filings catalogued the conflations and assumptions originally used by T-Mobile and Sprint to obscure that reality. They prop up their implausible claim that prices would actually go down eventually, or depending on how you look at it, based on the false suggestion that increased "supply" of spectrum and bandwidth in the New T-Mobile's hands would automatically necessitate a decrease in prices – even in the absence of competitive pressure.

Other deal opponents filed far more extensive refutations of T-Mobile's and Sprint's suggestions. They questioned not only the validity of the merging parties' models, but also their assertion that heavy data users would be better off with the supposed benefit of minimally improved speeds and coverage despite the price increases destined to happen.[2]

The merging parties' claims in each case boiled down to little more than an assertion that any price increases would be worth it – perhaps as customers were given the option to purchase more data and faster speeds; or, as is more likely to be the case, as customers were given no option but to purchase such plans at a greater out-of-pocket expense, even when they could not afford to do so or would not choose to do so.

T-Mobile's loophole-riddled pricing pledge does nothing to allay this concern or change this impression. In the original announcement in a short letter filed with the FCC, T-Mobile promised that its own and Sprint's legacy plans would continue "for three years . . . or until better plans that offer a lower price or more data are made available."[3] This mockery makes the entire pledge meaningless: post-merger prices will stay the same, unless of course New T-Mobile changes its mind. Just as T-Mobile did in its initial attempts to explain away such harms, it is the carrier that gets to decide that a more expensive plan is "better" if and when it offers more data than many customers might want, need, or be able to afford.

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[2] *See* DISH Network Corporation, Comments in Response to Public Notice Regarding Cornerstone Report, Redacted for Public Inspection, WT Docket No. 18-197, at 2 (filed Dec. 4, 2018), https://ecfsapi.fcc.gov/file/120509262305/REDACTED%20DISH%20Network%20Comment%204Dec%2018.pdf ("Instead of denying the prospect of price increases, the Applicants seem to stake their entire case on the proposition that consumers will accept New T-Mobile's higher prices because they are supposedly willing to pay a disproportionately large amount of money for even an ounce of improvement in the quality of their current 4G LTE service.").

[3] Letter from Nancy Victory, Counsel to T-Mobile, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 18-197, at 2 (filed Feb. 4, 2019) (emphasis added) ("T-Mobile Pledge"), https://ecfsapi.fcc.gov/file/102042192910190/Pricing%20Commitment%20Ex%20Parte%2002.03.2019.pdf.

T-Mobile's attempts to "clarify" this pledge leave in place the same ambiguities, allowing the merged firm to raise prices even within the first three years, to say nothing of the years that follow. Its purported clarifications only muddy the waters. There are internal contradictions within the latest T-Mobile filing on this point, to say nothing of the way the document conflicts with the original pledge and the parties' FCC applications and economic models.

Third: This merger would mean massive consolidation in the wholesale wireless market. T-Mobile and Sprint are wholesale suppliers. Reducing wholesale supply would raise costs for resellers who rely on that wholesale capacity, with the resellers passing along those increased costs in the form of higher prices for their own retail customers.

Wholesale is used by carriers without their own networks – including most wireless Lifeline carriers – to offer services at resale. Free Press has been a strong supporter of Lifeline, defending it against unfortunate and unfounded attacks by the current FCC, because Lifeline helps the most vulnerable in society stay connected with a benefit of just $9.25 a month to defray the high cost of voice or broadband service. What that subsidy gets participants has evolved, thanks in large part to competition. When the FCC first approved wireless Lifeline offerings, TracFone offered recipients a measly 68 monthly voice minutes. When Virgin entered the Lifeline market with a better plan, TracFone responded by nearly quadrupling its own offering.

Lifeline competition and Lifeline in general are dependent on a well-functioning wholesale market. Consolidation of the type contemplated here would further widen the quality gap between Lifeline offerings and non-subsidized plans. And since most facilities-based carriers including T-Mobile have largely abandoned the Lifeline program, this lessening of wholesale competition and Lifeline competition would harm recipients of that vital affordability program.

Merger Background and Summary of Harms

On April 29, 2018, T-Mobile and Sprint formally announced their intent to merge, with T-Mobile the surviving entity. On June 18, 2018, they filed their public interest statement with the FCC, purporting to outline the benefits of the proposed merger.[4] As we demonstrated in our petition calling on the FCC to deny the transaction, T-Mobile and Sprint failed to show at the outset that this deal would not lessen competition. They likewise failed to show any efficiencies, supposedly offsetting the harm of reduced competition, that were merger-specific, cognizable, or of greater weight than harm from further concentration of highly concentrated markets.

For these reasons, even as we explained that the deal could not satisfy the parties' burden of proof before the FCC to demonstrate affirmative public interest benefits, we showed too that this merger would violate the antitrust laws of the United States based on Department of Justice ("DOJ") guidelines and past precedent. The merging parties have conceded in their FCC filings that the concentration of the market would generate upward pricing pressure.

In the end, T-Mobile and Sprint's claimed efficiencies and net 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 or the price increases destined to follow from that combination. And the merging parties' funny math – claiming elimination of a competitor would somehow increase the number of viable competitors – is the kind of doublespeak that members of this subcommittee must see right through.

[4] *See Applications of 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").

The bottom line is that nothing about this deal begins to offset the harms from the merger of the two primary carriers that serve the price-sensitive cellular market segment. This merger'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 who have low incomes – with people of color disproportionately represented in that low-income demographic and disproportionately stuck on the wrong side of the digital divide.

This merger would especially harm those types of customers, often living in many of the nation's largest cities, as well as all other wireless subscribers who would likewise suffer from a loss of choices and resulting increase on the likelihood of coordinated effects in a market nearly 100 percent controlled by three roughly equal-sized firms. At a time when the modicum of wireless competition we see in today's market has finally yielded some benefits for the average customer, approval of this merger should be unthinkable. As our FCC filings summarized:

- 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, and also compete with each other for the market segment comprising more price-conscious and value-conscious customers.
- T-Mobile and Sprint are critical wholesale suppliers to resellers 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. 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.

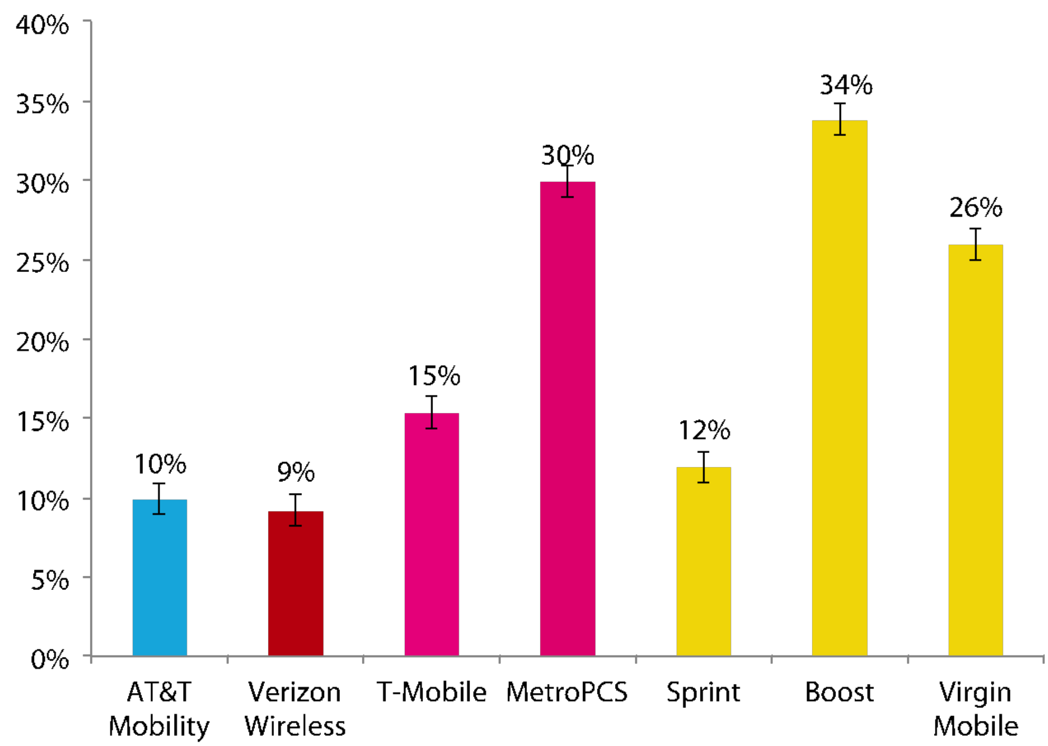
In our Reply in the FCC proceeding, we made extensive use of data subject to the FCC's protective orders to show conclusively that T-Mobile and Sprint are each other's closest competitors. They take customers away from each other's flagship brands and pre-paid affiliates by offering not only more valuable data packages, but plain and simple lower prices. They cater to these customers in densely populated areas, placing retail stores in locations that serve middle- and low-income populations often ignored by the two largest carriers. They are rewarded for this with higher market shares in those largest local markets, which would be hit hardest by this merger's price increases and job cuts.

Lastly, we explained that the driving force for the dynamic competition benefitting those communities has been Sprint's revival over the course of the past half-decade, coupled with T-Mobile's resurgence following its liberation from AT&T's rejected 2011 takeover bid. Sprint's different network coverage capabilities are not an impediment in this regard, and in fact those different coverage capabilities benefit the entire market and specific market segments by requiring Sprint to differentiate itself and compete more aggressively on price.

This Merger Would Eliminate the Primary Source of Price Competition in the Relevant Product Markets, for Price-Conscious Wireless Customers and for People of Color

T-Mobile's and Sprint's customers, for their flagship brands and especially for their respective pre-paid brands, far more often report that they are lower-income individuals than do the customers of the Verizon and AT&T. For instance, 30 percent of T-Mobile's Metro customers last year reported incomes below $25,000, as did 34 percent of customers for Sprint-owned Boost. This is a markedly higher percentage than the number of customers reporting incomes below that level for the "big two" carriers.

Percent of Each Carrier's Customers that Report Annual Income Below $25,000

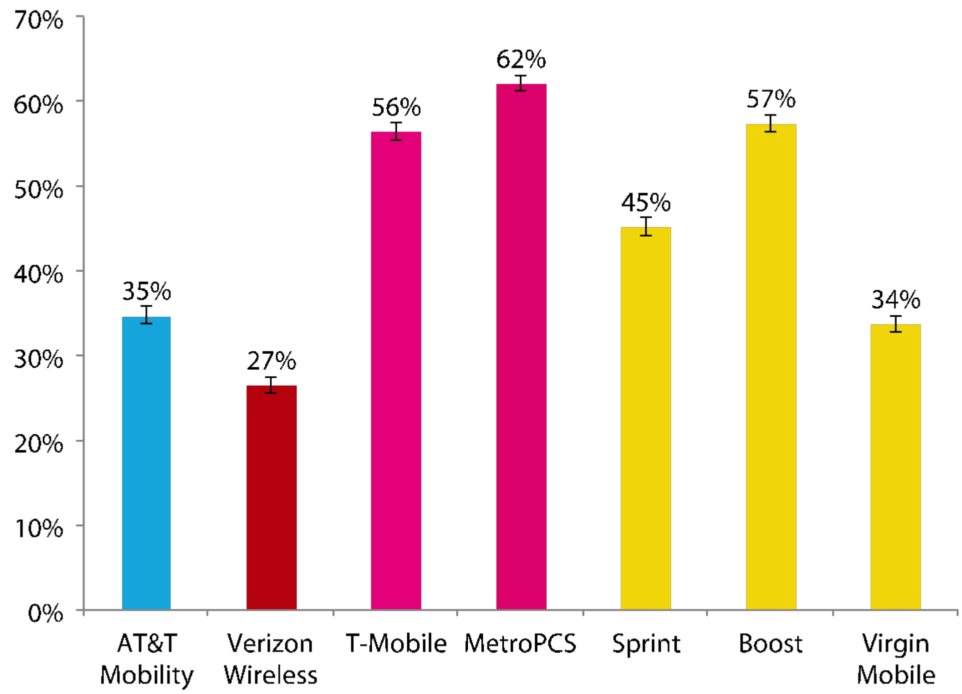


Source: Free Press analysis of a S&P Global Market Intelligence MediaCensus survey of 10,000 U.S. internet adults conducted in February 2018. Values for each carrier represent the percent of survey respondents claiming that brand as their carrier who reported their income as less than $25,000 per year. Values shown only represent branded customers, and do not include carriers' unlisted subsidiaries or customers of MVNOs that purchase wholesale network access from one of the facilities-based providers.

T-Mobile's and Sprint's customers are also far more likely to self-identify as persons of color, or members of a racial or ethnic group other than what the U.S. Census describes as "Non-

Hispanic white." For instance, 56 percent of T-Mobile customers and 45 percent of Sprint customers last year identified as persons of color, while even higher percentages of customers for T-Mobile's Metro brand and Sprint's Boost brand did.

Percent of Each Carrier's Customers that are Persons of Color

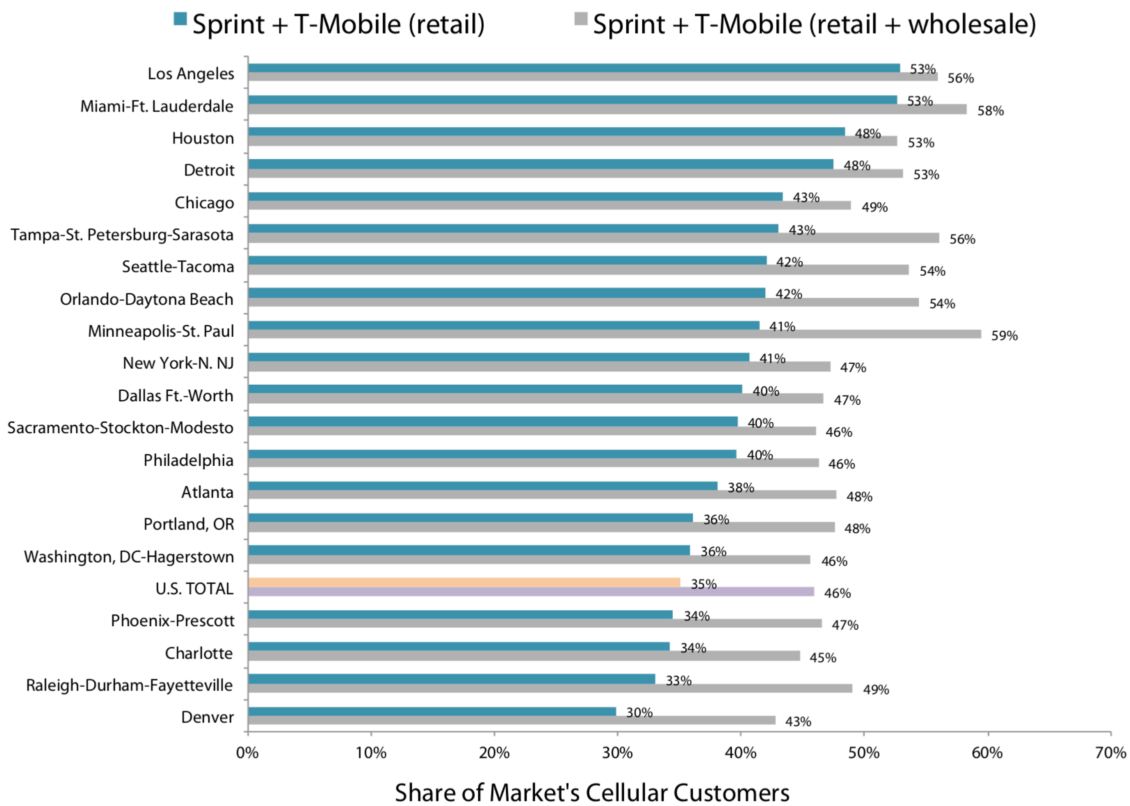


Source: Free Press analysis of a S&P Global Market Intelligence MediaCensus survey of 10,000 U.S. internet adults conducted in February 2018. Values for each carrier represent the percent of survey respondents claiming that brand as their carrier who self-reported a race or ethnicity other than Non-Hispanic white. Values shown only represent branded customers, and do not include carriers' unlisted subsidiaries or customers of MVNOs that purchase wholesale network access from one of the facilities-based providers.

And in several areas, the post-merger T-Mobile would be the number one carrier in the market, including in some of the country's largest cities.

The chart below lists markets in the top 25 most-populated Nielsen Designated Market Areas in which the New T-Mobile would likely be the largest retail carrier, largest wholesale supplier, or both. These cities have a disproportionate share of lower-income wireless users, people of color, and Spanish speakers. T-Mobile and Sprint have done well gaining share there precisely because these markets have disproportionately high levels of value-seeking customers.[5]

Percent of Select Market's Customers that Report Cellular Service from a Sprint- or T-Mobile-Owned Company, or Sprint- or T-Mobile-Owned Wholesale Partner



Source: Free Press analysis of a S&P Global Market Intelligence MediaCensus survey of 10,000 U.S. internet adults conducted in February 2018. Values for "retail + wholesale" represent MVNOs that exclusively purchase wholesale network access from Applicants plus an estimated allocation of customers from MVNOs that purchase wholesale access from Applicants and others.

In sum, the harmful impact of this deal would be felt most by low-income individuals and households. It would land most heavily on people of color. And it would hit hardest the subscribers to T-Mobile's and Sprint's pre-paid brands, along with users of these merging parties' other plans

[5] Values for "Sprint + T-Mobile (retail)" represent the percent of survey respondents reporting either Sprint, Boost, Assurance, Virgin, T-Mobile, or MetroPCS as their carrier. Values for "Sprint + T-Mobile (retail + wholesale partners)" represents the retail share plus the share of the market's cellular customers who report using a reseller that obtains network access from Sprint and/or T-Mobile. This includes resellers that may also purchase wholesale network access from other facilities-based carriers, weighted down to reflect those carriers' portions of the lines.

that likewise offer a better value, a lower price, or fewer impediments to adoption such as racially discriminatory credit checks and other similar barriers.

Those impacts would ripple outwards to other carriers' customers, due to coordinated effects and the loss of competitive options for customers of Verizon, AT&T, and AT&T's pre-paid brand Cricket. And they would extend to Lifeline recipients, and to other lower-priced and pre-paid services typically offered on a resale basis by providers that purchase wholesale capacity from Sprint and T-Mobile in an already highly concentrated wholesale market.

Despite the merger applicants' implausible claims to the contrary, none of this is good or necessary. The deal would put a stop to the positive, pro-competitive trends in the U.S. wireless market over the past decade. It would further concentrate markets that our antitrust agencies already consider highly concentrated, enhancing New T-Mobile's market power in ways that are presumptively unlawful under the Clayton Act. The inevitable outcome would be price increases for price-conscious customers, as the merging parties' own FCC filings and economic models admit, despite their recent attempts to pretend otherwise in marketing materials, in congressional testimony, and in their slippery pricing "pledge."

T-Mobile's Own Economic Models Show Price Increases, Disproportionately Impacting Lower-Income Customers, and T-Mobile's Pricing "Pledge" Does Not Change This Reality

Because of the protective orders in the FCC proceeding, and the number of facts and figures hidden behind them, T-Mobile executives, lobbyists, and hired advocates have sometimes tried to claim in public settings that the merger will decrease prices in some way, shape or form. That claim directly contradicts what the merging parties have told the FCC, no matter how they try to obscure that reality in more political settings.

As Free Press explained in a California Public Utilities Commission inquiry[6] into the effects of the proposed merger, and in the popular press,[7] Sprint and T-Mobile's pleadings at the FCC don't even bother to pretend this merger will lead to lower prices. Their own economic models show that pre-paid prices will rise. In their attempt to justify the merger nonetheless, they argue that harms to pre-paid customers will be offset by supposed capacity benefits, but those supposed benefits (if any) would be primarily enjoyed by heavy data users on post-paid plans. In other words, the merging applicants here admit that the poorest users would pay <u>more</u> to bring questionable capacity benefits to the wealthiest users, whose prices would also increase.

While T-Mobile's spokespeople for the deal may want to deny or ignore the existence of the company's concessions on this point, DISH's filings opposing the merger have articulated and explained these impacts that are sometimes spelled out clearly and sometimes merely hinted at in the public versions of T-Mobile's pleadings. For instance, in one of its most recent filings, DISH's economists concluded that T-Mobile's and Sprint's "own economists predict significant price increases, the harms of which would fall disproportionately on lower-income subscribers," even if the efficiencies and cost savings the merging parties claim are real.[8]

It gets worse. Not only has this set of T-Mobile's hired economists (at a firm called Cornerstone) granted that these price increases are likely. "Cornerstone [also] speculates that lower income customers may be proportionately <u>more</u> willing to pay more for better service than higher income customers because they may not be able to afford wireline broadband and therefore need

[6] *See* Testimony of Jessica J. González, "Free Press Urges the California Public Utilities Commission to Reject the T-Mobile/Sprint Merger" (Dec. 10, 2018), https://www.freepress.net/news/press-releases/free-press-urges-california-public-utilities-commission-reject-t-mobilesprint.

[7] *See* Jessica J. González, "A T-Mobile-Sprint merger would be onerous for California's working families," *L.A. Times* (Jan. 21, 2019), https://www.latimes.com/opinion/op-ed/la-oe-gonzalez-sprint-t-mobile- merger-20190121-story.html.

[8] Letter from Pantelis Michalopoulos, Counsel to DISH Network Corporation, to Marlene Dortch, Secretary, FCC, WT Docket No. 18-197, at 1, 7 (filed Feb. 27, 2019).

mobile broadband more."[9] In other words, part of T-Mobile's sales pitch for this merger is that poor people will be glad to pay more for wireless because it is still cheaper than a wired broadband connection, and T-Mobile and Sprint have these customers over a barrel.

In their initial comments on the Cornerstone report, DISH's experts once again laid bare the admissions made by T-Mobile's own economic model and the ramifications of its conclusions. As DISH explained:

> The Applicants' new study attempts to recast higher prices for New T-Mobile's services as a consumer benefit. But review of Cornerstone's methodology shows that the absurdly high valuations it assigns to small service quality improvements are as wrong as they sound. First of all, Cornerstone's method disguises the manner in which the merger's harm will fall on consumers. Among many other errors, Cornerstone has disregarded the fact that a consumer's willingness to pay is affected by her income. Cornerstone has assumed a nation of Americans for whom money is no object when it comes to purchasing wireless services. Correcting Cornerstone's calculation to take income into account shows what Cornerstone has sought to obscure – lower-income consumers will disproportionately bear the brunt of the harms of this transaction, as these consumers are especially unwilling, and in many cases unable, to pay for the price increases New T-Mobile will bring.[10]

In sum, T-Mobile claims that poor people will pay more because they have to, not because they can or are willing to; and T-Mobile's own economic models suggest that it will all be worth it based on very small increases in wireless service quality.

This same flaw and same poor bargain lies at the root of the more recent T-Mobile pricing pledge, evidently proffered late in the game in order to assuage concerns about the obvious upward pricing pressure T-Mobile has already conceded in its own filings. The pledge does nothing, however, to allay those concerns. The original letter T-Mobile filed with the FCC at the start of February said that T-Mobile and Sprint legacy plans would continue "for three years . . . or until

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[9] Letter from Pantelis Michalopoulos, Counsel to DISH Network Corporation, to Marlene Dortch, Secretary, FCC, WT Docket No. 18-197, at 2 (filed Feb. 19, 2019).

[10] DISH Network Corporation, Comments in Response to Public Notice regarding Cornerstone Report, WT Docket No. 18-197, at 3 (filed Dec. 4, 2018).

better plans that offer a lower price or more data are made available."[11] After merger opponents pointed out the glaring loophole left open by the "or" in the initial formulation – lower prices or more data could both justify revoking the pledge – T-Mobile attempted to clarify its position and only dug itself in on the very same contradiction.

As T-Mobile's attempted clarification claimed on the third version of this same promise, "network improvements in speed, quality, and coverage will not be a basis for eliminating a legacy plan" unless they are offered at the same price.[12] But take two of that promise, just a page above in the clarification letter, left open the same gaping hole afflicting the initial pledge language. It said that a better plan could be "a plan with the same price and/or more data."[13] Whether this is simply unfortunate drafting or a too-clever attempt to keep the loophole open is really of no import. Conditions are hard to enforce in mergers. They are of limited duration, even when they rarely are enforced before they expire. What's more, prices in a mature market with relatively effective competition and more efficient technology might go down absent the merger, not just remain static. And T-Mobile's pledge, even if it were trustworthy for the first three years, would do nothing to prevent inevitable price increases and loss of competition in years to come.

Conclusion

As our FCC filings (summarized and updated in Exhibit A) illustrate, and recent developments confirm, T-Mobile and Sprint are each other's closest competitors. Their rivalry has been the main source of the positive changes in the wireless market in recent years. This merger

[11] T-Mobile Pledge at 2.
[12] Letter from Nancy J. Victory, Counsel to T-Mobile, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 18-197, at 3 (filed Feb. 12, 2019).
[13] *Id*. at 2 (emphasis added).

would put a stop to that momentum, without sufficient offsetting merger-specific benefits, or without any need to "save" Sprint by eliminating it.

The U.S. wireless market already exhibits signs of coordinated effects and rampant pricing power, with little true price competition. But the competition that exists is thanks almost entirely to competition between Sprint and T-Mobile for value-conscious customers. This merger would eliminate this "maverick" competitive pressure, exacerbating pre-existing coordination effects, causing substantial unilateral harms, and creating substantial unilateral pricing power in the wholesale market – which though important to resellers serving the most value-focused and credit-challenged customers has largely failed to exert competitive pressure on the nation's two most dominant retail carriers.

The last time antitrust authorities were faced with a similar national wireless market merger in 2011, they rejected it out of hand, and in doing so set off a period of pro-consumer market expansion and competition. This current merger poses similar issues, and comes with similar unrealistic promises of benefits, and similar overwrought predictions of doom if it is rejected. It should be rejected out of hand too.

EXHIBIT A

Updated Summary of Free Press FCC Filings Opposing the T-Mobile/Sprint Merger

Antitrust Enforcers Use Data on Consumer Behavior to Determine Markets and the Number of Competitors – Not Self-Serving Claims That Fewer Competitors Is More

This horizontal merger of the nation's third- and fourth-largest cellular service providers would combine two of just four remaining nationwide carriers. In prior wireless merger reviews, such as the AT&T/T-Mobile takeover attempt, DOJ[14] and the FCC have determined that the relevant product market is the mobile voice and data market. It contains other distinct product markets in which a transaction may impart particular competitive effects (*e.g.*, retail, wholesale, enterprise and government wireless services). Antitrust enforcers also can and do devote attention to market segments that might be particularly impacted by a transaction, assessing the competitive impact a transaction would have on "value-focused" wireless customers, the pre-paid market segment, or other such price discrimination markets.

T-Mobile and Sprint, along with the legion of lobbyists they have paid to promote their merger, are fond of saying that this deal isn't "really" a 4-to-3 contraction in the nationwide cellular service market and wholesale cellular service market; or that it's not "really" an even more dramatic 3-to-2 shrinking in the nationwide pre-paid market segment, or other market segments that the agencies may examine as they review this transaction. The merger proponents attempt a sort of sad parlor trick, trying to fool their audiences into believe that eliminating a major competitor is "really" a 2-to-3 merger – whatever that may mean – or some other sort of fanciful calculation. In short, T-Mobile asks the esteemed members of this subcommittee to ignore all evidence, logic, and even mathematics, and accept these kinds of oxymoronic claims about how having fewer competitors is actually having more.

[14] *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").

The relevant product and geographic markets affected by this transaction function at the national level; but differences in how services are marketed (*e.g.*, where carriers place retail stores, advertise, or market to customer segments like the value-focused segment) also produce effects on competition in certain local markets. For cellular telecommunications consumers, there are no viable substitutes for combined, all-in-one mobile telephony and computing via mobile broadband networks. A smartphone user, facing sustained price increases in this market, would have no choice but to pay the increased rate or exit the cellular market and use fixed 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, asking whether a small but significant and non-transitory increase in price ("SSNIP") in the merging parties' offerings actually would result in customers substituting fixed voice and data services for mobile communications services. There is no evidence to suggest that a critical level of customers would do so. Antitrust analysis also indicates the existence of distinct product markets beyond the broad "mobile" telecommunications market. For example, resellers that purchase wholesale network access from the merger proponents and from other facilities-based carriers 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. These segments may not be formally defined as separate product markets, but they are differentiated enough that concentration would likely confer additional market power on the New T-Mobile that other firms in the broad mobile market would not act to negate.

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

With the relevant product market defined as the nationwide cellular service market, <u>the harms of this merger are impossible to ignore</u>. The four national carriers controlled 98 percent of mobile wireless service revenue by 2016, with a likely higher share of smartphone revenues.[15] Regional carriers' offerings have diminished in importance. Traditional cable companies' nascent, "Wi-Fi-first" wireless services do not discipline national cellular carriers' behavior. That's why, two months before publicly announcing this proposed merger, CEO John Legere said that as he looked ahead to T-Mobile's expected growth in 2018, "the furthest thing from my mind is any concern about the impact of cable."[16] Just as this merger isn't really a math-defying and logic-defying "2-to-3" merger, it's not an "8-to-7" merger either, based on the lack of prospects for near-term discipline on nationwide wireless carriers from cable companies.

Nevertheless, consistent with FCC and DOJ precedent, antitrust enforcers can examine the transaction's effects at the national level as well as the local level. This is particularly important in the examination of certain market segments, such as the value-focused and pre-paid customer segments. And it's especially important in the cities where Sprint and T-Mobile – along with their

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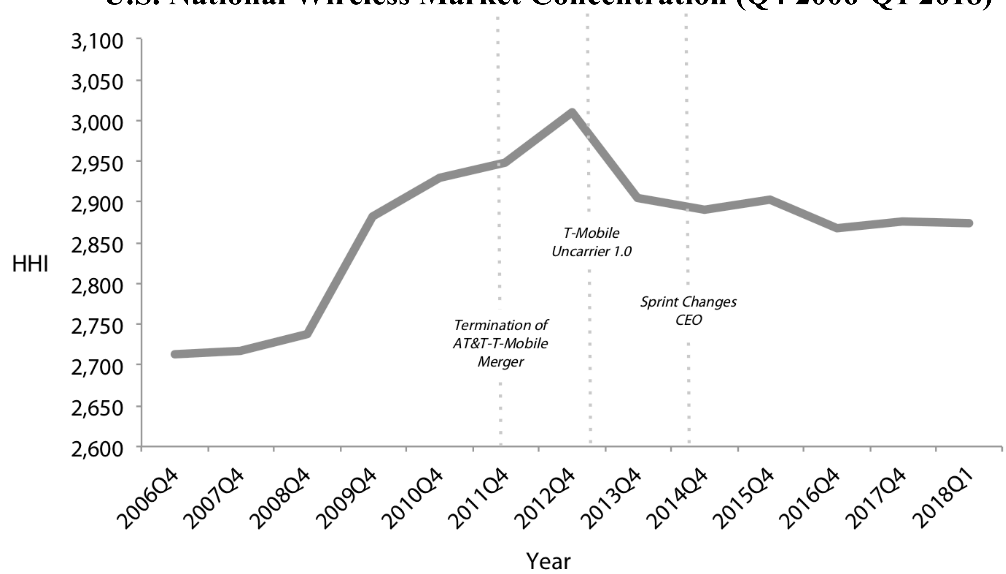
[15] *Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, WT Docket 17-69, Twentieth Report, 32 FCC Rcd 8968, ¶ 32 (2017) ("*Twentieth Report*").
[16] Comments of John Legere, T-Mobile US, Inc., Fourth Quarter 2017 Analyst Call (Feb. 8, 2018) ("Legere 4Q 2017 Comments").

affiliated pre-paid brands, and other resellers that purchase wholesale capacity from them – have significantly larger market shares, making the merger's harms particularly acute.

The longstanding decline in the regional carriers' combined share, along with the share-growth of the two legacy Bell carriers, meant steady increase in market concentration as measured with the standard Herfindahl-Hirschman Index ("HHI") method for determining market concentration by examining individual firms' shares and the change in those shares resulting from a proposed merger. FCC-calculated HHI figures for the total U.S. wireless market from 2003 to 2017 reflect a decade-plus of continued mergers and acquisitions. Yet, importantly, they show a slight decline in overall concentration after 2014, with small but meaningful growth in the shares of T-Mobile and Sprint after antitrust enforcers' 2011 rejection of AT&T/T-Mobile merger and signals that they would not approve a Sprint/T-Mobile bid in 2014 either.

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

This Merger Would Vastly Increase Already High Concentration Levels

As DOJ and FTC *Horizontal Merger Guidelines* explain, the agencies calculate HHI to assess concentration levels before and after proposed mergers "by summing the squares of the individual firms' market shares" which "gives proportionately greater weight to the larger market shares."[17] Thus, HHI calculations for the deal may differ based on the source and timing of market-share data, and in this hearing we cannot use material behind the FCC's protective order.

These expert agencies view markets with an HHI above 2,500 points as highly concentrated. They also presume that mergers in such markets increasing HHI by more than 200 points are "likely to enhance market power."[18] Publicly available data at the time Free Press filed its Petition to Deny this merger with the FCC <u>conservatively implied a national market HHI that already stood at 2,875, increasing 467 points to 3,342 if T-Mobile and Sprint were permitted to merge</u> – exceeding even the post-merger HHI the AT&T/T-Mobile deal would have caused.[19]

We suggested in our initial filing too that analysis of local market shares would reveal dozens of markets where post-merger concentration increases would be even higher, <u>estimating HHI increases of 1,000 points or more in cities with large low- to middle-income populations</u>, such as New York, Los Angeles, Chicago, Houston and others. There also is data strongly indicating that the relevant product market may in fact be narrower than the broad cellular market and include a "value" segment in which post-merger T-Mobile would be able to exercise market power, thanks to T-Mobile's and Sprint's dominance in those retail segments along with their importance to the wholesale market relied upon by pre-paid and Lifeline resellers.

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[17] *See* DOJ & FTC, *Horizontal Merger Guidelines*, at 18 (Aug. 19, 2010) ("*Horizontal Merger Guidelines*").
[18] *Id*. at 19.
[19] *See* DOJ Second Amended Complaint ¶ 25.

Sprint and T-Mobile are Each Other's Closest Competitors, and Sprint Independently Competes for AT&T and Verizon Customers Who Seek Less Expensive Services

Our Reply filing in the FCC proceeding showed conclusively that T-Mobile and Sprint are each other's closest competitors. Much of that filing is redacted, because it relied extensively on data behind the FCC's protective orders suggesting market shares and switching patterns between not just T-Mobile and Sprint but all U.S. wireless carriers. Based on my colleagues' review of that data, we are confident that competition between T-Mobile, Sprint, and their pre-paid brands is what keeps prices lower and plans better for their customers and all U.S. wireless users.

T-Mobile and Sprint take customers away from each other's flagship brands and pre-paid affiliates, offering not only more valuable data packages but plain and simple lower prices. They cater to customers in densely populated areas, placing stores in locations that serve middle- and low-income populations often ignored by the two largest carriers. They are rewarded for this with higher shares in those largest markets, which would be hit hardest by this merger's harms.

The driving force for the dynamic competition benefitting those communities has been Sprint's revival over the course of the past half-decade, coupled with T-Mobile's resurgence following its liberation from AT&T's rejected 2011 takeover bid. Sprint's different network coverage capabilities are not the impediment that the merger applicants now pretend, and in fact have the benefit of requiring Sprint to differentiate itself and compete more aggressively on price in ways that benefit the entire market and specific market segments. The filings these companies made at the FCC to justify their merger, and the statements they have made in hearings like these, paint a very different picture – but not an accurate one.

T-Mobile waves away the allegedly failing or flailing Sprint's competitive presence as immaterial to T-Mobile and the entire market. Yet they claim competition from resellers (which Sprint directly supports), and emerging competition from cable companies with far fewer wireless subscribers than the 50 million Sprint still serves, all would thrive after the merger and mitigate unilateral and coordinated effects. They fail to undertake an honest examination of how competition truly operates in the U.S. wireless market, and ignore the disproportionate impacts their merger would have on people in the most price-sensitive market segments.

As the wireless market becomes saturated, with all four remaining national carriers having comparable quality and universal coverage in most urban areas, an increasing proportion of people will choose a carrier based on price and perceived value. As the market reaches this state, Sprint stands to gain share from Verizon and AT&T while continuing to compete most directly with T-Mobile (the other carrier that primarily caters to this more price-sensitive consumer segment). The wireless market entered this state during the last two years, when it entered the "return to unlimited" era across all four nationwide carriers.

However, even at full saturation, the U.S. wireless market still has too few carriers to operate as a true commodity market in which price is the sole differentiator. Carriers continue to target certain market segments, and differentiate primarily based on non-price factors (*e.g.*, bundling wireless with "free" over-the-top video services). But so long as there are a minimum number of competitors and sufficient competition at the market's "lower" end, this saturation will result in some price discipline on the market's "top" end.

This Merger Would Reverse Competitive Gains in the U.S. Wireless Market, Which Stem Largely From the Rivalry Between T-Mobile, Sprint, and Their Pre-Paid Brands

T-Mobile's and Sprint's long histories offering prices well below Verizon's and AT&T's indicate that competition between these two merger applicants is the primary reason wireless users have seen actual and quality-adjusted price declines in recent years.

This competition that T-Mobile and Sprint independently bring to the highly concentrated U.S. wireless marketplace is invaluable. And their customers (and the customers of their associated resale partners) would be far worse off if not for the competition between Sprint and T-Mobile centered around attracting and retaining value-focused customers.

Less than a decade ago, the U.S. wireless market was already highly concentrated, and in a bad place. Waves of consolidation went hand-in-hand with increasing prices and onerous contracts. Competition was virtually non-existent. Anti-consumer practices like $0.20 per-text fees and "bill shock" were commonplace, even as demand grew with the arrival of the smartphone-era. The market was characterized by increasing prices, elimination of unlimited data plans, exorbitant rates on text messages, bill shock from metered plan overages, substantial below-the-line fees, arcane limits on voice minutes and when they could be used, onerous contracts with early 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 offerings from resellers, and other anticompetitive behavior. Carriers were reluctant to invest and innovate, choosing instead to reap supra-competitive profits.

This all started to change following DOJ and FCC rejection of the proposed AT&T/T-Mobile merger in 2011, and only continued after the government signaled that it would not approve a horizontal merger between Sprint and T-Mobile in 2014. 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 until then), and from AT&T and Verizon as well.

Our FCC filings opposing this merger catalogue Sprint's and T-Mobile's competitive innovations and successes over the last half-decade. We will only summarize a few of those here. But I cannot emphasize enough that Sprint and T-Mobile both acted successfully as "maverick" firms during this time period, attracting customers from each other and from the big two wireless carriers above them – not despite competition between T-Mobile and Sprint, but because of it.

After T-Mobile was liberated from AT&T's proposed takeover in 2011 and began its vaunted "uncarrier" promotions, Sprint undertook a series of aggressive moves starting in January 2014, like its so-called "Framily Plans" with substantial per-line savings if users purchased multi-line friends and family plans.[20] That same month, T-Mobile unveiled its "Contract Freedom" promotion to pay a new customer's early termination fee up to $650.[21] T-Mobile's promotion mirrored one launched by AT&T a few weeks earlier, with AT&T offering up to $450 to T-Mobile customers who switched to AT&T.[22] And AT&T's switching promotion targeted at T-Mobile customers wasn't its only winter 2014 response to competition, as it also decreased prices for users who shared 10 gigabytes or more of monthly data. AT&T's move still placed its prices above T-Mobile's then-current offers; but likely came in response to Sprint's Framily Plans, which were significantly less costly than the shared plans of all other carriers.[23] Verizon – exhibiting its tendency to ignore such moves or at least wait until every other carrier has acted – finally unveiled its "More Everything" family-style plan in mid-February 2014.

In February and March 2014, Sprint's Boost Mobile brand unveiled a $35 monthly unlimited talk, text and data plan with 2.5 gigabytes of 4G LTE data, then a Sprint-branded unlimited pre-paid plan for $60 per month.[24] Competition cooled somewhat during mid-2014, as

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[20] *See* Marguerite Reardon, "Sprint's new 'Framily Plans' offers big savings," *CNET* (Jan. 7, 2014).
[21] *See* Sean Hollister, "T-Mobile will now pay $350 for you to leave AT&T, Sprint, or Verizon," *The Verge* (Jan. 8, 2014); Marguerite Reardon, "T-Mobile will buy your AT&T or Verizon smartphone. What's the catch?" *CNET* (Mar. 22, 2015).
[22] *See* Don Reisinger, "Temptation: AT&T offers T-Mobile users $450 to switch," *CNET* (Jan. 3, 2014).
[23] *See* Dante D'Orazio, "AT&T tweaks Mobile Share pricing to significantly discount 10GB or larger plans," *The Verge* (Feb. 1, 2014).
[24] *See* Angela Moscaritolo, "Boost Mobile Kicks Off $35 4G LTE Promotion," *PC Magazine* (Feb. 6, 2014); Phil Goldstein, "Sprint replaces Sprint As You Go with Sprint Prepaid brand: New plans at $45 and $60 for smartphones," *FierceWireless* (Mar. 14, 2014).

Sprint and T-Mobile entered into negotiations with each other and with the U.S. government over a potential merger. But by August 2014, the competition ramped back up, beginning with Sprint's replacement of its CEO and subsequent replacement of its Framily Plans with shared plans that had higher data allotments. Sprint also launched a new single-user unlimited plan at a steep discount compared to any other carriers' unlimited options, offering a single-line unlimited plan for $60 per month – $20 cheaper than other carriers' similar plans.[25]

T-Mobile responded in August 2014, as it cut prices on family plans and launched a $10 monthly tablet data plan. It also responded to Sprint's single-line discounts by quadrupling the amount of monthly data on its entry-level single-line plan, offering unlimited voice, text, 3G data, and 2 gigabytes of 4G LTE data for $45 per month.[26] In September, T-Mobile also implemented a device trade-in program it called the industry's "best value,"[27] only to see Sprint launch its own trade-in program a day later aimed directly at the perceived shortcomings of T-Mobile's promotion.[28]

Sprint continued to respond to T-Mobile during the fall of 2014, as the company's new CEO implemented an overhaul of the company's pricing, promotions, and culture, and moved the "Sprint Spark" plan to upgrade the company's network capacity. In September, Sprint's Boost

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[25] *See* Marguerite Reardon, "Sprint CEO hits gas on price overhaul," *CNET* (Aug. 18, 2014); Marguerite Reardon, "Sprint attacks T-Mobile with $60 unlimited data plan," *CNET* (Aug. 21, 2014).

[26] *See* Phil Goldstein, "T-Mobile cuts prices on family plans with 7-10 lines, launches $10/month tablet plan," *FierceWireless* (Aug. 26, 2014); Malarie Gokey, "T-Mobile now offers a 2GB talk, text and data plan for $45," *Digital Trends* (Aug. 25, 2014).

[27] *T-Mobile US, Inc*., Press Release, "T-Mobile Guarantees Industry's Best Trade-In Value on Used Devices" (Sept. 8, 2014).

[28] *See* "Sprint 'Strikes Back,' Announces Tweaked Trade-in Program with Options for In-store and Account Credit," *Droid Life* (Sept. 9, 2014).

brand doubled monthly data allotments and cut prices by $5 price.[29] AT&T doubled data on its high-end plans a few days later, and Verizon aligned its tiers to match AT&T's.[30]

Sprint responded to AT&T's and Verizon's moves in the fall of 2014 by rolling out new post-paid tiers that offered double the amount of data that these "Twin Bell" companies did at the same price points.[31] In mid-October, Sprint's Boost Mobile became the first pre-paid carrier to offer the latest iPhone.[32] Sprint ended 2014 with an aggressive promotion: it announced it would charge customers who switched from AT&T or Verizon half of what they were paying previously.[33]

The primary beneficiaries of the wireless market competition during 2014 were, of course, wireless consumers. <u>But T-Mobile and Sprint benefited as well, with their promotions bringing in a slew of new customers that ultimately improved each company's financial metrics</u>. AT&T and Verizon were not so fortunate. After years of reaping the bounty of their market power, T-Mobile's and Sprint's competitive moves finally ate into the Twin Bells' profits.[34]

After Sprint's ascendency during 2014 and early 2015, T-Mobile's MetroPCS rolled out a series of price cuts and promotions aimed directly at Sprint's price-conscious customer base. In January 2015, Metro reduced the monthly price of its unlimited LTE plan from $60 to $50,[35] and T-Mobile unveiled its "smartphone equality" promotion, which extended no down-payment device

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[29] *See* Mark Davis, "Sprint CEO Marcelo Claure outlines shake-up of entire company," *Kansas City Star* (Sept. 11, 2014); "Sprint's Boost Mobile promotion doubles data and cuts price," *Kansas City Star* (Sept. 3, 2014).
[30] *See* Roger Cheng, "AT&T doubles data on high-end plans, starting at 15GB tier," *CNET* (Sept. 27, 2014); Mark Rogowsky, "Mobile Wars: AT&T Goes Whale Hunting, But Verizon, Sprint Bite Back as Data Prices Continue to Fall," *Forbes* (Oct. 2, 2014).
[31] Sprint Corporation, Press Release, "Sprint Stands Behind Pledge to Deliver 'Double the Data,'" (Oct. 1, 2014).
[32] *See* Bobby Burch, "Sprint's prepaid brand releases iPhone 6 pricing," *Kansas City Business Journal* (Oct. 10, 2014).
[33] *See* Chris Welch, "Sprint promises to cut Verizon and AT&T bills in half if customers switch," *The Verge* (Dec. 2, 2014).
[34] "AT&T and Verizon warn investors of higher Q4 churn as Sprint and T-Mobile increase competition," *9 to 5 Mac* (Dec. 9, 2014).
[35] *See* Amit Chowdhry, "MetroPCS Is Offering An Unlimited LTE Data Plan For $50 Per Month," *Forbes* (Jan. 22, 2015).

financing to pre-paid customers and eliminated credit checks.[36] Sprint's Boost Mobile responded quickly with a suite of unlimited plans ranging from $35 to $55 monthly, depending on the amount of 4G LTE data chosen.[37] In March 2015, MetroPCS introduced a $30 unlimited plan with no additional taxes or fees.[38] These promotions continued apace throughout the spring and summer of 2015. T-Mobile aggressively used MetroPCS to take customer share from Sprint, which had previously faced aggressive pre-paid competition only in the regional markets in which Cricket and MetroPCS operated prior to their acquisitions.[39]

With several carriers having dropped prices in January 2015, many additional promotions that Spring shifted to value-adds, such as handset discounts and data rollovers. Yet in June 2015, Sprint pushed the market with a promotion that cut Cricket and MetroPCS customers' prices in half if they switched to Boost Mobile. This resulted in customers being able to pay as little as $20 per month for unlimited voice and text with 2.5 gigabytes of data.[40]

In August 2016, T-Mobile brought back unlimited data plans, and just hours later Sprint announced its own unlimited data offering.[41] 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[42] (AT&T had an unlimited data offering, but only for its DirecTV customers, starting in January 2016).[43] These continuing back-and-forth salvos are crucial for

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[36] *See* Chris Welch, "T-Mobile will ignore bad credit if you pay your bill on time for a year," *The Verge* (Jan. 22, 2015).
[37] *See* Bertel King Jr., "Boost Mobile $35 Plan Will Supply 2.5GB Of 4G LTE To Customers Who Commit To Automatic Payments Starting Feb. 3rd," *Android Police* (Jan 22, 2015).
[38] *See* Lance Whitney, "MetroPCS crafts unlimited phone plan for $30 a month," *CNET* (Mar. 24, 2015).
[39] *See, e.g.*, Nick Terry, "MetroPCS and Boost Mobile Battle It Out for Subscribers," *AndroidHeadlines*, (May 21, 2015).
[40] *See* "Boost Mobile Invites All Cricket and MetroPCS Customers to Slash Their Payment in Half," *PR Newswire* (June 19, 2015).
[41] *See* Aaron Pressman, "Here's How Sprint and T-Mobile Are Battling With New Unlimited Data Plans," *Fortune* (Aug. 18, 2016).
[42] *See* Raymond Wong, "AT&T caves in and opens its unlimited data plan to non DirecTV and U-Verse subscribers," *Mashable* (Feb. 17, 2017).
[43] *See* Roger Cheng, "AT&T revives the unlimited data plan, with a catch," *CNET* (Jan. 11, 2016).

competition – not just those in which T-Mobile or Sprint spurred Verizon or AT&T, but also these battles between T-Mobile and Sprint competing against each other.

It is critical to note the change in each carrier's market shares during these more competitive periods, and how such changes also reveal <u>the importance of competition between Sprint and T-Mobile to the entire wireless market</u>. The return of unlimited or uncapped data plans and numerous other positive developments occurred primarily because of direct competition between Sprint and T-Mobile, and as a result of DOJ and the FCC as well rejecting prior overtures towards damaging 4-to-3 mergers like this one.

The point of all of this is that the national market de-concentrated during the 2013-2017 time period, when many of the prior period's anti-consumer practices faded away. Verizon's and AT&T's share of the wireless market's service revenues started to decline, as T-Mobile's and Sprint's went in the right direction.[44] And customers saved too, on discounted multi-line offerings 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).[45]

The elimination of independent T-Mobile and Sprint would remove from the market firms that <u>each</u> have a track record of product innovation, produced by pressure to compete not only with the Twin Bells but against each other.[46] Both T-Mobile and Sprint have taken on the role of

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[44] *See* Petition to Deny at 30-32, figs. 4-5.

[45] *See* Marguerite Reardon, "Sprint's new 'Framily 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; Jerry Hildenbrand & Joseph Keller, "Everything you need to know about Sprint's Unlimited Freedom Plan," *iMore* (Jan. 7, 2018).

[46] *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.").

maverick competitors, and collectively gained share relative to those Twin Bells in the broader cellular market and specific market segments. Both have used product innovation and price promotions to differentiate and compete. With this merger, T-Mobile and Sprint propose to put a stop to this positive competitive momentum.

The merged firm wants to grow its profits and profit margins to heights historically enjoyed by AT&T and Verizon, and the only way to achieve that goal is to merge the market into a triopoly where no provider feels any meaningful pressures to compete on price.

There is no credible evidence to support T-Mobile's claims that without an independent Sprint, the New T-Mobile would not exercise its newfound market power; or that the consolidated market would not produce coordinated effects in the absence of low- and middle-market competition between Sprint and T-Mobile vying for a share of these segments.

This Massive Merger and Elimination of Competition in the Value-Focused Market Segment Would Lead to Price Increases, Not the Benefits and Efficiencies T-Mobile Claims

At the outset of the FCC proceeding, T-Mobile's central argument was that the merged firm would see a 6 percent reduction in Average Revenue per User ("ARPU") by 2026, which it claimed would result from the merged firm passing along scale benefits to customers.[47] Setting aside the reality that in the resulting (and obscenely highly concentrated) market, there would not be the normal competitive pressures that force a carrier to pass along these savings to users as opposed to shareholders, this is a wildly misleading statistic. ARPU is already declining.[48]

A 6 percent reduction in ARPU by 2026 is an average annual decline of 0.9 percent. But according to CTIA, a trade association representing the U.S. wireless industry, industry ARPU declined by 7 percent in 2016 alone (and between 2012 and 2016, declined by an average annual

[47] Application at 121.
[48] *See Twentieth Report* ¶ 59.

rate of 1.9 percent). As a growing proportion of wireless carriers' customers are not smartphone users but connected devices, using lower amounts of bandwidth and generating less revenue per account, these ARPU claims may in fact mask price increases for cellphone customers.

This is laid bare by T-Mobile's public materials touting the merger to investors, which noted in the long term (5-plus years) their expectation that profit margins would more than double to a whopping 45 percent, well above 2018 *pro forma* values of 21 percent.[49] This cannot be explained by increased competition, nor supposed synergies; only by reduced market-wide competition that enables unilateral and coordinated behavior, and a reduction in investment.

The FCC's 2011 decision to reject AT&T's takeover of T-Mobile was in part based on those applicants "significantly overstat[ing] the estimated cost savings of the proposed transaction."[50] This overstatement should not have been surprising, as it reflects the economic reality that large telecommunications firms have largely exhausted their returns to scale, which is particularly the case for wireless firms.[51] The DOJ's findings that firms of Sprint's and T-Mobile's size likely do not have unexhausted scale economies suggest that claims here of substantial merger-related efficiencies are overstated. If this is the case, not only are the supposed benefits of this merger non-cognizable, they would not outweigh the competitive harms of the transaction – particularly those caused by the upward pricing pressure in the value-focused market segment.

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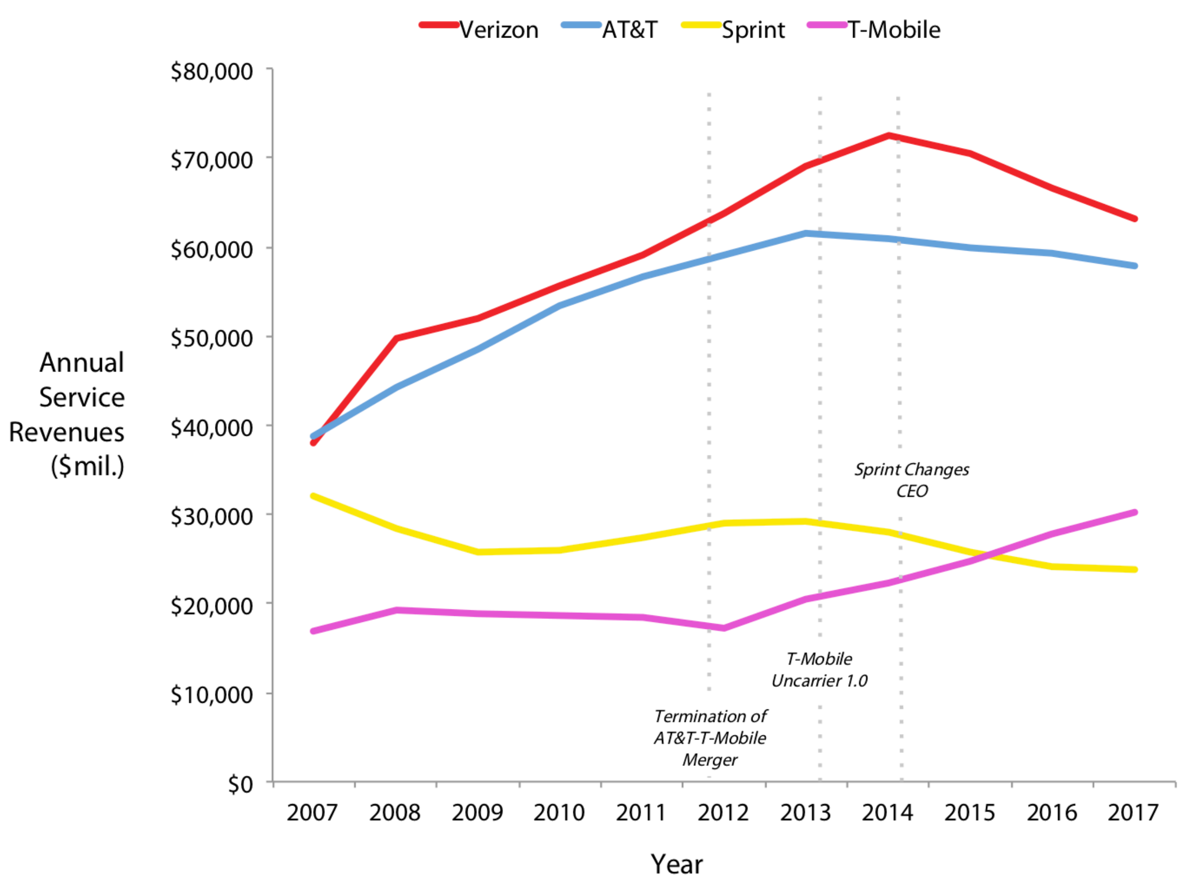
[49] *See* T-Mobile US, Inc., and Sprint Corporation, "Creating Robust Competition in the 5G Era," at 18 (Apr. 29, 2018) (showing the 2018 *pro forma* values for adjusted EBITDA and margins; adjusted EBITDA less capital expenditures and margins; capital intensity; as well as the short and long-term expectations for these values at New T-Mobile).
[50] FCC Staff Report ¶ 176.
[51] *See* Yan Li & Russell Pittman, United States Department of Justice Economic Analysis Group, Discussion Paper, "The proposed merger of AT&T and T-Mobile: Are there unexhausted scale economies in U.S. mobile telephony?" at 8 (Apr. 2012) ("[T]he literature suggests that it is unlikely that a firm as large as AT&T – and perhaps T-Mobile as well – is operating at a point on its overall enterprise cost curve of substantial unexhausted economies of scale."). Note that this was written in 2012, when T-Mobile's reach was well below where it is today, now reaching some 99 percent of the U.S. population.

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

The proposed transaction is not a merger to monopoly in the primary product markets. Yet there would be substantial unilateral harms, including reductions in relative long-term capital investment, innovation, and non-price competition; higher prices for certain services, and removal of certain products from the market. This would reverse recent, more positive trends.

Service revenues for the four national wireless carriers combined increased steadily until peaking in 2014, but declined sequentially until 2017 for nearly a 5 percent drop. T-Mobile's "uncarrier" moves elicited competitive responses from AT&T and Verizon, and Sprint as well.

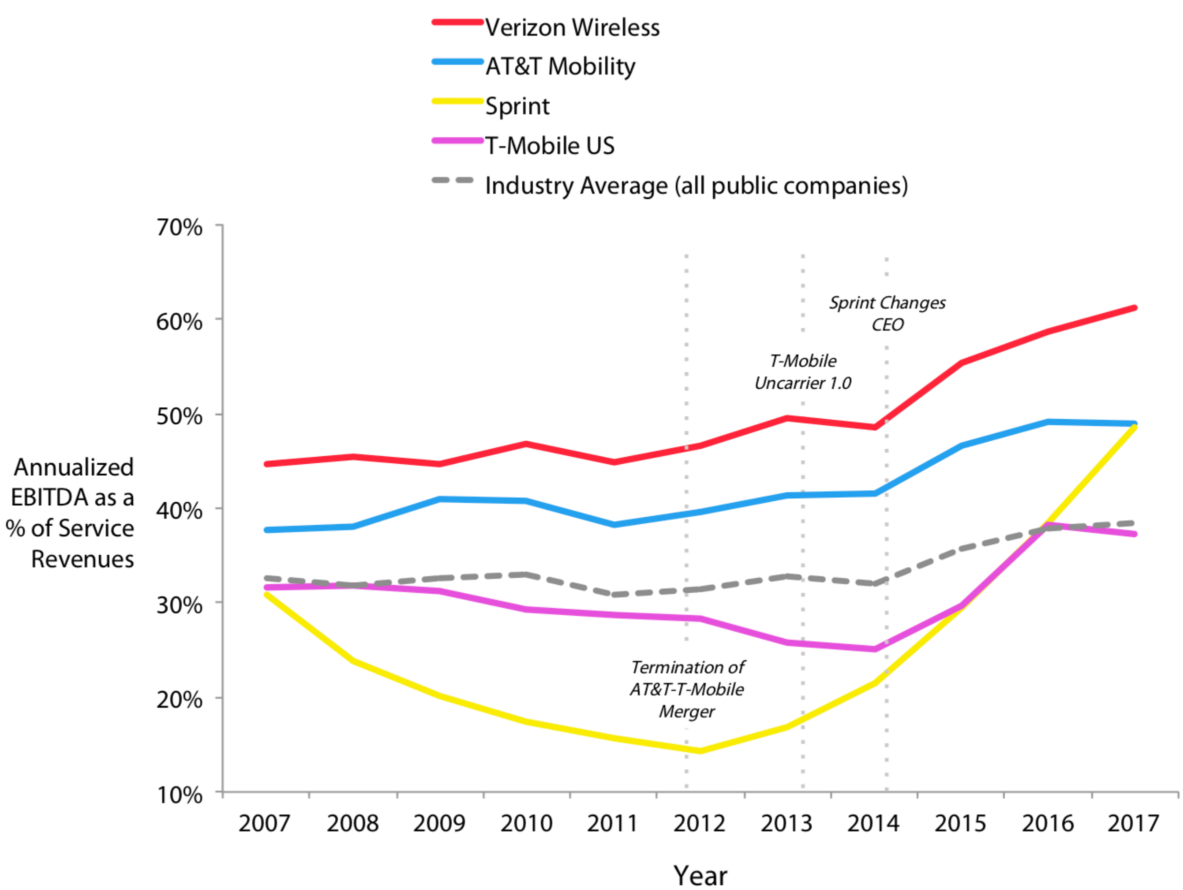
Wireless Market Service Revenues (2007-2017)



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

We saw declining competitive outcomes prior to the government's rejection of the AT&T/T-Mobile merger in late 2011. Competitive outcomes improved following that, and continued to improve after strong signals in 2014 that antitrust enforcers would not permit Sprint and T-Mobile to merge either. But that increase in competition did not harm profitability of the industry as a whole, or of any individual carriers. Indeed, increased competition appears to be a rising tide that lifted all boats. AT&T and Verizon saw their profit margins grow slowly and steadily over the last decade. 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.

Wireless Profit Margins (2007-2017)

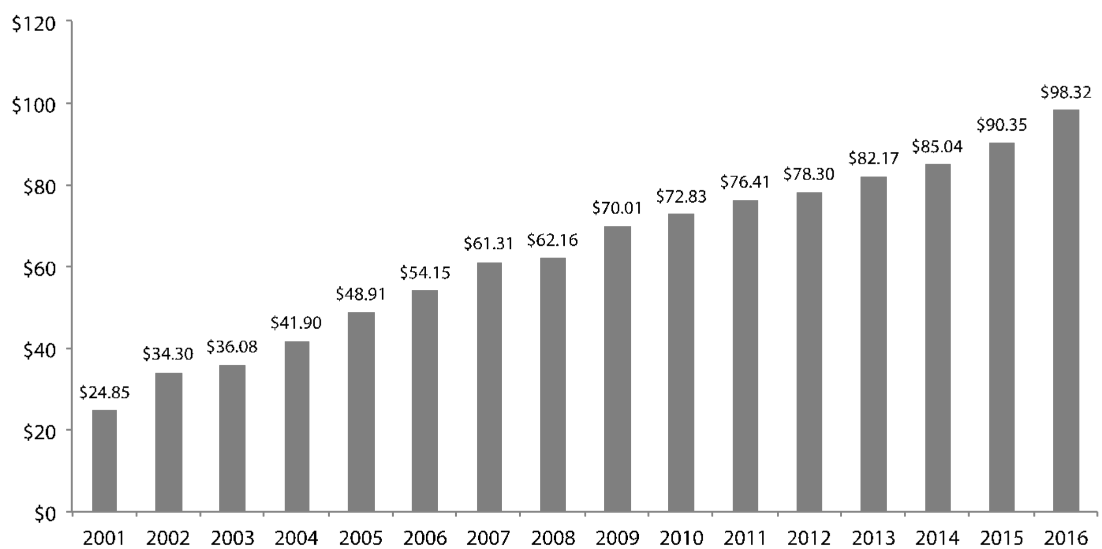


Source: S&P Global Market Intelligence.

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

Yet the competitive benefits that materialized over the past half-decade would not have occurred if there were not competition <u>between</u> 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.

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

The central question for this merger is whether it would confer unilateral pricing power on the merged firm. We are confident, based on all of the publicly available data, that <u>Sprint and T-Mobile already possess unilateral pricing power in the value market segment, and that their merger</u>

would vastly enhance this unilateral market power. Sprint's pre-paid ARPU has increased 11 percent over the past two years, while T-Mobile's increased 4 percent during this time.

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 on its price promotions, focusing more on value-adds like free Netflix subscriptions. Sprint continues to focus on aggressive price promotions, like a 2018 offering of $15 monthly unlimited plans to switching customers. Sprint's price-focused efforts exert 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.

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 too, relieving AT&T and Verizon from the modicum of competitive pressure they've felt from both Sprint and T-Mobile in recent years. But to put to rest any doubt that the merger would likely lead to price increases by the New T-Mobile itself, we need only consult the economists hired by . . . T-Mobile itself. As explained in our main testimony above, based largely on a series of DISH filings that unearth and interpret the statements T-Mobile's hired experts made in the FCC record for this proceeding, T-Mobile has conceded that prices are likely to go up considerably – especially for price-conscious customers least able to afford such price hikes.

The Merger of T-Mobile and Sprint Would Further Exacerbate Harmful Coordinated Effects in the Relevant Product Markets, With No Prospect of New Entry to Prevent Them

DOJ has shown concern in the recent past that AT&T and Verizon may already engage in and benefit from coordinated interaction.[52] This merger's elimination of competition in the value-focused customer segment would exacerbate that threat. Assessing the potential for coordinated interaction is inherently a predictive exercise for antitrust enforcers, but the structure of the wireless marketplace makes it particularly vulnerable. The potential product market (smartphone service plans) is largely homogeneous, with prices readily observed by competing firms. Wireless carriers more rarely offer new customer discounts or retention incentives than wired carriers do, and they price their services nationally.[53]

DOJ's review undoubtedly focused both on price and non-price competition when evaluating the potential for 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, switching remains difficult. It is unlikely a firm exercising market power through increased prices would immediately lose a substantial portion of customers to competing carriers. This would especially be the case if New T-Mobile increased prices or reduced non-price competition, because value-focused customers would have no better option. For Verizon and AT&T though, coordination in response to New T-Mobile would be highly likely: they'd face less threat of defection from customers seeking greater value.

[52] *See, e.g.*, Cecilia Kang, "U.S. Investigating AT&T and Verizon Over Wireless Collusion Claim," *New York Times* (Apr. 20, 2018).

[53] *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 likely to be the case if the terms offered to customers are relatively transparent. Price transparency can be greater for relatively homogeneous products.").

In a typical product market, the impact of coordination would be greatly reduced by smaller firms expanding output and capturing share.[54] 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 and regional carriers' lack of spectrum outside their regions. The threat of regional carrier expansion into the national market obviously could not mitigate coordinated action due to the high fixed costs and deployment time even if the few remaining regional carriers were inclined to try. And as discussed above, cable companies have neither the mobile customer base or mobile service footprint needed to challenge the nationwide mobile carriers.

Horizontal mergers of this size raise particular concern in markets where competitors are unable to enter sufficiently and quickly. In the wireless market – and particularly the wireless data market – sufficient new entry is impossible, and the smaller firms lack the ability to quickly and efficiently expand output at levels needed to offset the unilateral and coordinated harms that approving this merger would cause. <u>No new firm has successfully entered the facilities-based cellular telephony and data market in the past two decades</u>, and with the massive amount of consolidation many have exited.[55] New entrants would have to amass substantial spectrum assets, navigate local and federal regulations, and incur substantial fixed deployment costs prior to signing up a single customer. In addition, the high valuation of existing leading firms indicates intangible assets that a new entrant would not be able to sufficiently and quickly duplicate.

[54] *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).

[55] The only facilities-based carriers to enter the market in the past two decades are Clearwire in 1998, and Qualcomm's spin-off Leap in 1999. Clearwire did not enter the national market for integrated mobile voice and data. AT&T later acquired Leap. AT&T, Press Release, "AT&T Completes Acquisition of Leap Wireless" (Mar. 13, 2014).

Even if timely entry were possible, it would be insufficient to mitigate the unilateral and coordinated harms of this proposed merger. In the cellular service market, AT&T and Verizon increasingly rely on bundled vertical content to differentiate themselves.[56] This practice, along with substantial switching costs, creates insurmountable barriers to effective entry.[57] T-Mobile in its merger filing at the FCC first held up DISH as a potential competitor, claiming that "DISH has the resources and spectrum to compete effectively in offering 5G wireless broadband services."[58] But as we noted in our Petition to Deny, there is little reason to expect DISH will ever launch a nationwide, competitive service, certainly not in the foreseeable future. What's more, DISH's current plans are for a narrowband connected devices network, not a full broadband network offering a nationwide integrated mobile voice and data service that competes in the retail market with the national carriers.[59] And T-Mobile has changed its tune completely, now telling the FCC that DISH "intends to continue to warehouse spectrum with no benefit to consumers."[60]

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 in the four nationwide carriers. This merger would eliminate two maverick competitors (replacing them with a newly combined firm equal in size to the Verizon and AT&T) and would lead to "a more stable pricing environment," which is the main reason that Wall Street has long clamored for

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[56] *See* Jacob Passy, "Why a T-Mobile-Sprint merger could be 'devastating' for consumers," *MarketWatch* (Apr. 30, 2018) ("One big reason why regulators could block the deal is the role TV and internet services now play in the wireless market. . . . [T]here's a divide among the major carriers between those that offer bundled services including TV and internet (AT&T and Verizon) and those that don't (Sprint and T-Mobile). Only having one company in the latter category could have caused prices to go up.").
[57] *See Horizontal Merger Guidelines* at 29 ("Even where timely and likely, entry may not be sufficient to deter or counteract the competitive effects of concern. For example, in a differentiated product industry, entry may be insufficient because the products offered by entrants are not close enough substitutes to the products offered by the merged firm to render a price increase by the merged firm unprofitable.").
[58] Application at 112.
[59] *See* Sarah Barry James and Waqar Jamshed, "Analysis: Debt load, build-out deadlines complicate DISH's wireless ambitions," *S&P Global Market Intelligence* (Aug. 7, 2018).
[60] Mike Dano, "T-Mobile takes huge swing at Dish for hoarding spectrum," *Fierce Wireless* (Oct. 26, 2018).

greater wireless industry consolidation.[61] And 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, but likely punished AT&T and Verizon on news that the merger was not happening because investors feared AT&T's and Verizon's earnings at the top are subject to greater challenge by an independent T-Mobile and Sprint.

The domination at the top is a strong indicator of an already-broken market, but this proposed merger of the third- and fourth-largest carriers would exacerbate, not cure, its problems. The proposed contraction from four to three carriers would have a particularly corrosive impact on innovation and what few competitive incentives exist. That AT&T and Verizon were able to largely avoid dropping their prices during periods in which both T-Mobile and Sprint did so, and were still able to increase their profit margins and subscribers in the face of this price competition below them, is a strong indicator of the market's existing lack of <u>effective</u> competition. Indeed, the *Horizontal Merger Guidelines* state:

> If a firm has retained its market share even after its price has increased relative to those of its rivals, that firm already faces limited competitive constraints, making it less likely that its remaining rivals will replace the competition lost if one of that firm's important rivals is eliminated due to a merger.[62]

Both Sprint and T-Mobile have proven to be critical sources of marketplace competition that has in recent years resulted in tangible consumer benefits. Indeed, the market had four national carriers prior to the government's rejection of the AT&T/T-Mobile merger, yet still showed no signs of effective competition until T-Mobile received an infusion of cash and spectrum from the breakup. It is critical to maintain Sprint and T-Mobile as <u>independent</u> firms, and why market contraction to just three carriers would be a disaster. The elimination of the two "maverick" firms

[61] Sheena Lee, "AT&T/T-Mobile Deal Won't Hurt Verizon," *Seeking Alpha* (Mar. 25, 2011).
[62] *See Horizontal Merger Guidelines* at 18.

currently running as the third- and fourth-place carriers would more than fully restore AT&T's and Verizon's pre-2012 market power, and would remove the only sources of what little pricing discipline currently exists in the wireless space.

There's simply no good argument against the inescapable conclusion that contracting to three carriers would lead to price increases and to unilateral and coordinated harms. The merging parties' hypothesis to the contrary is neither borne out by the historical evidence in the U.S. market, nor suggested by comparative analysis of wireless markets in other nations, where the axiom of "more competitors equals more competition" proves true.[63]

This Merger Would Result in Negative and Irreversible Harms to the Lifeline Marketplace and the Low-Income Families that Rely on Lifeline to Stay Connected

Sprint is the only remaining national facilities-based wireless carrier that offers the FCC-standardized "free" wireless Lifeline minimum service plan (under its brand Assurance Wireless). By contrast, T-Mobile ceased its Lifeline offerings almost entirely, stating that it is unprofitable. Whether or not that claim is legitimate, it indicates that incentives for carriers to offer Lifeline are already precarious, and that Sprint – for a variety of potential reasons including its position in the market as the lowest-priced national carrier – has different incentives and a different view of this market than its suitor T-Mobile (as well as AT&T and Verizon, of course).

The Lifeline marketplace is almost entirely dependent on a well-functioning wholesale market, which this merger would massively consolidate. Concerns about harms to the value segment of the cellular market are particularly acute given T-Mobile's and Sprint's already

[63] There are at least two major international comparative market studies that provide strong evidence that markets with three carriers produce worse competitive outcomes than markets with four or more carriers. *See* Working Party on Communications Infrastructures and Policy, OECD, "Wireless Market Structures and Network Sharing," at 17 (Jan. 8, 2015). "Particularly in countries with four or more mobile operators[,] benefits are visible through more competitive and more inclusive offers and services that are generally not available in countries with three mobile operators." Price Waterhouse Coopers, "Grasping at differentiated straws: Commoditization in the wireless telecom industry" (Feb. 2018).

substantial shares of the wholesale market. In addition to Lifeline providers, that market's buyers consist of resellers 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 at service prices often far lower than those charged by the wholesaling carrier for its own similar retail plans.

Precise wholesale market share data is difficult to estimate using only public data, due to the way each national facilities-based carrier reports subscriber totals. For example, Verizon only reports retail connections, not wholesale or connected device counts. AT&T does report "reseller" connections; but it is unclear how many, if any, of AT&T's reseller connections are for connected devices. Sprint and T-Mobile also report wholesale connections, but neither company includes in its counts the connections resold by Lifeline resellers.

However, our FCC filings estimated that post-merger T-Mobile would control more than 45 percent of all wholesale connections for mobile customers using integrated mobile voice and data telecommunications services. We estimated in that scenario that the post-merger wholesale HHI would increase by more than a thousand points, to nearly 3,700. That could range higher, depending on the reality of AT&T's unspecified connected devices count, with New T-Mobile's total wholesale market share after this merger possibly even above 70 percent, and the total wholesale market HHI increasing from just under 3,000 points to more than 5,500 points.

It's clear from these and other reasonable estimates that this merger would dramatically increase wholesale market concentration, posing a grave threat to resellers and their price-sensitive customers. If approved, it would increase market power for these facilities-based suppliers in the wholesale market. This would result in higher prices for resellers, who simply might not be able to earn what they deem a reasonable profit from offering Lifeline services, much less at the quality levels the FCC requires.

Competition among providers also plays a critical role in Lifeline. For example, when the FCC first introduced wireless waivers for TracFone, the quality offered was static, and the quantity frankly paltry. TracFone initially offered Lifeline subscribers 68 free monthly minutes, increasing this to 250 minutes only after Virgin Mobile entered the program with a 200 minutes per-month offering. That TracFone was capable of nearly quadrupling the size of its offering – merely in response to entry by another carrier – illustrates the importance of robust competition in the wireless market overall, but also in the segment that is occupied by the value-focused facilities-based carriers (Sprint and T-Mobile) as well as the resellers primarily supplied with wholesale access by Sprint and T-Mobile.

Sprint Is Positioned to Survive and Even Thrive Without the Merger, As Robust Wireless Competition Benefits Not Only Consumers But Competitive Carriers Too

As T-Mobile did in 2011 when it tried to merge with AT&T, Sprint today pleads poverty and begs for a government bailout. Yet it is now clear that T-Mobile's predictions of impending doom in 2011 were completely wrong, and the evidence indicates that Sprint is wrong today too.

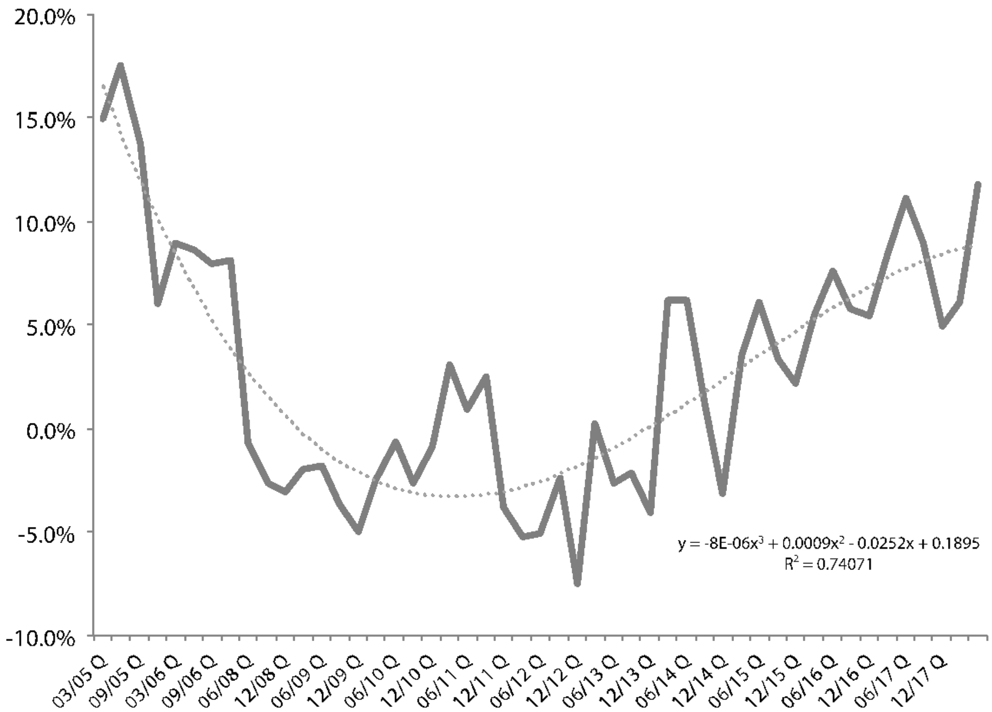
Upon being told merger with AT&T was not possible, T-Mobile took a series of steps that shook up the wireless market and increased its competitiveness relative to all carriers, especially Sprint and AT&T. And though Sprint lost market share largely to T-Mobile because of T-Mobile's competitive moves, Sprint's own financial situation improved too. This is a strong indicator that the U.S. wireless market functions best when competitive pressures force firms to respond. If it were forbidden to merge with T-Mobile, Sprint would not be forced to shutter its doors, or even reduce its network quality.

The path ahead is even clearer for Sprint today than it was for fourth-place T-Mobile in 2012. And the public evidence makes clear that the merger of T-Mobile and Sprint would destroy the primary competitive force producing substantial, tangible consumer benefits during the past seven years. This fact is further supported by the evidence and data subject to the protective order. Neither Sprint or T-Mobile have made credible claims to the contrary. They rely on wildly optimistic predictions about the merged firm's future capacities as their offsetting benefit, ignoring the wealth of economic evidence that indicates the merger would confer substantial new market power on the merged firm as well as the other two remaining national carriers.

Sprint is not a dying firm, but even if it were, the firm would not simply shutter its network. It would become an attractive takeover target not only for its current national wireless competitors blatantly destructive horizontal merger like this one, but for one of the myriad U.S. telecommunications firms already dabbling in the wireless market (such as Comcast or Charter) or a traditional Local Exchange Carrier seeking to enter the wireless market as a hedge against its slowly shrinking wired businesses (*e.g.*, CenturyLink, Frontier, or Windstream). All of those potential outcomes are more favorable than T-Mobile's acquisition of Sprint.

Sprint's claims now are particularly egregious considering that, after years of struggling with the aftermath of its prior merger with Nextel, Sprint has finally put its financial house in order. It has returned to profitability, largely because it had to invest and compete effectively against a revitalized T-Mobile following DOJ's rejection of the proposed AT&T/T-Mobile merger and government signals to Sprint in 2014 that it would not be permitted to buy T-Mobile. Between 2005 and 2012, Sprint's operating margin was in steady decline, as it struggled after that disastrous Nextel deal. But since 2012 Sprint has seen its operating margin improve.

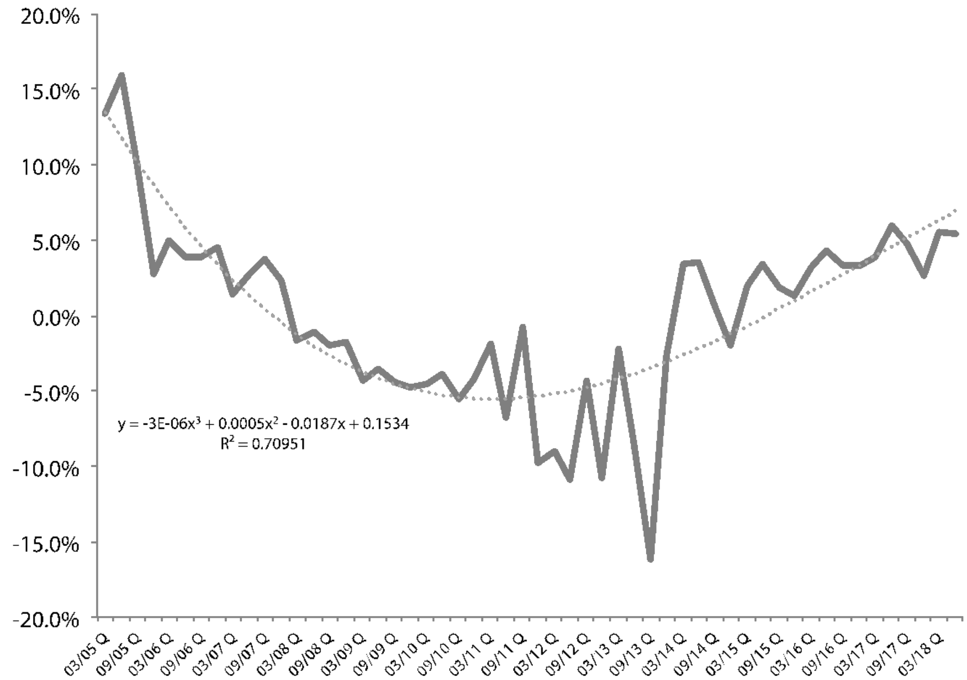
Sprint - Operating Margin (Q1 2005–Q1 2018)



Source: Sprint quarterly SEC filings. Curved-dotted line (and equation) represents a polynomial curve fitted to the data.

Sprint's Return on Invested Capital ("ROIC") also steadily declined following the Nextel merger, entering negative territory in 2008 and remaining there until mid-2014. However, it returned to positive territory following the implementation of Marcelo Claure's turnaround plans. Its ROIC in consecutive quarters in 2018 was 5.6 percent then 5.4 percent. That's above values of T-Mobile's ROIC for 2013 (3.8 percent) and 2014 (3.1 percent), when T-Mobile was universally recognized as ascendant and independently viable. It is difficult to meaningfully compare Sprint's ROIC with AT&T's or Verizon's, vertically integrated conglomerates that operate in many industries outside of wireless telecommunications, but Sprint's ROIC is also above U.S. Cellular's (the only wireless carrier outside the big four that is publicly traded). Sprint is generating positive returns and on the upswing.

Sprint – Return on Invested Capital (Q1 2005–Q1 2018)



Source: Sprint quarterly SEC filings. Curved-dotted line (and equation) represents a polynomial curve fitted to the data.

Sprint's Network Coverage Does Lag Behind Other Carriers in Rural Areas, But It Overcomes This Gap Through Reciprocal Roaming Agreements and Competes on Price

That Sprint's network coverage is inferior to its national carrier rivals is not notable: Sprint's competitors have attempted to make hay of this fact in their commercials, and Sprint has even recognized this fact in its own advertisements, using it as a rationale for why customers that do not value coverage in areas they'll never visit should save money by choosing Sprint.[64]

The U.S. is a vast but sparsely populated geographic space, where people are packed together in cities. According to the U.S. Census Bureau, nearly 63 percent of the U.S. population lives in cities that occupy just 3.5 percent of the nation's land area.[65] Sprint's overlay of its facilities-based LTE coverage area with its competitors on a map of the U.S. is therefore highly

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[64] *See* Mike Gikas, "Can You Believe Cell-Phone Carrier TV Ads?" *Consumer Reports* (Feb. 1, 2017).

[65] "U.S. Cities are Home to 62.7 Percent of the U.S. Population, but Comprise Just 3.5 Percent of Land Area," United States Census Bureau (Mar. 4, 2015).

misleading, and also irrelevant. The more informative metric is to measure what percentage of the U.S. population lives in areas where Sprint has deployed LTE (and even that is not completely informative, as roaming agreements have long been an important aspect of Sprint and other carriers' rural coverage).

U.S. Wireless Carrier Facilities-Based Mobile Broadband Deployment U.S. Population Coverage

Percent of U.S. Population (2016 est.)	Any Mobile Broadband Facilities	LTE
AT&T	99.3%	97.8%
Verizon	97.5%	97.3%
T-Mobile	95.2%	94.9%
Sprint	92.2%	88.1%

Sources: FCC Form 477 data as of Dec. 31, 2017 (centroid methodology); FCC 2016 block-level population estimates; Free Press research. Values do not reflect coverage offered via roaming agreements.

Relative to the other national carriers, Sprint's LTE deployment gap is almost entirely due to a gap in rural-area coverage. Sprint's urban area population coverage is nearly universal (at 95.5 percent) and comparable to its competitors.

U.S. Wireless Carrier Facilities-Based Mobile Broadband Deployment U.S. Urban Area Population Coverage

Percent of U.S. Urban Population (2010 block-level)	Any Mobile Broadband Facilities	LTE
AT&T	99.8%	99.4%
Verizon	98.2%	98.1%
T-Mobile	98.0%	97.7%
Sprint	97.6%	95.5%

Sources: FCC Form 477 data as of Dec. 31, 2017 (centroid methodology); 2010 Census block-level population counts; Free Press research. Values do not reflect coverage offered via roaming agreements. Values are imprecise due to the use of 2010-census population counts and the possibility of previously unpopulated blocks becoming urban blocks.

Rural coverage is a different story. Sprint's LTE network reaches just 56.2 percent of the rural U.S. population, well behind the proportion of the rural population reached by T-Mobile-owned LTE facilities (83.1 percent), and even further behind AT&T's and Verizon's facilities-based LTE reach (91.2 percent and 93.7 percent, respectively).

U.S. Wireless Carrier Facilities-Based Mobile Broadband Deployment
U.S. Rural Area Population Coverage

Percent of U.S. Rural Population (2010 block-level)	Any Mobile Broadband Facilities	LTE
AT&T	97.4%	91.2%
Verizon	93.9%	93.7%
T-Mobile	83.3%	83.1%
Sprint	68.6%	56.2%

Sources: FCC Form 477 data as of Dec. 31, 2017 (centroid methodology); 2010 Census block-level population counts; Free Press research. Values do not reflect coverage offered via roaming agreements. Values are imprecise due to the use of 2010-census population counts and the possibility of previously unpopulated blocks becoming populated rural blocks.

This clearly matters to people in rural areas, and to the Members of Congress who serve them and know of their struggles to get better coverage. Rural coverage is of course an important factor in the choice of cellular carrier for the persons who live in, or frequently travel through, these areas. And we cannot and should not dismiss the complaints from every quarter of the country that actual rural coverage does not match what the carriers claim. But Sprint can (and does) increase its rural availability through roaming agreements. Such agreements can be reciprocal: Small regional rural carriers provide Sprint with favorable roaming terms in exchange for similar terms for their customers when those individuals leave these rural carriers' facilities-based coverage footprints. And for the vast majority of the U.S. population, remote rural coverage is simply not a factor they weigh when choosing their carrier. Sprint is able to focus on customers who do not value rural coverage as much and offer them lower prices.

T-Mobile's Claimed Benefits of Accelerated 5G Deployment Are Vastly Overstated, Non-Merger Specific, Non-Cognizable, and Do Not Outweigh the Harms of this Merger

Sprint's and T-Mobile's primary claimed benefit from the proposed merger is acceleration of their deployment of 5G. Other witnesses will undoubtedly discuss the flaws in T-Mobile's claims that the merger would markedly improve the national 5G picture or rural 5G coverage. Yet T-Mobile's and Sprint's primary claimed method for achieving those benefits in their FCC merger application is that they would "invest nearly $40 billion to bring the combined company into the 5G era over the next three years, or approximately three times the amount that T-Mobile would have invested on its own without the merger."[66] This is a sleight-of-hand which makes no mention of the amount that both Sprint and T-Mobile would have spent over the next three years.

If we examine the "but-for" scenario, we see that the marginal investment attributed to the merger is very small, the acceleration of investment is very small, and it may not be real. The combined companies took in $76.7 billion in revenues and invested $17.8 billion in capital during 2018. This equates to a combined capital intensity value of 23.2 percent (capital intensity is capital expenditures as a percentage of revenues). This level of capital intensity is high for the telecom industry, which typically see carriers ranging from mid- to high-teens percentages, depending on where each company is in its technology and upgrade cycle.

Thus, even if the stand-alone companies' revenues remained constant at 2018 levels, and even if their capital intensities declined back to the high-teens, the two firms would easily invest $40 billion over the next three years as stand-alone companies. Indeed, financial analyst firm MoffettNathanson recently released its projections for the top telecom industry firms through 2022. MoffettNathanson estimated that between 2019 and 2021, Sprint alone will invest $36.7

[66] Application at 15.

billion, with T-Mobile's projected 3-year capital outlay estimated at $17.9 billion. Sprint's capital expenditures are higher than its peers due to its unique capital outlays for its handset leasing program. This is real capital that Sprint could shift to 5G network construction. However, even without any such shift, MoffettNathanson estimated that Sprint would invest $18 billion during 2019-2021 on network investments.[67] That puts investment estimates for the two stand-alone firms at approximately $36 billion over the coming three-year period on network capital.

Thus, at best, the merging firms claim a total capital investment acceleration of $4 billion over a three-year period, not a new $40 billion as they sometimes pretend. This equates to a four-month acceleration of network capital spending.

T-Mobile and Sprint also claim that without the merger they "would be unable . . . to deploy a fully capable 5G network as quickly or as cost efficiently as New T-Mobile."[68] But T-Mobile and Sprint each independently have committed to deploying 5G technologies across their networks within the same time period the firms now promise with the merger.[69] Sprint has promised a nationwide 5G network by the end of 2019, and T-Mobile has indicated it would fully deploy its 5G network by the end of 2020.

Just one month prior to the public announcement of the merger with Sprint, T-Mobile's CTO again confirmed the company's 2020 completion date for its 5G deployment plans.[70] He also explained how T-Mobile's existing advanced LTE network will have more than enough capacity

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[67] MoffettNathanson Media & Telecom, "Telecom and Cable Capital Spending Outlook 2019" (Jan. 18, 2019).

[68] Application, App. B (Declaration of Neville R. Ray), ¶ 4.

[69] *See* Mike Dano, "Sprint promises to launch nationwide mobile 5G network in first half of 2019," *FierceWireless* (Feb. 2, 2018) ("'We're working with Qualcomm and network and device manufacturers in order to launch the first truly mobile [5G] network in the United States by the first half of 2019,' Sprint CEO Marcelo Claure said today during the carrier's quarterly earnings conference call with investors. 'This development will put Sprint at the forefront of technology innovation on par with other leading carriers around the world. . . . We believe our next-gen network will truly differentiate Sprint over the next couple of years.' That timeline would put Sprint ahead of T-Mobile in terms of launching nationwide mobile 5G; T-Mobile has promised to start its launch in 2019 and finish it in 2020.").

[70] *See* Comments of Neville R. Ray, CTO & EVP, T-Mobile US, Inc., Morgan Stanley European Technology, Media & Telecom Conference (Nov. 16, 2017).

for the foreseeable future, how its 5G and LTE technologies will complement each other, how T-Mobile would beat AT&T and Verizon to market with 5G, and discussed the company's excess spectrum capacity.[71] T-Mobile now wants everyone to believe that without the government's blessing to wipe out its closest competitor in Sprint, T-Mobile will be "unable" to do what it just said it was going to do.

Like T-Mobile, Sprint too outlined its nationwide 5G deployment plans just ahead of the news of the merger. Just a few weeks prior to agreeing to merge with T-Mobile, Sprint laid out in detail its plan to deploy "the first national wireless 5G network in 2019."[72] And as would be true for all carriers (including AT&T, Verizon, and even New T-Mobile), Sprint's CTO noted how incremental improvements to its 4G network would massively increase capacities above projected demand for the foreseeable future, as it also rolls out a national 5G network.[73]

Sprint's confidence in its network improvement plans and its ability to finally leverage its 2.5 GHz spectrum advantages, expressed repeatedly in the months leading up to the merger announcement, stand in stark contrast to the tales of woe in their merger application at the FCC. It is simply impossible to square Sprint's March 2018 statement that "we have the next few years where we have a clear advantage"[74] with the FCC application's claim that "Sprint's standalone

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[71] *See* Comments of Neville R. Ray, CTO & EVP, T-Mobile US, Inc., European and Emerging Telecoms Conference (Mar. 20, 2018) ("[W]e want to build out nationwide 5G. . . .. <u>But in '19, there's going to be a lot of 5G available to our customers in the U.S. and I compare and contrast that to the pockets of millimeter wave 5G that will exist from Verizon and AT&T</u>, and I think that's going to be tremendous for our brand, for our messaging and for our customers.") (emphasis added).

[72] *See* Comments of Michel Combes, President, CFO & Director, Sprint Corporation, 26th Annual Media, Telecom & Business Services Conference (Mar. 7, 2018) ("Combes Comments").

[73] *See id*. ("Massive MIMO is a way to really improve quality of the network in terms of speed, 10 times LTE speed; in terms of reach, meaning extending the coverage; and in terms of bandwidth, at the edge of the cell, so which means a much better experience for the customer. So there, we intend to start in Q2 this year to roll [out] Massive MIMO. . . Massive MIMO . . . to introduce smoothly 5G, meaning that as soon as 5G in our software will be available, probably by the end of the year, we'll be able from a software point of view just to switch on to 5G, our Massive MIMO sites. . . . <u>[O]ur intent is to have . . . a national 5G network in first half of 2019</u>.") (emphasis added).

[74] *Id*. ("We have a unique opportunity to regain leadership in network, leveraging 5G. So, why should we miss it? . . . <u>we have the next few years where we have a clear advantage</u>. So, let's play it. So, you can expect from us, and that's what we have guided the market, that we will invest more in the next 2 to 3 years. . . . Last but not least, <u>it's also very</u>

future will not be one that allows it to be an effective competitor to Verizon and AT&T on a nationwide basis."[75]

5G availability is one of the claimed benefits of New T-Mobile. The other is enhanced capacity. But there is scant evidence of demand for capacities that will not be met more than adequately by these companies independently, using their existing and planned networks. For example, T-Mobile claims its planned standalone 5G network would have broad coverage, but lack capacity.[76] This is misleading because it completely ignores the fact that T-Mobile will no doubt acquire additional spectrum at future auctions or on the secondary market. This claim also ignores the fact that there likely will be little need for any additional excess capacity given the longevity of its 4G network. Regardless, T-Mobile's arguments do not offer a cognizable merger benefit that outweighs the lasting harm of a loss of a value-focused nationwide carrier.

Another argument is that Sprint's 5G network would lack nationwide coverage.[77] What this fails to account for, however, is the competitive benefits where Sprint would operate, how that is a critical component of the competitive forces that discipline the carriers with larger national footprints, and how this shortcoming has in fact benefited competition during the 4G LTE-era as discussed above.[78] Indeed, Sprint's CFO made this clear in March when he stated "we are still the

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good to invest earlier than later in 5G for two reasons. First it will support our unlimited offers. So that will help us to continue the race for unlimited, where some of our competitors might be a little more reluctant. And second, it reduces the cost per megabyte, because with the spectrum that we have, with the efficiency of 5G, we can reduce our cost to operate network. So on one side, we will continue to streamline the organization. On second, we will get the benefit of this 5G transition in terms of data cost." (emphases added).

[75] Application at 98.

[76] *See id*. at 20.

[77] *See* Application at 23-24.

[78] With consolidation wiping out most regional carriers, Sprint's modest geographic shortcomings in part force the company to more aggressively compete nationally on price and non-price dimensions. If the market further consolidates to three equal-sized (in terms of national coverage and quality) firms, consumers will only see "competition" in the form of product add-on differentiation, similar to the offerings of mid-2018 (*e.g.*, Sprint's bundling of Hulu, T-Mobile's bundling of Netflix, AT&T's bundling of DirecTV Now). In other words, it is likely whatever value is lost by not having Sprint's newer networks deployed to the entire country (like the other three national carriers) is more than outweighed by Sprint's subsequent need to compete more aggressively on price in order to make up for this perceived shortcoming.

most aggressive players in the marketplace. We had to compensate a little bit for this bad perception by more aggressive pricing."[79]

T-Mobile Has Broken Its Promises Before

In the end, T-Mobile's last-ditch argument is that no matter what the economic and engineering models show about incentives to the contrary, the company's "mavericky" DNA means that it will keep its promises and keep on competing just the same as ever – even once it's just as large as AT&T and Verizon. These kinds of claims are unpersuasive, to put it mildly. A company has a duty to its shareholders to maximize returns, not to uphold its current CEO's self-styled quirky brand. But beyond being unconvincing in any case, these promises are especially worrisome because (like most big carriers), the so-called uncarrier has a track record of breaking its promises too, often saying one thing and doing another.

The several egregious examples of this behavior further underscores the need to scrutinize the merger proponents' claimed but exaggerated benefits of the merger, and raises questions about T-Mobile's credibility.

For example, in 2016 the FCC received complaints that T-Mobile customers were unable to reach certain rural customers and that calls were failing. T-Mobile was alerted to the issue and ensured the FCC that the problem had been resolved, but complaints continued. The FCC investigated the claims further, revealing that T-Mobile had injected false ringtones in certain calls that failed to connect. In April 2018, the FCC concluded: "Rural call completion problems have significant and immediate public interest ramifications. They cause rural businesses to lose revenue, impede medical professionals from reaching patients in rural areas, cut families off from

[79] *See* Combes Comments ("[I]t's obvious that once you change the perception, we would be able to close the gap in terms of pricing, [ ] which will give us some support to reignite growth for our wireless revenue."). This is a strong indicator of what is to come post-merger: the end to price competition in the U.S. wireless market.

their relatives, and create the potential for dangerous delays in public safety communications."[80] T-Mobile agreed to pay the FCC a $40 million settlement.

There are also allegations that T-Mobile has vastly overstated its 4G LTE rural speeds and even its coverage at those speeds in maps submitted to the FCC, in response to universal service Mobility Fund requirements.[81] The Mobility Fund was created to help wireless carriers build out to rural America, and requires that wireless carriers submit maps of their 4G LTE coverage with speeds of 5 gigabits per second download or faster. However, 95.8 percent of tests showed speeds below that threshold or no 4G LTE coverage at all. In many places where T-Mobile certified it had coverage, there were no cell sites in operation. This possible misrepresentation has negative consequences not just for T-Mobile's customers but for other carriers who do serve rural customers because they would be denied Mobility Fund support.

Finally, just last year Senator Wyden found several wireless carriers selling customers' location data to third parties.[82] Soon after these practices were revealed, T-Mobile CEO John Legere pledged that T-Mobile would not sell location data to "shady middlemen."[83] Yet in January, Motherboard broke a story detailing how T-Mobile (and other carriers) were still selling location data to third party aggregators, which was making its way to bounty hunters, debt collectors and stalkers.[84]

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[80] Order, *In the Matter of T-Mobile USA Inc.*, 33 FCC Rcd 3737, ¶ 3 (Apr. 16, 2018).

[81] *See* Informal Request for Commission Action of Rural Wireless Association, Inc., WC Docket No. 10-90 & WT Docket No. 10-208 (filed Dec. 26, 2018).

[82] *See* Letter from Senator Ron Wyden, to Ajit Pai, Chairman, FCC (May 8, 2018), https://www.wyden.senate.gov/imo/media/doc/wyden-securus-location-tracking-letter-to-fcc.pdf.

[83] John Legere (@johnlegere), Twitter (June 19, 2018, 1:17 PM), https://twitter.com/JohnLegere/status/1009168217586061313.

[84] *See* Joseph Cox, "Stalkers and Debt Collectors Impersonate Cops to Trick Big Telecom Into Giving Them Cell Phone Location Data," *Motherboard* (Mar. 6, 2019) ("In several cases, a stalker impersonated a U.S. Marshal and reported a fake kidnapping in order to get telecom companies to give them real-time cell phone location data."); Joseph Cox, "I Gave A Bounty Hunter $300. Then He Located Our Phone," *Motherboard* (Jan. 8, 2019).