United States Senate
WASHINGTON, DC 20510

February 12, 2019

Makan Delrahim
Assistant Attorney General
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530-0001

Dear Assistant Attorney General Delrahim:

We write urging you to reject the proposed merger between T-Mobile and Sprint and to seek an injunction to block this transaction. The two companies have proposed a four-to-three merger that is likely to raise prices for consumers, harm workers, stifle competition, exacerbate the digital divide, and undermine innovation. Furthermore, we remain unconvinced that the merger would speed up the deployment of next-generation 5G networks or extend affordable coverage to all Americans. The Department of Justice and the Federal Communications Commission (FCC) have previously been very clear in discouraging these companies from merging. Blocking this proposed combination is necessary to send a strong signal that our enforcement officials are vigorously protecting Americans from harmful anticompetitive behavior.

The public FCC docket for this merger raises the alarm that the proposed transaction would increase consolidation and produce a country-club market in our critical telecommunications sector. After the merger, the three remaining members of this exclusive club will have every incentive to shut the door on new members, happily divide the market, and collect ever-rising monthly rents from wireless subscribers with few real alternatives. At least two studies demonstrate that Americans' monthly bills will go up dramatically as a result of this merger.[1] Beyond price increases, at least one review has raised the concerning possibility that the

[1] *See* Joint Declaration of Joseph Harrington, Coleman Bazelon, Jeremy Verlinda, and William Zarakas, The Brattle Group (hereinafter "Brattle Group Declaration"), *in* Dish Network Corporation Petition to Deny, , *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, Exhibit B, pp. 10, Aug. 27 2018, https://ecfsapi.fcc.gov/file/108271088719800/REDACTED%20DISH%20PTD%20Sprint%20TMO%208-27-18.pdf (hereinafter "Dish Network Petition to Deny"); Altice Supplemental Response, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 25–30, Jan. 28 2019, https://ecfsapi.fcc.gov/file/1012865940796/(REDACTED)%20Altice%20USA%20Inc.%20-%20Supplemental%20Response%20to%20Information%20Request%20(1.28.19).pdf (hereinafter "Altice Supplemental Response").

merger will reduce wages for thousands more workers.[2] Finally, this merger may hinder efforts to bridge the digital divide facing rural communities and many lower- and middle-income Americans.

For more than 30 years, our enforcers have understood that fostering robust competition in telecommunications markets is the best way to provide every American with access to high-quality, cutting-edge communications at a reasonable price.[3] This merger will turn the clock back, returning Americans to the dark days of heavily consolidated markets and less competition, with all of the resulting harms. Our enforcement officials are the last line of defense preventing reconsolidation of our telecommunications markets at the expense of American consumers. We urge you to act to prevent this dangerous merger from proceeding.

This Merger Will Lead to Dangerously High Levels of Market Concentration

If this merger is approved, it will be a sharp blow to competition in the telecommunications industry. There are currently only four nationwide, facilities-based mobile carriers: AT&T, Verizon, T-Mobile, and Sprint.[4] This merger could leave only three providers with over 98% of total facilities-based wireless connections, according to one estimate.[5] This should raise serious concerns. Antitrust regulators around the world have consistently blocked four-to-three mergers in the mobile and telecommunications industry,[6] and those who have allowed such mergers have lived to regret it.[7] The competitive harms of this sort of four-to-three

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[2] *See* Adil Adel and Marshall Steinbaum, *Labor Market Impact of the Proposed Sprint-T-Mobile Merger* Economic Policy Institute & Roosevelt Institute http://rooseveltinstitute.org/labor-market-impact-proposed-sprint-t-mobile-merger/.

[3] *See* Tim Wu, *A Brief History of American Telecommunications Regulations*, OXFORD ENCYCLOPEDIA OF LEGAL HISTORY (Black, ed. 2009).

[4] *See* Petition to Deny of Dish Network Corporation, WT Docket No. 18-197, pp. 43–45, Aug. 27, 2018.

[5] Anna-Maria Kovacs, *Competition in the U.S. Wireless Service Market*, Georgetown Center for Business and Public Policy, at 5 (August 2018) https://cbpp.georgetown.edu/sites/default/files/Policy%20Paper%20-%20Kovacs%20-%20Wireless%20Competition%202018-08.pdf; *See also* Petition to Deny of Public Knowledge, Open Markets Institute, Writers Guild of America, West, Inc. Common Cause & Consumers Union, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. ii, Aug. 27 2018, https://ecfsapi.fcc.gov/file/10827862305575/T-Mobile%20Sprint%20Petition%20to%20Deny%20CC%20CU%20OTI%20PK%20WGA.pdf ("The current market sees four dominant, nationwide carriers, but if T-Mobile and Sprint are allowed to merge, 98 percent of the country's wireless market would be in the hands of three providers.").

[6] *See, e.g.,* European Commission, *Hutchison 3G UK/Telefonica UK*, Case M.7612 (Nov. 5 2016), http://ec.europa.eu/competition/mergers/cases/decisions/m7612_6555_3.pdf (rejecting a four-to-three merger of mobile operators in the United Kingdom); European Commission, *Statement by Commissioner Vestager on Announcement by Telenor and TeliaSonera to Withdraw from Proposed Merger* (Sept. 11 2015), http://europa.eu/rapid/press-release_STATEMENT-15-5627_en.htm. (regarding the end of a proposed four-to-three merger of mobile carriers in Denmark).

[7] *See e.g.* Austrian Regulatory Authority for Broadcasting and Telecommunications, *Price Increases Caused by Mergers Were Followed by Price Decreases Due to Entry of New Mobile Operators* (Mar. 14 2016), https://www.rtr.at/en/pr/PI14032016TK (concluding that a four-to-three merger among mobile virtual network operators led to "average [price] increases of 20-30% in the pre-paid segment and 13-17% in the post-paid segment.").

merger are well documented,[8] and American enforcers have thrown cold water on similar four-to-three mergers in other industries.[9]

Our enforcers have been emphatic in recent years that a four-to-three merger in the telecommunications industry would be harmful. In 2011, the Department of Justice acted decisively to block AT&T's acquisition of T-Mobile.[10] Only a few years later, Sprint and T-Mobile were reported to have quietly approached the Department of Justice and the FCC about the possibility of merging.[11] Officials at both agencies made clear that they would vigorously oppose such a merger.[12] History has proven that those were the right decisions. Consumers benefited from increased innovation and price competition after AT&T's proposed acquisition of T-Mobile was rejected,[13] and prices again declined dramatically in the years after regulators effectively stopped Sprint and T-Mobile from merging in 2014.[14] T-Mobile and Sprint are once again proposing the same four-to-three merger that they were warned to abandon just a few years ago, with little change in circumstances.

A T-Mobile-Sprint merger would produce unacceptably high levels of concentration in an already consolidated wireless industry. The Herfindahl-Hirschman Index (HHI) is the most common measure of a merger's effect on consolidation. It is widely used by economists and antitrust enforcers. Expert estimates indicate that this particular merger would lead to a 451 point increase in the HHI for a total HHI value of 3,265, well above the 2500 HHI threshold to be classified as a "highly concentrated market."[15] The Horizontal Merger Guidelines issued by the Department of Justice and Federal Trade Commission state that mergers "resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed likely to enhance market power."[16] This proposed transaction far exceeds this threshold.

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[8] *See* Jonathan Baker & Carl Shapiro, *Reinvigorating Horizontal Merger Enforcement*, AEI BROOKINGS JOINT CENTER FOR REGULATORY STUDIES, n.150 (June 2007), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1089198.
[9] *See e.g.*, Complaint, United States v. Alcan, Inc, 1:03-CV02012, ¶ 3 (D.D.C. Sept. 29, 2003) ("By reducing the number of major North American producers of brazing sheet from four to three, this acquisition would substantially increase the likelihood that the combined firm will unilaterally increase, or that it and the other major competitor will tacitly or explicitly cooperate to increase, prices of brazing sheet to the detriment of consumers.").
[10] *See* Michael J. De La Merced, *AT&T Ends $39 Billion Bid for T-Mobile*, N.Y. TIMES (Dec. 19 2011), https://dealbook.nytimes.com/2011/12/19/att-withdraws-39-bid-for-t-mobile/.
[11] Bill Baer and Tom Wheeler, *Here's Who Loses Big Time If Sprint and T-Mobile Are Allowed to Merge* (May 19 2017), https://www.cnbc.com/2017/05/19/heres-who-loses-big-time-if-sprint-and-t-mobile-are-allowed-to-merge-commentary.html.
[12] *Id.*
[13] *See, e.g.,* Alice Truong, *Blocking AT&T's Merger With T-Mobile Has Been Great for US Consumers, But Bad News for Operators*, QUARTZ (Dec. 15 2014), https://qz.com/312907/blocking-atts-merger-with-t-mobile-has-been-great-for-us-consumers-but-bad-news-for-operators/.
[14] *See, e.g.*, Mike Dano, *Cost of Wireless Services Falls 13%, Biggest Decline in 16 Years: Labor Dept.*, FIERCEWIRELESS (May 22 2017), https://www.fiercewireless.com/wireless/cost-wireless-service-falls-13-biggest-decline-16-years-labor-dept.
[15] *See* Reply of Dish Network Corporation, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 35, Oct. 31 2018, https://ecfsapi.fcc.gov/file/103127405997/REDACTED%20-%20DISH%20Reply%20TMO%20Sprint%2010-31-18.pdf (discussing diversion ratios) (hereinafter "Dish Reply").
[16] U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines § 5.3 (2010).

This merger threatens to produce not only dangerous levels of market concentration, but also an unacceptable consolidation of valuable wireless spectrum. The record indicates that this merger would create a company that exceeds the Federal Communications Commission's spectrum screen in a majority of counties around the country, or 532 cellular market areas.[17] While T-Mobile requested the spectrum screen be raised even before this merger was proposed, the New T-Mobile would vastly exceed its own proposed spectrum screen in most of the United States.[18] Rather than promote competition, this consolidation of spectrum holdings would foreclose competition in nationwide and even regional markets. The predicted increase in HHI and the spectrum screen should give any enforcer or regulator assessing this deal serious pause.

We are deeply concerned that the merger of Sprint and T-Mobile in particular will eliminate competition that has been shown to benefit consumers and stifle the emergence of new carriers. Both T-Mobile and Sprint, as well as the parties opposing the merger, have filed submissions that indicate a high diversion ratio between the two merging parties.[19] This means that consumers see T-Mobile's and Sprint's products as closely interchangeable offerings and switch between the services easily and often. This is to be expected considering that Sprint and T-Mobile have aggressively competed against each other to attract middle- and lower-income consumers.[20] Allowing these two close competitors to merge will remove an important market dynamic that has driven prices down in the industry in recent years.[21]

In order to gloss over the absence of strong economic or legal arguments in their favor, the merging parties seek to shout down concerns over whether they will continue to compete aggressively with a single name: John Legere.[22] They argue that John Legere, the current CEO of T-Mobile and the future CEO of the proposed New T-Mobile, has a legacy as an innovative business leader that he will not wish to risk.[23] While Mr. Legere may be leading a dynamic

[17] *See* Dish Reply at 35.
[18] Petition to Deny of the NTCA – The Rural Broadband Association, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 12, Aug. 27 2018, https://ecfsapi.fcc.gov/file/10827780817015/08.27.18%20Sprint%20TMobile%20Petition%20to%20Deny%20(002).pdf (hereinafter "Rural Broadband Association Petition to Deny").
[19] *See* Joint Opposition of T-Mobile US, Inc. and Sprint Corporation, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, Appendix F: Declaration of Compass Lexecon, pp. 126–131,Sept. 17 2018, https://ecfsapi.fcc.gov/file/109171182702890/Appendices%20A-K%20(Public).pdf ("We find that porting-based diversion ratios between Sprint and T-Mobile are substantially larger than those derived from share and survey data.") (hereinafter "Lexecon Declaration").
[20] *See* Comments of Communications Workers of America, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 24–30, Aug. 27 2018, https://ecfsapi.fcc.gov/file/10827275801503/CWA%20T-Mobile-Sprint%20Comments%208-27-2018.pdf (hereinafter "CWA Comments"); Dish Reply at 13–15.
[21] *See* Bill Baer and Tom Wheeler, *Here's Who Loses Big Time If Sprint and T-Mobile Are Allowed to Merge* (May 19, 2017), https://www.cnbc.com/2017/05/19/heres-who-loses-big-time-if-sprint-and-t-mobile-are-allowed-to-merge-commentary.html.
[22] *See, e.g.,* Merging Parties' Public Interest Statement at 51.
[23] *See e.g.*, *id.*, Appendix D: Declaration of Peter Ewens at 5 ("New T-Mobile will maintain the T-Mobile philosophy of placing a high value on its pro-customer reputation as its brand, and the reputations of the leadership

company today, there is reason to doubt that T-Mobile will remain dynamic if it swallows its closest competitor. As a smaller player, T-Mobile has had to be innovative and aggressive on pricing to compete with bigger players like Verizon and AT&T. But if T-Mobile succeeds in acquiring Sprint, Mr. Legere will not need to run the company like an aggressive maverick player to attract customers. The New T-Mobile's shareholders will expect Mr. Legere to take advantage of a consolidated marketplace, and they will hold him accountable if he does not. For this reason, Mr. Legere's presence at the New T-Mobile is insufficient to guarantee it will continue to innovate and push prices lower. A charismatic CEO is not a legal commitment and does not change a company's economic incentives. Only the discipline of a competitive marketplace can guarantee continued incentives to innovate in the consumer's interest.

This Merger Will Likely Cause Americans' Monthly Bills to Jump Dramatically

Given that this merger will weaken competitive pressures that otherwise discipline price increases, it is no surprise that it is likely to lead to higher monthly bills for consumers. One study has estimated that just the unilateral effects of this merger will lead to price increases of at least 9% for postpaid plans and at least 10% for prepaid plans.[24] Another submission has predicted that this merger will lead to higher monthly bills for consumers.[25] At a time of growing inequality, we cannot afford another merger that will likely increase costs for the many, while lining the pockets of a few wealthy executives and shareholders. We urge you to challenge this merger to ensure that there is continued downward pressure on consumers' monthly bills.

The merging parties seek to rebut the economic models that demonstrate price increases by using well-worn catchphrases and vague promises. First, they argue that the New T-Mobile will continue to act as a disruptive un-carrier because it will be incentivized to "fill up" increased capacity in its network by keeping prices low.[26] However, even a merger that creates a monopoly can produce increased capacity. This does not mean that the monopolist will not artificially reduce output in order to drive up price, or that it will generously offer its excess capacity to competitors.[27] T-Mobile is far more likely to continue to act as a disruptive un-carrier if this merger is blocked and today's competitive market pressures remain the same. Second, the merging parties claim that the merger's projected efficiencies will lead to savings for consumers.[28] However, these projected merger efficiencies – which have not been sufficiently

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team, most notably John Legere, are inextricably intertwined with the company's commitment to shake up industry conventions in favor of the customer.").

[24] *See* Brattle Group Declaration at 10.

[25] Altice Supplemental Response at 30.

[26] T-Mobile US, Inc. and Sprint Corporation Description of Transaction, Public Interest Statement, and Related Demonstrations, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp, iii, June 18 2018, https://ecfsapi.fcc.gov/file/10618281006240/Public%20Interest%20Statement%20and%20Appendices%20A-J%20(Public%20Redacted)%20.pdf (hereinafter "Merging Parties' Public Interest Statement").

[27] *See* Reply of Dish Network, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 33, Oct. 31 2018, https://ecfsapi.fcc.gov/file/103127405997/REDACTED%20-%20DISH%20Reply%20TMO%20Sprint%2010-31-18.pdf (discussing why increased capacity may not lead to lower prices).

[28] *See* Lexecon Declaration at 14 ("Among other things, we show that, even if one accepts all of the other assumptions of HBVZ's merger simulation analysis, *simply correcting it to account for the proposed merger's projected efficiencies* leads to the conclusion that the proposed merger will strengthen competition and benefit

independently verified[29] and which, as explained further below, may be specious – may only materialize around 2024.[30]

Finally, the merging parties seek to ward off scrutiny of likely price increases with the old canard that the transaction will yield "substantial benefits in quality-adjusted price."[31] Even if true, this is insufficient since consumers do not pay 'quality adjusted' mobile phone bills, nor do they earn 'quality-adjusted' paychecks. If this merger is approved, Americans living paycheck to paycheck will see a costly increase in their monthly bill.

In a last-ditch effort to mask this underlying reality, T-Mobile entered a new letter into the FCC docket committing to maintain legacy rate plans for three years if the merger is approved.[32] T-Mobile heavily caveats this commitment with fine print that permits the company to raise prices if plans with "more data are made available."[33] This vague commitment would seemingly permit T-Mobile to raise prices if there is even the most minimal change in performance or technology. Even if this commitment were turned into a formal merger condition, it would remain so vague as to be unenforceable. Moreover, a three year rate lock is an inadequate short-term solution to the long-term structural problem that the merger will create. Only competitive market pressures can keep rates down over the long run, not temporary rate caps. The bottom line is that no such commitments would be necessary if the Department of Justice blocks this merger and allows the market to continue disciplining consumer costs.

This Merger Is Bad For Workers

Studies have raised the specter that this merger could lead to increased labor market concentration and reduced wages for thousands of retail workers selling electronics, including wireless equipment and services. In response to a question from Senator Blumenthal, Federal Trade Commission Chairman Joseph Simon has previously set out a framework for analyzing the effects of consolidation in the labor market. [34] Some economic policy experts have applied Chairman Simons's framework for analyzing labor market consolidation effects to this merger.[35]

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consumers.") (emphasis added); Merging Parties' Public Interest Statement, Exhibit F: Evans at 116 ("To analyze the Transaction's competitive effects, I have relied on analyses prepared by the Applicants concerning (a) the characteristics of the 5G networks New T-Mobile will deploy in 2024").

[29] *See* DISH at 11, https://ecfsapi.fcc.gov/file/103127405997/REDACTED%20-%20DISH%20Reply%20TMO%20Sprint%2010-31-18.pdf (citing instances of Dr. Evans and Compass Lexecon relying on T-Mobile's own assumptions to project merger efficiencies).

[30] Merging Parties' Public Interest Statement, Exhibit G: Declaration of David S. Evans at 116 ("To analyze the Transaction's competitive effects, I have relied on analyses prepared by the Applicants concerning (a) the characteristics of the 5G networks New T-Mobile will deploy in 2024").

[31] Merging Parties' Public Interest Statement at 120.

[32] T-Mobile Letter, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197 (Feb. 4 2019) https://ecfsapi.fcc.gov/file/102042192910190/Pricing%20Commitment%20Ex%20Parte%2002.03.2019.pdf.

[33] *Id.*

[34] *See* Subcommittee on Antitrust, Competition Policy and Consumer Rights, *Oversight of the Enforcement of the Antitrust Enforcement Laws* (Oct. 3 2018), https://www.judiciary.senate.gov/meetings/10/03/2018/oversight-of-the-enforcement-of-the-antitrust-laws.

[35] *See* Adil Adel and Marshall Steinbaum, *Labor Market Impact of the Proposed Sprint-T-Mobile Merger*, ECONOMIC POLICY INSTITUTE & ROOSEVELT INSTITUTE, http://rooseveltinstitute.org/labor-market-impact-proposed-sprint-t-mobile-merger/.

Although economists are still developing tools for predicting the labor market effects of a merger, the analysis contains some troubling findings.[36] For example, it concludes that this merger will increase concentration levels in the labor market for retail laborers selling electronics.[37] As a result, this analysis suggests that the New T-Mobile will likely be able to use its monopsony power to reduce these workers' wages by an average of $500-$3,200 a year.[38] In light of these disturbing findings, we strongly urge you to consider whether this merger should be rejected on the basis of its impact on labor market competition.

This Merger Will Harm Low-Income Consumers

If this merger is approved, the rising cost of wireless services will be borne most heavily by low-income consumers and vulnerable seniors who can least afford it. At least one study has concluded that this merger will dramatically increase consolidation in the prepaid market.[39] If this proposed merger is approved, the new T-Mobile would directly control an estimated 43% of prepaid wireless connections.[40] As noted above, this could lead prices to rise by at least 10%.[41] Because low-income consumers disproportionately rely on the prepaid wireless market, these communities will suffer the most, despite being the very communities that our antitrust laws should most vigorously protect. The Department of Justice and FCC should take any threats to the prepaid market as a discrete and serious challenge to vulnerable Americans.

The merging parties do not rebut these claims head-on, instead arguing that the prepaid and postpaid markets should not be analyzed separately.[42] They know all too well that these plans are not interchangeable. Prepaid plans routinely provide fewer features than comparable postpaid plans.[43] Consumers on prepaid plans are commonly those who do not have sufficient credit or are otherwise unable to qualify for a postpaid plan.[44] As such, consumers who use prepaid plans often cannot get or cannot afford a postpaid plan.

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[36] *Id.* at 1 (noting that the "empirical economics literature on the earnings effect of labor market concentration" is "nascent but fast-growing").
[37] *See id.*
[38] *Id.*
[39] *See* Dish Reply at 19 ("Nor do the Applicants persuasively rebut the fact that the merger would take the prepaid services submarket from three to only two national facilities-based competitors.").
[40] Anna-Maria Kovacs, *Competition in the U.S. Wireless Service Market*, Georgetown Center for Business and Public Policy, at 6 (August 2018) https://cbpp.georgetown.edu/sites/default/files/Policy%20Paper%20-%20Kovacs%20-%20Wireless%20Competition%202018-08.pdf.
[41] *See* Brattle Group Declaration.
[42] Joint Opposition of T-Mobile US, Inc. and Sprint Corporation, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 74–76, Sept. 17 2018, https://ecfsapi.fcc.gov/file/109171182702890/FINAL%20Joint%20Opposition%20091718%20(Public).pdf (hereinafter "Joint Opposition").
[43] Philip Michaels, *Prepaid vs. Postpaid Phone Service: What's Better for You?,* TOM'S GUIDE (Mar 25 2018), https://www.tomsguide.com/us/prepaid-vs-postpaid-phone-service,review-5269.html ("[P]ostpaid plans typically offer more perks than their prepaid counterparts.").
[44] *See* Rob Pegoraro, *Sprint's $15 Unlimited Data Plan Required a 'Hard Pull' Credit Report, and Its Not the Only One*, USA TODAY (June 25 2018), https://www.usatoday.com/story/tech/news/2018/06/25/switching-new-cell-phone-plan-may-prompt-hard-pull-credit-check/723158002/ ("To avoid a hard pull of your credit, you'll usually have to decline postpaid service in favor of 'prepaid' service.").

Another way this merger will harm low-income consumers is by undermining the wholesale market that mobile virtual network operators (MVNOs) depend upon. MVNOs often provide affordable and tailored offerings to communities that are not served by the dominant facilities-based mobile network operators, bringing connectivity to many vulnerable Americans.[45] Several MVNOs have focused their branding and customer acquisition to reach those who qualify for Lifeline assistance.[46] By contrast, facilities-based operators are generally less willing to engage Lifeline customers.[47] For example, T-Mobile has historically been antagonistic toward Lifeline, stating that it was not a "valuable or sustainable product for our base" and threatening to pull out of the program.[48] If the MVNO market is undermined, the Lifeline program and low income consumers will suffer.

That is precisely the risk here. The proposed merger would permit the New T-Mobile to steadily ratchet up wholesale prices on MVNOs and block them out of the market. Sprint and T-Mobile are key competitors against each other in the wholesale market.[49] This merger would dramatically increase concentration in the MVNO industry, with estimates concluding that the New T-Mobile would be the host for at least 60% of all wholesale subscribers.[50] Carriers will not sell wholesale access to competitors unless there is a compelling financial or operational reason. If this merger is approved, the New T-Mobile will not only have a dominant market share, but it will also be free of the competitive pressures from Sprint. As a result, the New T-Mobile will have less reason to provide affordable access to MVNOs that resell their services. Research shows that the merger will likely lead to an increase in wholesale prices to MVNOs.[51]

Already, there is evidence to suggest that T-Mobile intends to use the market position it will gain in order to put the squeeze on the wholesale market. For example, Altice and other MVNOs have reported that T-Mobile is signaling it will only renegotiate Sprint's existing

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[45] Sheila Dang and Diane Bartz, *Poorest U.S. Consumers Seen Hit Hard by T-Mobile, Sprint Merger*, REUTERS (May 2, 2018), https://www.reuters.com/article/us-sprint-corp-m-a-low-income/poorest-u-s-consumers-seen-hit-hard-by-t-mobile-sprint-merger-idUSKBN1I32VX.
[46] Comments of Free Press, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 20–40, Feb. 21 2018, https://ecfsapi.fcc.gov/file/1022121485501/Free%20Press_Feb%2021%202018%20Lifeline%20Comments.pdf.
[47] *Id.* at 28-30; *see also* Robert Channick, *AT&T Ends Monthly Federal Subsidy for Law-Income Landline Customers*, CHICAGO TRIBUNE (Oct. 22, 2018), https://www.chicagotribune.com/business/ct-biz-att-landline-cut-low-income-discount-20181019-story.html (regarding AT&T's decision to disengage from the Lifeline program in the Chicago area).
[48] Joan Engebreston, *CFO: 'Non-Sustainable' T-Mobile Lifeline Business To Be Phased Out*, TELECOMPETITOR (June 8, 2017), https://www.telecompetitor.com/cfo-non-sustainable-t-mobile-lifeline-business-to-be-phased-out/.
[49] *See* Sue Marek, *Sprint, T-Mobile Execs Explain the MVNO Explosion*, FIERCEWIRELESS https://www.fiercewireless.com/special-report/sprint-t-mobile-execs-explain-mvno-explosion (last visited Feb. 8, 2019) (detailing Sprint and T-Mobile's innovations in the MNVO market).
[50] *See* Brattle Group Declaration at 75; *see also* Petition to Deny of Altice, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 3, Aug. 27, 2018, https://ecfsapi.fcc.gov/file/10827968626122/Altice%20USA%20Inc%20-%20Petition%20to%20Condition%20or%20Deny.pdf (stating that "68% of the MVNO market relies on T-Mobile and Sprint today").
[51] *See* Brattle Group Declaration at 11–12 ("We calculate increases in vertical 'upward pricing pressure' index values of 22.7% for T-Mobile's current wholesale contracts and 48.0% for Sprint's current wholesale contracts.").

contracts with MVNOs and other wholesale partners after the merger.[52] T-Mobile has committed to honoring the contract terms for the lifetime of current contracts.[53] However, this is cold comfort to MVNOs given that once the existing contracts expire, the New T-Mobile will be in the driver's seat when it comes to setting the terms of their relationship. If the New T-Mobile raises wholesale prices or pushes MVNOs out of the market altogether by refusing them access at any price, it is low-income consumers that will suffer the most.

Both Sprint and T-Mobile Maintain Standalone Paths to Nationwide 5G

Starting with their video announcing the proposed merger, T-Mobile and Sprint have pitched the New T-Mobile as "the ONLY company with the capacity to quickly create a broad and deep nationwide 5G network."[54] To buttress their pitch, both have disparaged their own current standalone futures, claiming that alone neither have an adequate path forward to 5G.[55] The history of wireless mergers shows this is a common tactic: when AT&T attempted to acquire T-Mobile in 2011, the latter was portrayed as a failing firm with "no clear path" to LTE.[56] Today, by some accounts, T-Mobile boasts better LTE coverage than AT&T – a testament to the decision to reject that acquisition.[57] Federal officials should not be blinded by the glittery promise of nationwide 5G. Not only do each of these companies have their own path forward to achieving 5G coverage, but the financial details of this deal and the technical challenges of building a 5G network suggest that the New T-Mobile is unlikely to meaningfully speed up the deployment of nationwide 5G.

T-Mobile's and Sprint's sudden claims that neither can create a competitive 5G network separately flies in the face of announcements, disclosures, and marketing to consumers and investors over the past two years. The merging parties' own statements indicate that they were planning to deploy 5G long before this merger application was submitted. For example, T-

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[52] *See, e.g.*, Petition to Deny filed by Altice, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, Aug. 27 2018, https://ecfsapi.fcc.gov/file/10827968626122/Altice%20USA%20Inc%20-%20Petition%20to%20Condition%20or%20Deny.pdf; Petition to Deny filed by Cellular South, d/b/a C Spire, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, Aug. 27, 2018, https://ecfsapi.fcc.gov/file/10827047617622/C%20Spire%20Petition%20to%20Condition%20Final.PDF.
[53] Joint Opposition at 89. ("New T-Mobile will initially have limited flexibility to raise rates because T-Mobile and Sprint have existing multi-year wholesale agreements with MVNOs that must be honored after the merger.").
[54] T-Mobile, *Creating Robust Competition in the 5G Era*, *https://www.sec.gov/Archives/edgar/data/101830/000110465918028650/a18-12444_4425.htm.*
[55] *See* Merging Parties' Public Interest Statement at 18-28.
[56] AT&T, *Acquisition of T-Mobile USA, Inc. by AT&T Inc.*, WT Docket No. 11-65, pp. 1, Apr. 21, 2011, https://www.wired.com/images_blogs/business/2011/04/att_tmobile.pdf ("In this transaction, AT&T Inc.—an American company on the leading edge of mobile broadband innovation—is acquiring T-Mobile USA, a Deutsche Telekom subsidiary with declining market shares and no clear path to Long Term Evolution (LTE), the gold standard for advanced mobile broadband services.").
[57] Andrea Toth, *The 4G Battle Continues Between T-Mobile and Verizon*, OPEN SIGNAL (Mar. 15, 2018), https://opensignal.com/blog/2018/03/15/the-4g-battle-continues-between-t-mobile-and-verizon/ (showing T-Mobile as having better LTE coverage than AT&T in all regions of the country).

Mobile publicly promised to build nationwide 5G in January[58] and February[59] of 2018, as well as in May,[60] July,[61] and December[62] of 2017. Sprint has similarly touted its ability to build out a 5G network in at least three quarterly earnings calls or statements prior to this merger.[63] Sprint has gone on to announce a handset to be released this summer that will use low-band and mid-band spectrum for mobile 5G, specifically, Sprint's 2.5 GHz, 1.9 GHz, and 800 MHz spectrum.[64] On their own, Sprint and T-Mobile are taking steps to provide customers with 5G.

T-Mobile has tried to distance itself from its past promises of a nationwide 5G network by conjuring the new promise of a "broad and deep" 5G network.[65] T-Mobile argues, in effect, that while it repeatedly promised *nationwide* 5G in the past, what it meant to say was that T-Mobile would only be able to offer fast 5G in the cities and slow 5G in rural communities.[66] This

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[58] Neville Ray, *5G Reality vs 5G Hype: The Un-carrier vs the Carriers*, T-MOBILE BLOG (Jan. 16, 2018), https://www.t-mobile.com/news/5g-ces-wrap-uphttps://www.t-mobile.com/content/t-mobile/corporate/news/archive.html ("[L]ast week we reiterated our commitment to launch 5G nationwide by 2020, starting in 2019 in 600 MHz....And we will of course be leveraging our mmW assets to drive not just great 5G mobility but also enhanced speeds and latency.").

[59] Alex Scroxton, MWC 2018: 5G Collaboration Dominates Agenda at Annual Mobile Fair, COMPUTER WEEKLY.COM (Feb. 28, 2018), https://www.computerweekly.com/news/252435888/MWC-2018-5G-collaboration-dominates-agenda-at-annual-mobile-fair (quoting T-Mobile Chief Technology Officer Neville Ray as stating: "T-Mobile will be the first to give customers the truly transformative, nationwide 5G network they deserve").

[60] Neville Ray, *Setting the 5G Record Straight: Announcing Plans for Nationwide 5G from T-Mobile*, T-MOBILE BLOG (May 1, 2017), https://www.t-mobile.com/news/nationwide-5g-blog ("T-Mobile is the first company to commit to building a nationwide 5G network. And yes that's real 5G, not fake 5G! And that's nationwide Mobile 5G, not Fixed 5G!").

[61] Neville Ray, *Proof Positive. T-Mobile Does Unlimited Better*, T-MOBILE BLOG (July 16, 2017), https://www.t-mobile.com/news/tmobile-best-unlimited-network (stating that T-Mobile will "light up the country's first real, nationwide 5G network, blowing by the competition again.").

[62] John Legere, *The Revolution Continues...*, T-MOBILE BLOG (Dec. 27, 2017), https://www.t-mobile.com/news/legere-2018-predictions ("Our epic [600 MHz] low-band spectrum haul blankets the country from coast to coast and ensures we can.... use part of that spectrum to build nationwide 5G . . . . [W]e will be the only ones on the fast-track toward a *real, mobile nationwide* 5G network in 2020 – and have already started deploying 5G ready equipment.").

[63] *See, e.g.,* Sprint Corp., Q3 2017 Earnings Call Transcript (Feb. 2, 2018), http://s21.q4cdn.com/487940486/files/doc_financials/transcripts/S-US-20180202-2039822-C.pdf (quoting Sprint Chief Executive Officer Marcelo Claure as stating, "I am very confident in Sprint's future based on the competitive advantage that we will have with the deployment of 5G on our 2.5 GHz spectrum."); Sprint Corp., Q2 Results FY 2017: Message from Management 4 (Oct. 25, 2017), http://s21.q4cdn.com/487940486/files/doc_financials/quarterly/2017/q2/02_Message-from-Management-FINAL.pdf (quoting Sprint Chief Executive Officer Marcelo Claure as stating that "[W]e are also preparing for 5G. We continue to partner across the global 2.5GHz, ecosystem including SoftBank, Qualcomm, China Mobile, and others towards rapidly developing the 5G NR standards to make 2.5GHz a key band in global 5G deployments."); Sprint Corp., Q4 2016 Earnings Call Transcript (May 3, 2017), http://s21.q4cdn.com/487940486/files/doc_financials/transcripts/S-US-20170503-1941373-C.pdf (quoting Sprint Chief Executive Officer Marcelo Claure as stating, "When we look at what is coming, where 5G is going, and based on the latest 3GPP standard, we are certain that we have the right spectrum, right? I mean, having the vast amount of 2.5 GHz spectrum, as we call the new low band of 5G, I think we're very, very well positioned in terms of continuing to densify our network.").

[64] *See* Sprint, *Sprint Planning to Debut 5G Smartphone from Samsung in Summer 2019,* CISION (Jan. 7 2019) https://www.prnewswire.com/news-releases/sprint-planning-to-debut-5g-smartphone-from-samsung-in-summer-2019-300773631.html.

[65] Merging Parties' Public Interest Statement at 36.

[66] *Id.* at 18–28.

ignores the inconvenient fact that in May 2017 T-Mobile specifically promised customers a "5G network that offers BOTH breadth and depth nationwide."[67] In other words, T-Mobile's 5G promises are nothing new – and are not merger specific.

The engineering and financial plans underlying the deal also make clear that this merger will not speed up the build-out of nationwide 5G. First, the parties argue that this merger is necessary because increased usage and demand will lead to wireless congestion, limiting the actual performance of their standalone 5G networks.[68] Such claims seem to assume that the companies do not continue to add spectrum to their network or engage in other actions to increase efficiency. At least one party privy to confidential information has concluded that, on their own, "each company will be able to provide full 5G without experiencing almost any congestion at all."[69] This suggests that potential congestion is not a barrier to either Sprint or T-Mobile achieving quality 5G as standalone companies.

Second, the merging parties' claims that they do not have sufficient spectrum to provide quality 5G cannot justify this merger. If Sprint or T-Mobile need new spectrum to improve 5G coverage or provide fixed wireless broadband, they could simply acquire more on their own. In fact, that is precisely what is already happening. The FCC has prioritized making available new mid-band and millimeter wave spectrum to support 5G,[70] and both T-Mobile and Sprint have sought to participate in the FCC's recent auctions.[71] Even if the parties do not succeed in these auctions, other options remain available. Both operators could build partnerships with, or purchase spectrum holdings from, other companies. Sprint has successfully pursued this strategy with other carriers in the past.[72] Additionally, the FCC has set aside unlicensed spectrum that has been successfully used by mobile carriers, including T-Mobile, to improve performance.[73]

Third, the parties' claims that this merger will unleash new financing to speed up the deployment of nationwide 5G are dubious. The parties claim that the merger will enable them to invest roughly $40 billion in building out a nationwide 5G network by 2021, or within three

[67] Neville Ray, *Setting the 5G Record Straight: Announcing Plans for Nationwide 5G From T-Mobile*, T-MOBILE BLOG (May 1, 2017), https://www.t-mobile.com/news/nationwide-5g-blog.
[68] Merging Parties' Public Interest Statement at 38 ("In contrast, in transitioning to 5G, both standalone companies would have lower LTE average data rates with high levels of congestion, absent additional cell splits or other network investments.").
[69] Dish Reply at 6 (emphasis removed).
[70] *See* Federal Communications Commission, *FCC Proposes Expanding Flexible Use of Mid-Band Spectrum* (July 12, 2018), https://docs.fcc.gov/public/attachments/DOC-352520A1.pdf (announcing an auction of mid-band spectrum in order to promote "American leadership in the next generation of wireless connectivity, or 5G").
[71] *See* Federal Communications Commission, *Comment Sought on T-Mobile, Sprint Auctions 101 and 102 Waivers* (Aug. 8, 2018), https://www.fcc.gov/document/comment-sought-t-mobile-sprint-auctions-101-and-102-waivers (regarding T-Mobile and Sprints applications for waivers to participate in 24 GHz and 28 GHz auctions).
[72] *See, e.g.*, Michael J. De La Merced, *Sprint Offers $2.1 Billion for Clearwire and Its Spectrum*, N.Y. TIMES (Dec. 13, 2012), https://dealbook.nytimes.com/2012/12/13/sprint-looks-to-buy-remaining-stake-in-clearwire-for-2-1-billion/.
[73] T-Mobile has successfully used unlicensed mid-band spectrum, specifically the LTE-License Assisted Access feature, to improve performance. *See* TeleGeography, *T-Mobile US, AT&T Test LTE-LAA; T-Mobile Launches LTE-U in Select Locations* (June 27, 2017), https://www.telegeography.com/products/commsupdate/articles/2017/06/27/t-mobile-us-att-test-lte-laa-t-mobile-launches-lte-u-in-select-locations/.

years of the merger being approved.[74] However, the two companies had previously promised to spend a combined amount of around $10 billion in capital expenditure in 2018 alone.[75] Assuming these spending levels continue, the two companies will have spent around $40 billion through 2021 even absent the merger. The merging parties counter that, while overall capital outlays may increase only slightly as a result of the merger, these capital outlays will be spread over a much smaller network since T-Mobile will be decommissioning many of Sprint's towers.[76] This argument minimizes potentially significant costs associated with decommissioning so many Sprint towers, transferring Sprint radios, and renegotiating lease agreements.[77] In other words, this deal may not unleash much in the way of new financing to achieve nationwide 5G coverage, and the little financing it does free up may be spent on the network integration costs created by the merger itself.

Finally, the merging parties suggest that Sprint is a failing firm without saying so outright.[78] The Horizontal Merger Guidelines establish a strict three part test that a firm must meet in order to show it is failing.[79] The parties do not attempt to meet this test directly, instead simply detailing Sprint's business challenges.[80] The merging parties' reticence to try to satisfy the Merger Guidelines' stringent standards indicates that they lack confidence in the claim that Sprint cannot survive alone. In the third quarter of 2018, Sprint enjoyed its twelfth consecutive quarter of positive operating income, its highest fiscal third quarter adjusted EBITDA in over a decade, and its sixth consecutive quarter of net additions in the postpaid market.[81] Although Sprint experienced a negative net income during the third quarter of 2018,[82] it had previously

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[74] Merging Parties' Public Interest Statement at 15.
[75] *See* Sprint Corp., Q1 2018 Earnings Call Transcript, Slide 13 (Aug. 1, 2018), https://seekingalpha.com/article/4193250-sprint-s-q1-2018-results-earnings-call-transcript (stating that in 2018, there would be a "[c]ash [c]apex [of] 5.0 billion to 6.0 billion excluding leased devises"); T-Mobile Q2 2018 Earnings Call Transcript (Aug. 1, 2018), https://seekingalpha.com/article/4193405-t-mobile-us-inc-tmus-ceo-john-legere-q2-2018-resultsearnings-call-transcript?page=2 (stating that in 2018, "cash CapEx now expected to be at the high end of the guidance range of 4.9 billion to 5.3 billion.").
[76] Joint Opposition at 43–44.
[77] Dish Reply at 97–99.
[78] Joint Opposition at 17–20.
[79] U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines § 11 (2010) ("The Agencies do not normally credit claims that the assets of the failing firm would exit the relevant market unless all of the following circumstances are met: (1) the allegedly failing firm would be unable to meet its financial obligations in the near future; (2) it would not be able to reorganize successfully under Chapter 11 of the Bankruptcy Act; and (3) it has made unsuccessful good-faith efforts to elicit reasonable alternative offers that would keep its tangible and intangible assets in the relevant market and pose a less severe danger to competition than does the proposed merger.").
[80] *See* Joint Opposition at 17–20; Reply of Public Knowledge, Open Markets Institute, Writers Guild of America, West, Inc. Common Cause & Consumers Union, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 15, Oct. 31 2018, https://ecfsapi.fcc.gov/file/1101288126586/PK%2C%20CC%2C%20WG%2C%20CU%2C%20OMI%20T-Mobile-Sprint%20Reply%20Filing%20(10.31.2018)%20FINAL.pdf ("While the Horizontal Merger Guidelines offer a clear and strict test for firms identified as 'failing,' Sprint has not attempted to argue that it meets these strict requirements").
[81] Sprint, *Sprint Reports Continued Year-Over-Year Growth in Wireless Revenue With Fiscal Year 2018 Third Quarter Results* (Jan. 31, 2019), https://s21.q4cdn.com/487940486/files/doc_financials/quarterly/2018/Q3/01_Fiscal-3Q18-Earnings-Release-FINAL.pdf.
[82] *Id.*

enjoyed three consecutive quarters of positive net income. [83] If this merger is rejected, Sprint appears positioned to continue as a vigorous and viable competitor in the market.

This Merger Offers Little to Rural Consumers

While both Sprint and T-Mobile have independently committed to building out 5G networks, the merging parties have sought to paper over these previous commitments with vague assurances that the New T-Mobile would provide additional coverage and wireless broadband to rural America. We view these assurances with deep skepticism. When Senator Klobuchar asked John Legere how the New T-Mobile would bring 5G service to rural America – where current mobile giants Verizon and AT&T struggle to provide adequate connectivity – he spoke about new investments that would allow the combined company to drive improvements in rural service. But looking at what these companies have done, rather than what their leaders have said, it becomes clear that neither party has found it attractive to invest substantially in building out their presence in rural communities. And Sprint's assets will not change this cold, financial calculus for T-Mobile. Neither 5G nor the New T-Mobile will be a logistical and financial panacea that solves decades of shortcomings on rural coverage. While 5G will likely provide at least incremental technical improvements to all mobile customers, the merger itself will provide minimal added improvements to rural communities. Rather, rural America's best hope for mobile broadband is to preserve a competitive mobile market.

Mobile carriers and others have set high expectations about how 5G will change our economy and society. 5G establishes a set of standards that enable new radio technologies, use of new spectrum bands, and wider channels of spectrum in mobile networks.[84] In order to achieve one of the loftiest promises of 5G – a world where wireless competes with cable companies over home broadband – mobile carriers likely will be required to use millimeter wave spectrum, add fiber backhaul, and install servers closer in the network to consumers.[85] These engineering developments will most directly benefit urban communities. The millimeter wave spectrum used within high-performance 5G is limited to a range of less than a mile and requires direct line of

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[83] Sprint Corporation, *Sprint Reports Inflection in Wireless Service Revenue with Fiscal Year 2018 First Quarter Results* (Aug. 1 2018), http://s21.q4cdn.com/487940486/files/doc_financials/quarterly/2018/Q1/01_Fiscal-1Q18-Earnings-Release-FINAL.pdf; *see also* Reply of Public Knowledge, Open Markets Institute, Writers Guild of America, West, Inc. Common Cause & Consumers Union, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 14–19, Oct. 31 2018, https://ecfsapi.fcc.gov/file/1101288126586/PK%2C%20CC%2C%20WG%2C%20CU%2C%20OMI%20T-Mobile-Sprint%20Reply%20Filing%20(10.31.2018)%20FINAL.pdf (rebutting the merging parties' failing firm argument).

[84] Ericsson, *5G Spectrum: Strategies to Maximize All Bands*, https://www.ericsson.com/en/networks/trending/hot-topics/5g-spectrum-strategies-to-maximize-all-bands ("The deployment of 5G should be viewed as an evolution that builds on all spectrum assets.").

[85] *See* Mona Jaber, Muahmmad Ali Imran, Rahim Tafazolli and Anvar Tukmanov, *5G Backhaul Challenges and Emerging Research Directions*, IEEE ACCESS (Apr. 20, 2016),https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7456186 (regarding the role of backhaul in 5G deployment); Amy Nordrum, Kristen Clark, and IEEE Spectrum Staff, *Everything You Need to Know About 5G*, IEEE SPECTRUM (Jan. 27 2017), https://spectrum.ieee.org/video/telecom/wireless/everything-you-need-to-know-about-5g (regarding the role of millimeter waves in 5G technology); Verizon, *How 5G Will Pull the Cloud Closer* https://www.verizon.com/about/our-company/5g/how-5g-will-pull-cloud-closer (stating that 5G will involve deploying servers closer to the user).

sight.[86] Such buildouts likely would only happen in dense areas, as the infrastructure costs would be economically prohibitive for rural and even suburban markets.[87] In fact, T-Mobile has previously stated that it does not believe it is feasible to "go after 5G millimeter wave deployment in rural America."[88] Simply put, a mobile provider is unlikely to install expensive infrastructure to serve only a handful of customers. Bridging the digital divide will require a significant investment in building out mid-band and millimeter wave networks to reach sparsely populated areas – a commitment T-Mobile has not credibly made, and an even more distant possibility if the merger harms regional carriers willing to serve those communities.[89]

Neither Sprint nor T-Mobile as standalone companies have demonstrated a track record of catering to rural America. As the Rural Broadband Association describes, T-Mobile has neglected to use spectrum it holds in rural areas for years, holding back coverage.[90] T-Mobile's public interest statement provides few new commitments that would show a significant change in attitude or indicate the merger would meaningfully contribute to expanded rural coverage. Providing service in rural America requires low-band spectrum that can travel longer distances with the trade-off of less capacity.[91] Sprint does not hold this spectrum, and the merging parties acknowledge that there would be no change in low-band coverage.[92] The mid-band spectrum that Sprint does hold travels less distance, requiring the aggressive build out of more cell sites to extend coverage.[93] In effect, mid-band does little to cover rural Americans, and T-Mobile acknowledges that it is "better suited to suburban and urban areas."[94] If Sprint could not economically justify building out thousands more cell sites to blanket small tracts of sparsely-populated areas with mid-band spectrum, then the equation will not change with the New T-Mobile.

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[86] *See* S. Janakiraman and P. Marichamy, *Propagation Characteristics of Millimeter-Wave Band for 5G Mobile Communications*, INDIAN JOURNAL OF SCIENCE AND TECHNOLOGY (2015), http://www.indjst.org/index.php/indjst/article/viewFile/81058/62519 (regarding the propagation characteristics of millimeter wave); *See generally* The Conversation, *Wireless Spectrum is for Sale . . . But What Is It* (Feb. 26, 2013), https://theconversation.com/wireless-spectrum-is-for-sale-but-what-is-it-11794 (regarding spectrum in general)

[87] Shara Tibken, *Why 5G Is Out of Reach for More People Than You Think*, C Net (Oct. 25, 2018) https://www.cnet.com/news/why-5gs-out-of-reach-for-more-people-than-you-think/.

[88] *Id.*

[89] We discuss the ways in which this merger will harm rural carriers further below.

[90] *See* NTCA – The Rural Broadband Association Petition to Deny, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 8, Aug. 27 2018, https://ecfsapi.fcc.gov/file/10827780817015/08.27.18%20Sprint%20TMobile%20Petition%20to%20Deny%20(002).pdf.

[91] *See generally* Rural Wireless Association, *Access to Low-Band Spectrum Is Key to Wireless Competition* (June 5, 2015), https://ruralwireless.org/access-to-low-band-spectrum-is-the-key-to-wireless-competition/.

[92] *See* Merging Parties' Public Interest Statement at 47, Tbl 9, https://ecfsapi.fcc.gov/file/10618281006240/Public%20Interest%20Statement%20and%20Appendices%20A-J%20(Public%20Redacted)%20.pdf.

[93] *See generally* The Conversation, *Wireless Spectrum is for Sale . . . But What Is It* (Feb. 26, 2013), https://theconversation.com/wireless-spectrum-is-for-sale-but-what-is-it-11794 (regarding spectrum in general).

[94] Merging Parties' Public Interest Statement at 18. *See* CWA Comments, Appendix A ("Sprint also has licenses for 14 MHz of 800 MHz spectrum in most of the United States, but Sprint's narrow holdings in the 800 MHz spectrum band will only contribute a small amount of additional spectrum, relative to the hundreds of MHz in the mid-band spectrum").

Expanding rural coverage is also not solely a matter of having the right spectrum and adding new radios to existing cell sites. Mobile networks require backhaul access for cell sites to connect the customer to the phone network and the internet.[95] While under slower access technologies, such as 3G, mobile providers could rely on satellite or microwave connections, LTE and 5G require low latency and high-throughput connections, mainly fiber connectivity.[96] Neither T-Mobile nor Sprint have their own national fiber network. [97] They are reliant on others for fiber or otherwise must use slower connectivity.[98] This creates a potential bottleneck in the link between the cell site and the mobile network. Having a 5G phone will not mean anything if the cell tower doesn't have a fast connection to the internet.[99] While both companies have made standalone investments in improving their backhaul in preparation for 5G, the Rural Wireless Association has documented T-Mobile's continued reliance on slower satellite connections for many of its rural cell sites.[100] The acquisition of Sprint would not provide T-Mobile with the fiber assets required to support high-performance connections for rural cell sites.[101] As a result, the New T-Mobile is unlikely to extend high-performance 5G coverage to rural markets.

This Merger Could Have A Significant Negative Impact on Rural Access

This merger is likely to harm rural consumers by undermining the regional wireless carriers that are the backbone of rural communities. Regional carriers are dependent on arrangements with nationwide carriers to allow their customers to roam outside the areas where

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[95] *See* Mona Jaber, Muahmmad Ali Imran, Rahim Tafazolli and Anvar Tukmanov, *5G Backhaul Challenges and Emerging Research Directions*, IEEE ACCESS (Apr. 20 2016), https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7456186 (regarding the role of backhaul in 5G deployment)

[96] *See* Jake Saunders, *Fiber-Optic Is Important for 5G But Operators Will Need a Range of Options*, TELECOMS.COM (Sept. 7 2018), http://telecoms.com/opinion/fiber-optic-is-important-for-5g-but-operators-will-need-a-range-of-options/.

[97] *See* Rural Wireless Association, Informal Request for Commission Action, *In the Matter of Connect America Fund Universal Service Reform – Mobility Fund*, WC Docket No. 10-90, WT Docket No. 10-208 (Dec. 26 2018) pp. 7-11 https://ecfsapi.fcc.gov/file/10110638914087/RWA%20MFII%20Informal%20Request%20for%20Commission%20Action-%20FINAL%2012262018.pdf (regarding T-Mobile's reliance on satellite and microwave backhaul in rural communities); Alison Diana, *Sprint CTO: On Fiber, 5G & The Future* Broadband World News (Aug. 13 2018) http://www.broadbandworldnews.com/author.asp?section_id=548&doc_id=745337 (regarding Sprint's reliance on third party fiber providers for 5G buildout).

[98] *See See* Rural Wireless Association, Informal Request for Commission Action, *In the Matter of Connect America Fund Universal Service Reform – Mobility Fund*, WC Docket No. 10-90, WT Docket No. 10-208 (Dec. 26 2018) pp. 7-11 https://ecfsapi.fcc.gov/file/10110638914087/RWA%20MFII%20Informal%20Request%20for%20Commission%20Action-%20FINAL%2012262018.pdf; Alison Diana, *Sprint CTO: On Fiber, 5G & The Future* Broadband World News (Aug. 13 2018) http://www.broadbandworldnews.com/author.asp?section_id=548&doc_id=745337 (quoting Sprint Chief Technology Office John Saw as stating that Sprint works with other providers in order to have access to fiber).

[99] *See* Mona Jaber, Muahmmad Ali Imran, Rahim Tafazolli and Anvar Tukmanov, *5G Backhaul Challenges and Emerging Research Directions*, IEEE ACCESS (Apr. 20, 2016), https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7456186 (regarding the role of backhaul in 5G deployment).

[100] Declaration of Lynn Merrill, Rural Wireless Association at ¶ 6 (Dec. 27, 2018), https://www.fcc.gov/ecfs/filing/122683577794.

[101] *See* Sean Kinney, *T-Mobile US COO Says Merger With Sprint Starts With Network Integration* RCR Wireless News (Sept. 19 2018) (indicating that T-Mobile relies on 52 fiber providers and that it will not be relying on Sprint for fiber).

those operators maintain their own spectrum and infrastructure.[102] The Rural Wireless Association has argued that Sprint is the *only* national carrier that provides "anything approximating commercially reasonable roaming rates, terms, and conditions to rural carriers."[103] Sprint works closely with rural carriers because it is reliant on mid-band spectrum for its network, and this spectrum has limited propagation characteristics.[104] In order to avoid building out expensive cell sites to extend its own coverage in less urban areas, Sprint must pursue attractive roaming relationships with regional carriers to broaden their network.[105] Sprint and regional carriers have a mutually-beneficial relationship: Sprint provides the carriers a national network, and the carriers provide broad coverage in their markets to Sprint customers. Both Sprint and regional carriers' customers benefit from better coverage and more competition where it would not otherwise exist.

The New T-Mobile is unlikely to continue to provide mutually-beneficial roaming agreements with regional carriers because, like T-Mobile today, it has little incentive to do so. T-Mobile has significant low-band 600 MHz holdings, which means it is much less reliant on rural carriers to provide broad coverage.[106] As a result, regional carriers have reported that T-Mobile has a history of making it difficult, if not impossible, for T-Mobile customers to roam on rural carriers' networks.[107] According to these reports, T-Mobile tends to charge "astronomical" rates for rural carriers' customers to roam on its network, only allows one-sided arrangements, or otherwise declines to establish roaming agreement with rural carriers.[108] While T-Mobile has stated that it will honor Sprint's current contracts with roaming partners, it has not made enforceable commitments regarding the terms of those contracts when they come up for renewal.[109] Absent a national network for customers to roam onto, or faced with rising roaming prices, the regional carriers that provide needed coverage and competition could fail.

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[102] Rural Wireless Association Petition to Deny, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 7, Aug. 27 2018, https://ecfsapi.fcc.gov/file/10828928101034/RWA%20Petition%20to%20Deny%20-%20FINAL.pdf ("Given the difficulty that rural wireless carriers often have in accessing spectrum, these lease agreements are critical, but may disappear if the proposed merger is consummated.").

[103] Reply to Opposition of the Rural Wireless Association, Inc., *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. i, Oct. 31 2018, https://ecfsapi.fcc.gov/file/103142407048/RWA%20Reply%20to%20Opposition%20-%2010312018%20FINAL%20AS%20FILED.pdf (hereinafter "RWA Reply").

[104] Merging Parties' Public Interest Statement, Appendix B: Declaration of Neville R. Ray at 17 ("Because the propagation in the mid-band is more limited (operating radii of approximately up to 4 miles around cell sites) the band is not optimized for rural area coverage, as it requires more capital expenditures to cover those geographies.").

[105] Merging Parties' Public Interest Statement, Appendix E: Declaration of John C. Saw at 8 ("Because our network covers fewer POPs and less geography than our competitors, we must rely on roaming arrangements to provide services outside of our network footprint, particularly in rural areas.").

[106] *See* NTCA – The Rural Broadband Association Petition to Deny, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, pp. 8, Aug. 27 2018, https://ecfsapi.fcc.gov/file/10827780817015/08.27.18%20Sprint%20TMobile%20Petition%20to%20Deny%20(002).pdf (stating that T-Mobile's spectrum holdings enable it to cover rural areas).

[107] RWA Reply at 4-6.

[108] Petition to Deny of the Rural Wireless Association, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, Aug. 27 2018, https://ecfsapi.fcc.gov/file/10828928101034/RWA%20Petition%20to%20Deny%20-%20FINAL.pdf.

[109] Joint Opposition at 98–99; Merging Parties' Public Interest Statement at 69.

While T-Mobile talks up covering rural consumers, its past tells another story altogether. First, in April 2018, T-Mobile agreed to a $40 million settlement after admitting that that it misled consumers by pretending that calls to rural areas were unanswered, when in fact the company and its partners failed to place the calls in the first place.[110] Rather than connect rural consumers, it inserted false ringtones and failed to correct problems that prevented the delivery of "hundreds of millions of calls each year" to rural areas, including potentially calls for medical emergencies.[111] Second, T-Mobile has been accused of filing inaccurate information about its current coverage in rural areas with the FCC in the Mobility Fund Phase II (MF-II) process.[112] Lastly, T-Mobile's merger plans include an expedited shut down of Sprint's CDMA (3G) network, the previous access technology that is still used by older phones and smaller carriers.[113] Turning off CDMA without transitioning those phones and partners could disproportionately cut off rural communities, fixed-income customers, and elderly consumers.[114] If approved, this merger would leave rural consumers at the mercy of T-Mobile – a company with a questionable record when it comes to reaching Americans outside cities and suburbs.

Conclusion

The best way to achieve the goal of high-quality, affordable, nationwide 5G is through competitive markets. This merger moves us further away from the sort of competition we need to accomplish this aim. It will lead to excessive consolidation and undermine innovation. It will raise prices, particularly on low-income consumers and seniors. This merger offers little in return for these likely tangible harms. Finally, it will not speed up the deployment of 5G, nor will it achieve meaningful nationwide coverage for rural Americans.

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[110] *See* Colin Dwyer, *T-Mobile Fined $40M Over 'False Ring Tones' That Masked Failed Calls*, NPR (Apr. 17, 2018), https://www.npr.org/sections/thetwo-way/2018/04/17/603247797/t-mobile-fined-40m-over-false-ring-tones-that-masked-failed-calls.

[111] *See In the Matter of T-Mobile USA, Inc.*, Order, File No.: EB-IHD-16-00023247, Acct. No.: 201832080003, FRN 0004121760, DA 18-373 (released April 16, 2018), https://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0416/DA-18-373A1.pdf.

[112] The MF-II provides $4.53 billion in Universal Service Funds to carriers to incentivize the build out of advanced high-speed mobile broadband service (4G LTE) in underserved regions, such as rural communities *See* Rural Wireless Association, Informal Request for Commission Action, *In the Matter of Connect America Fund Universal Service Reform – Mobility Fund*, WC Docket No. 10-90, WT Docket No. 10-208 (Dec. 26 2018) https://ecfsapi.fcc.gov/file/10110638914087/RWA%20MFII%20Informal%20Request%20for%20Commission%20Action-%20FINAL%2012262018.pdf.

[113] Reply of Cellular South, Inc. D/B/A C Spire to the Joint Opposition of T-Mobile US, Inc. and Sprint Corporation, *Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of the Licenses and Authorizations*, WT Docket No. 18-197, Oct. 31 2018, pp. 12-18 https://ecfsapi.fcc.gov/file/10310083029700/C%20Spire%20Reply%20to%20Joint%20Opposition%20with%20Declaration%20-%20FINAL%20(00129886xC33F1).pdf

[114] In its public interest statement, T-Mobile proposes to turn down Sprint's CDMA network by 2021. T-Mobile Public Interest Statement, *In the Matter of Connect America Fund Universal Service Reform – Mobility Fund*, WC Docket No. 10-90, WT Docket No. 10-208, pp. 38–39, June 18, 2018 ("Additionally, New T-Mobile will migrate Sprint CDMA voice users to VoLTE (either through a software upgrade or handset replacement promotions.").

Twice in our recent past, our antitrust officials have been asked to approve a merger or acquisition similar to this one. Twice, our antitrust officials have rejected it. Twice, Americans have benefited from that decision. Once again, this third time, we must put our foot down. The potential harms are clear. Please reject this merger.

Thank you for your consideration.

Sincerely,

RICHARD BLUMENTHAL
United States Senate

AMY KLOBUCHAR
United States Senate

TOM UDALL
United States Senate

SHERROD BROWN
United States Senate

KIRSTEN GILLIBRAND
United States Senate

ELIZABETH WARREN
United States Senate

BERNARD SANDERS
United States Senate

CORY A. BOOKER
United States Senate

EDWARD J. MARKEY
United States Senate