

I. THE U.S. IS ALREADY THE WORLD LEADER IN 5G

T-Mobile and Sprint state in their Public Interest Statement that their proposed merger is “necessary” for “the rapid and widespread deployment of 5G networks.”² The merger, the Applicants claim, will “force” AT&T “and other competitors to more quickly provide faster, better 5G services” instead of the “tepid adoption” of 5G that could be expected otherwise.³ Absent a merger, the Applicants contend, “none of the carriers are on track to deploy a robust national 5G network quickly.”⁴

In fact, the U.S. is already the world leader in 5G, and AT&T and the other major facilities-based wireless carriers are in the midst of a race to deploy next generation 5G services – a race that began long before T-Mobile and Sprint announced their merger plans.⁵ As Chairman Pai has observed, the U.S. is “in the lead on 5G,”⁶ and the FCC has taken “important steps that will help solidify U.S. leadership in 5G.”⁷ Commissioner Carr similarly has noted, “I think we’re really in great shape when it comes to the race to 5G.”⁸

Analysts echo these comments. A new IHS Markit study finds that “North America seems to be leading the race to launch commercial 5G services” – “5G is going live in North America by

² Consolidated Applications of T-Mobile US, Inc. and Sprint Corporation for Consent To Transfer Control of Licenses and Authorizations, *Description of Transaction, Public Interest Statement, and Related Demonstrations*, WT Docket No. 18-197, at i, (“T-Mobile/Sprint Public Interest Statement”) [https://ecfsapi.fcc.gov/file/10618281006240/Public%20Interest%20Statement%20and%20Appendices%20A-J%20\(Public%20Redacted\)%20.pdf](https://ecfsapi.fcc.gov/file/10618281006240/Public%20Interest%20Statement%20and%20Appendices%20A-J%20(Public%20Redacted)%20.pdf).

³ *Id.* at 17.

⁴ *Id.* at 49.

⁵ FCC website, *Leading the World Toward a 5G Future* (“The United States is moving swiftly to lead the world in the next generation of wireless connectivity – or 5G”), <https://www.fcc.gov/5G> (last visited Aug. 23, 2018); *The Top Countries Most Likely to Launch 5G First*, sdx Central, <https://www.sdxcentral.com/5g/definitions/5g-network-countries>.

⁶ Communications Daily, *Demand for 5G May Not Be High, Rollout May Take Years, TPI Told*, (Aug. 22, 2018), <https://communicationsdaily.com/article/view?s=245769&id=555864>.

⁷ Ajit Pai, *Coming Home*, FCC Blog (July 11, 2018), <https://www.fcc.gov/news-events/blog/2018/07/11/coming-home>.

⁸ Julia Manchester, *FCC Commissioner: US in 'great shape' in 5G network race with China, other countries*, The Hill (Aug. 13, 2018), <http://thehill.com/hilltv/rising/401526-fcc-commissioner-us-is-in-great-shape-in-5g-race-with-china-other-countries>.

the end of 2018, and then in South Korea in 2019,” but “[m]ost operators in Europe, however, aren’t planning to deploy 5G until 2021 or later.”⁹ GSMA agrees: “The US will be one of the first countries to launch 5G commercial services, as was the case for 4G.”¹⁰ GSMA notes the “continuous efforts from US government institutions to support 5G progress through new spectrum allocations (including mmWave bands) and work to enable infrastructure deployment,” as well as “[c]ontinued, significant operator investment in both fibre infrastructure and 4G network upgrades.”¹¹ Indeed, analysts estimate that nearly half of the mobile subscriptions in North America will be 5G by 2023.¹² As the trade press explains, the wireless industry is engaged in an “early 5G arms race,”¹³ and this rush to deploy the best 5G service the fastest will continue with or without the T-Mobile/Sprint merger.

AT&T is fully engaged in that arms race and is leading the industry. AT&T already offers “5G Evolution in more than 140 markets, covering nearly 100 million people with theoretical peak speeds of at least 400 Mbps,”¹⁴ and AT&T plans to serve more than 400 markets by the end of 2018.¹⁵ 5G Evolution technology takes advantage of features like 256 QAM, 4x4 MIMO, and three-way carrier aggregation, which permit enormous boosts in speed and capacity. In addition, AT&T is starting to upgrade cell towers with LTE-Licensed Assisted Access (“LTE-

⁹ Juan Pedro Tomas, *North America leads race towards commercial 5G deployment, study says*, RCR Wireless (Aug. 22, 2018), <https://www.rcrwireless.com/20180822/5g/north-america-leads-race-towards-commercial-5g-deployment-study-says>.

¹⁰ Dennisa Nichiforov-Chuang, James Robinson, and Pablo Iacopino, *The 5G era in the US*, GSMA (Mar. 26, 2018), <https://www.gsmainelligence.com/research/?file=4cbbdb475f24b3c5f5a93a2796a4aa28&download>.

¹¹ *Id.*

¹² See Ericsson Mobility Report, at 11 (June 2018), <https://www.ericsson.com/assets/local/mobility-report/documents/2018/ericsson-mobility-report-june-2018.pdf>.

¹³ See Mike Dano, *Verizon, AT&T Show Surprise Increase In Network Spending in Q1*, FierceWireless (May 7, 2018), <https://www.fiercewireless.com/5g/verizon-at-t-show-surprise-increase-network-spending-q1>.

¹⁴ AT&T Inc., Q2 2018 Earnings Call (July 24, 2018).

¹⁵ AT&T Newsroom, *AT&T Bringing 5G to More U.S. Cities in 2018* (July 20, 2018), http://about.att.com/story/5g_to_launch_in_more_us_cities_in_2018.html.

LAA”), which achieves theoretical peak speeds of up to 1 Gbps.¹⁶ LTE-LAA combines unlicensed spectrum with licensed spectrum through carrier aggregation to increase network capacity – providing faster speeds and a better customer experience. AT&T has deployed LTE-LAA in 15 markets and expects to reach at least 24 later this year.¹⁷ AT&T “expect[s] to be the first U.S. company to introduce mobile 5G service.” AT&T’s “millimeter wave mobile 5G trials are going well,” and AT&T is “on track to launch service in parts of 12 markets by the end of this year.”¹⁸

AT&T’s launch of mobile 5G service will be the culmination of testing that began in 2016 with an enterprise 5G trial in Austin in which AT&T used millimeter wave (“mmW”) technology to power a 5G network experience in a customer’s office.¹⁹ AT&T subsequently expanded these pre-standards 5G mmW fixed wireless trials to three additional communities – South Bend, Kalamazoo, and Waco – where AT&T worked with residential, small business, and educational trial participants.²⁰ AT&T also created a 5G testbed in Austin where engineers could build and test creative solutions and run “stress tests” simulating real-world customer experiences before they are rolled out to customers.²¹ More recently, AT&T has tested standards-based mobile 5G, also in Austin.²² Through trials and testing, AT&T has “collected

¹⁶ *See id.*

¹⁷ AT&T Newsroom, *AT&T Builds on 5G Foundation in More Than 100 New Markets* (Apr. 20, 2018), http://about.att.com/story/att_builds_on_5g_foundation_in_more_than_100_new_markets.html; *see also* AT&T Newsroom, *AT&T Bringing 5G to More U.S. Cities in 2018* (July 20, 2018), http://about.att.com/story/5g_to_launch_in_more_us_cities_in_2018.html.

¹⁸ AT&T Inc., Q2 2018 Earnings Call (July 24, 2018).

¹⁹ AT&T Inc., *AT&T Launches First 5G Business Customer Trial with Intel and Ericsson* (Dec. 5, 2016), http://about.att.com/story/att_launches_first_5g_business_customer_trial_with_intel_and_ericsson.html.

²⁰ AT&T Innovation Blog, *Ready to Launch: How 2 Years of 5G Trials Is Preparing Us for Commercial Deployment* (Apr. 10, 2018), http://about.att.com/innovationblog/two_years_of_5g_trial.

²¹ *Id.*

²² *See* Federal Communications Commission Application for Special Temporary Authority, available at https://apps.fcc.gov/oetcf/els/reports/STA_Print.cfm?mode=current&application_seq=85764&RequestTimeout=1000.

mountains of data and insights to comb through, obsess over and ultimately act on.”²³ These trial learnings are guiding AT&T’s mobile 5G launch this year and will help ensure that AT&T is building a 5G network that is both real and reliable for everyone.²⁴

To support the massive data use that 5G will bring, AT&T is expanding its deployment of software-defined networking,²⁵ as well as related elements like white box (replacing traditional proprietary routers inside cell towers with new hardware built around open standards that can be quickly upgraded via software)²⁶ and Network AI (deploying open source software in AT&T’s centralized network cloud and in AT&T’s edge cloud).²⁷ Having virtualized 55 percent of its network already, AT&T plans to reach 75 percent virtualization by 2020.²⁸

AT&T is also actively seeking to enhance further its 5G capabilities by acquiring additional spectrum for its 5G build out through secondary market transactions and future auctions. As AT&T has stated, “future wireless growth will increasingly depend on our ability to offer innovative video and data services on a wireless network that has sufficient spectrum and capacity to support these innovations,” and “[w]e continue to invest significant capital in . . . obtaining additional spectrum that meets our long-term needs.”²⁹

While AT&T is leading the industry in 5G deployment, others are racing ahead with their own plans. Prior to announcing its merger plans, T-Mobile was touting how aggressively

²³ AT&T Innovation Blog, *Ready to Launch: How 2 Years of 5G Trials Is Preparing Us for Commercial Deployment* (Apr. 10, 2018), http://about.att.com/innovationblog/two_years_of_5g_trial.

²⁴ *Id.*

²⁵ AT&T Innovation Blog, *Setting the Record Straight on 5G Evolution* (Apr. 19, 2018), http://about.att.com/innovationblog/5g_evolution_record.

²⁶ AT&T Newsroom, *AT&T Is Deploying White Box Hardware in Cell Towers To Power Mobile 5G Era* (Mar. 25, 2018), http://about.att.com/story/att_deploying_white_box_hardware_in_cell_towers.html.

²⁷ AT&T Innovation Blog, *Network AI: AT&T’s Framework for Its Open Source Efforts That Will Drive Our Software-Defined Network in 2018 and Beyond* (Mar. 27, 2018), http://about.att.com/innovationblog/att_framework.

²⁸ AT&T Newsroom, *AT&T Drives Path to Nationwide Mobile 5G with Multi-Gigabit Speeds* (Feb. 20, 2018), http://about.att.com/story/multigigabit_mobile_5g.html.

²⁹ AT&T Inc., 2017 Annual Report (Form 10-K) (Feb. 9, 2018) at 2.

it was moving toward 5G. T-Mobile claimed that it was positioned “to deliver a 5G network that offers BOTH breadth and depth nationwide.”³⁰ T-Mobile noted that it had assembled a portfolio of low-, mid-, and high-band spectrum for its 5G deployment,³¹ and T-Mobile touted the advantages of this “multi-spectrum” strategy, which includes significant “unpopulated” spectrum that does not need to be re-farmed.³²

T-Mobile also has been aggressively upgrading its LTE network and deploying 5G-ready infrastructure. T-Mobile’s 600 MHz spectrum is “live in 992 cities and towns and 33 states,” and the equipment that T-Mobile has deployed is “upgradable to 5G with a software update.”³³ T-Mobile is also adding 25,000 small cells to activate LTE-LAA technology, which “adds extra capacity and speed, while paving the way for 5G.”³⁴ T-Mobile has announced a

³⁰ T-Mobile Newsroom, *Setting the 5G Record Straight: Announcing Plans for Nationwide 5G from T-Mobile* (May 1, 2017), <https://www.t-mobile.com/news/nationwide-5g-blog>.

³¹ In 2017, “T-Mobile made its largest network investment ever, tripling its low-band spectrum holdings by purchasing 45% of the spectrum sold in the US Government’s 600 MHz auction – 31 MHz nationwide.” T-Mobile Newsroom, *T-Mobile 600 MHz Extended Range LTE Now Live in 900+ Cities & Towns, Coming to Puerto Rico* (June 6, 2018), <https://www.t-mobile.com/news/extended-range-lte-puerto-ric>. “These holdings cover 100% of the U.S.” *Id.* T-Mobile also has what it describes as “an impressive volume of mid-band spectrum to deploy 5G.” T-Mobile Newsroom, *Setting the 5G Record Straight: Announcing Plans for Nationwide 5G from T-Mobile* (May 1, 2017), <https://www.t-mobile.com/news/nationwide-5g-blog>. In addition, T-Mobile said that it has “a nice big, hefty chunk” of mmW spectrum. Telco Transformation, *T-Mobile Walks a Fine Line on 5G Spectrum* (Feb. 9, 2018), http://www.telcotransformation.com/author.asp?section_id=696&doc_id=740479.

³² *See, e.g., id.* (“T-Mobile is in a unique position with 5G, with its unpopulated spectrum holdings and multi-spectrum strategy. While other wireless companies must kick customers off their congested LTE networks to build out 5G, the Un-carrier is building 5G on wide-open airwaves. . . . A multi-spectrum strategy is critical to delivering a breakthrough consumer experience—an experience that includes national coverage and reliability from low band spectrum, reliable capacity and consistent mobile broadband speed with mid band spectrum and multi-gigabit hotspots in urban areas and on campuses with millimeter wave”).

³³ T-Mobile US Inc., Q2 2018 Earnings Call (Aug. 1, 2018), <https://www.youtube.com/watch?v=WQrBSv3pBWw>; *see also, e.g.*, T-Mobile, Q4 and Full-Year 2017 Investor FactBook, at 7 (Feb. 2018), <http://investor.t-mobile.com/Cache/1001231994.PDF?O=PDF&T=&Y=&D=&FID=1001231994&iid=4091145> (“Our 600 MHz spectrum holdings will be used to deploy America’s first nationwide 5G network expected by 2020”); T-Mobile, Video Vlog, Exhibit 99.3, at 2, <http://investor.t-mobile.com/Cache/1001228566.PDF?O=PDF&T=&Y=&D=&FID=1001228566&iid=4091145> (“When the time comes, we will literally turn on 5G with the flip of a switch! And as I’ve said many times before, we expect to be the first wireless provider with a nationwide 5G network.”).

³⁴ T-Mobile Press Release, *T-Mobile Building Out 5G in 30 Cities This Year ... And That’s Just The Start* (Feb. 2, 2018), <https://www.t-mobile.com/news/mwc-2018-5>.

\$3.5 billion partnership with Nokia to speed up deployment of its 5G network.³⁵ T-Mobile CEO, John Legere, reaffirmed in August 2018 that T-Mobile’s “plan continues to be to bring 5G to 30 cities in 2018 starting with New York, L.A., Dallas, Las Vegas, with nationwide coverage coming in 2020. This network will utilize 600 megahertz and will harness 4G and 5G bandwidth simultaneously for dual connectivity, and we’ll be ready for the first 5G smartphones in 2019.”³⁶ All of this progress toward 5G by T-Mobile is happening independently of any merger plans.

Sprint claimed in February 2018 that it is “Positioned To Lead in 5G.”³⁷ Sprint observed at that time that, “[w]ith 204 MHz of spectrum and more than 160 MHz of 2.5 GHz spectrum in top 100 markets, Sprint is uniquely positioned with enough capacity to deliver a nationwide 5G mobile network using licensed spectrum.”³⁸ Sprint’s Executive Chairman, Marcelo Claure, stated that “Sprint is best positioned to be the first carrier with a nationwide mobile 5G platform.”³⁹ He further remarked that “Sprint is the only carrier that doesn’t have to compromise what 5G can

³⁵ T-Mobile Newsroom, *T-Mobile and Nokia Ink \$3.5 Billion, Multi-year 5G Network Agreement* (July 30, 2018), <https://www.t-mobile.com/news/nokia-5g-agreement>.

³⁶ T-Mobile US Inc., Q2 2018 Earnings Call (Aug. 1, 2018), <https://www.youtube.com/watch?v=WQrBSv3pBWw>; see also Wireless Week, *T-Mobile Goes “All In” on 5G, Sets 2020 Target for Nationwide Mobile Network* (May 2, 2017), <https://www.wirelessweek.com/news/2017/05/t-mobile-goes-all-5g-sets-2020-target-nationwide-mobile-network>.

³⁷ Sprint Q3 FY2017 Results Conference Call (Feb. 2, 2018), http://s21.q4cdn.com/487940486/files/doc_financials/quarterly/2017/q3/3QFY17-Slides-Final.pdf.

³⁸ Sprint Newsroom, *Sprint Unveils Six 5G-Ready Cities; Significant Milestone Toward Launching First 5G Mobile Network in the U.S.* (Feb. 27, 2018), <http://newsroom.sprint.com/sprint-unveils-5g-ready-mimo-markets.htm>; see also Sprint Corp., Q3 Quarterly Report (Form 10-Q) (Dec. 31, 2017) at 42 (arguing that Sprint’s “substantial spectrum holdings are sufficient to allow us to continue to provide consistent network reliability, capacity, and speed, as well as to provide current and future customers a highly competitive wireless experience”).

³⁹ Sprint Corp., Q3 2017 Earnings Call, at 16 (Feb. 2, 2018), http://s21.q4cdn.com/487940486/files/doc_financials/transcripts/S-US-20180202-2039822-C.pdf (“What I can tell you is as a company, we could not be more excited that 5G is coming, right, and we see 5G as a very important milestone in the history of Sprint because we have the spectrum to basically lead on 5G and lead in a different way”); *id.* at 6 (“There are a lot of claims being made about 5G by our competitors. We believe Sprint is best positioned to be the first carrier with a nationwide mobile 5G platform.”).

deliver because we can deliver super wide channels of more than 100 MHz while still delivering mid-band coverage characteristics.”⁴⁰

Sprint reiterated this month that its “priority is mobile 5G” and that it “expect[s] to provide commercial services and devices by the first half” of 2019,⁴¹ prior to the likely completion of its merger with T-Mobile. Sprint said that it is moving “full steam ahead” in “building a strong foundation in LTE” that will “pave[] the way for an innovative 5G network to take the customer experience to a whole new level.”⁴² Sprint indicated that it is “hard at work upgrading thousands of cell sites and lighting up tens of thousands of small cells” in order “to give Sprint customers an even stronger 4G LTE Advanced network and launch mobile 5G.”⁴³ “Sprint’s deployment of Massive MIMO radios, a key technology for 5G, is underway,” and “every Massive MIMO site that we add is going to be 5G-ready or 5G-capable.”⁴⁴ Sprint and LG are partnering to build a 5G phone, which they claim will be the first mobile 5G smartphone in the U.S.⁴⁵ Sprint also has indicated interest in adding to its industry-leading spectrum portfolio in Auctions 101 and 102, which it sees as “an excellent opportunity to potentially supplement our existing 2.5-gig spectrum portfolio for our 5G deployments.”⁴⁶

⁴⁰ Mike Dano, *Sprint promises to launch nationwide mobile 5G network in first half of 2019*, FierceWireless (Feb. 2, 2018), <https://www.fiercewireless.com/5g/sprint-promises-to-launch-nationwide-mobile-5g-network-first-half-2019-and-to-raise-unlimited>.

⁴¹ Sprint Corp., Q1 FY 2018 Earnings Call (Aug. 1, 2018), <https://event.on24.com/wcc/r/1772279/EB29375512A06184DD8698FBAC0B6420>; see also Comments of Sprint, *Transforming the 2.5 GHz Band*, WT Docket No. 18-120, at 3 (Aug. 8, 2018) (“Sprint expects to begin providing 5G commercial services and devices during the first half of 2019.”).

⁴² Sprint Corp., Q1 FY 2018 Earnings Call (Aug. 1, 2018).

⁴³ Sprint Corp., Press Release, *Sprint’s Next-Gen Network Build Gains Momentum* (Aug. 1, 2018), <http://investors.sprint.com/news-and-events/press-releases/press-release-details/2018/Sprints-Next-Gen-Network-Build-Gains-Momentum/default.aspx>.

⁴⁴ Sprint Corp., Q1 FY 2018 Earnings Call (Aug. 1, 2018).

⁴⁵ Mike Dano, *Sprint, LG Promise First Mobile 5G Phone, Coming Next Year*, FierceWireless (Aug. 14, 2018), <https://www.fiercewireless.com/5g/sprint-lg-promise-first-mobile-5g-phone-coming-next-year>.

⁴⁶ Sprint Corp., Q1 FY 2018 Earnings Call (Aug. 1, 2018).

II. U.S. LEADERSHIP IN 5G IS BEING DRIVEN BY FIERCE COMPETITION IN THE WIRELESS INDUSTRY

The race to 5G is one consequence of a wireless marketplace characterized by aggressive, disruptive competition that triggers competitive responses, resulting in plummeting prices, skyrocketing output, and record consumer satisfaction.⁴⁷ As Sprint President, CEO and Director Michel Combes noted earlier this month, “There is significant competition in the market around devices and also around service pricing.”⁴⁸ The recent “price war”⁴⁹ in unlimited plans “underscor[es] the cutthroat nature” of competition among the four national wireless carriers.⁵⁰ The Bureau of Labor Statistics’ Wireless Price index fell by *11 percent* in 2017, which was “the largest decline in 16 years,”⁵¹ and those declines have continued into 2018. Similarly, CTIA estimates that the average monthly revenue per unit for wireless services dropped to \$38.66 for 2017, which is a 20 percent decline from 2013, and is the lowest since CTIA has been tracking that figure.⁵²

⁴⁷ See, e.g., AT&T Competition Comments, at 7-12; see also Twentieth Report, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Wireless Services, WT Docket No. 17-69, ¶¶ 58, 62 (Sept. 27, 2017) (“Twentieth Report”).

⁴⁸ Sprint Corporation, Q1 FY 2018 Earnings Call (Aug. 1, 2018).

⁴⁹ See Ryan Knutson and Joshua Jameson, *Verizon Customers Defect as Competition Ramps Up*, Wall Street Journal (Apr. 20, 2017), <https://www.wsj.com/articles/verizon-for-first-time-loses-core-wireless-customers-1492691308> (“The industry’s bruising price war has been a boon to consumers.”); see also Donna Fuscaldo, *Unlimited Data Offers Mean New Carrier Price War*, Investopedia (Feb. 17, 2017), <http://www.investopedia.com/articles/investing/021717/unlimited-data-offers-mean-new-carrier-price-war.asp>; see also Tomi Kilgore, *Wireless carrier stocks fall amid budding price war in unlimited data*, MarketWatch (Feb. 27, 2017), <http://www.marketwatch.com/story/wireless-carrier-stocks-fall-amid-budding-price-war-in-unlimited-data-2017-02-27>; see also Scott Moritz, *T-Mobile, Sprint Escalate Price War With New Unlimited Plans*, Bloomberg Technology (Aug. 18, 2016), <https://www.bloomberg.com/news/articles/2016-08-18/t-mobile-unveils-unlimited-wireless-plan-escalating-price-war>.

⁵⁰ Martha DeGrasse, *Sprint Slashes Data Prices With \$15 Unlimited Plan For Those Willing To Switch*, FierceWireless (June 8, 2018), <https://www.fiercewireless.com/wireless/sprint-slashes-data-prices>.

⁵¹ Dr. Robert F. Roche and Shae Gardner, *CTIA’s Wireless Industry Indices Report, A Comprehensive Report from CTIA based on CTIA’s Wireless Industry Survey Results, Year-End 2017 Results*, at 59 (July 2018) (“CTIA Wireless Competition Report”).

⁵² *Id.* at 44.

As prices have plummeted, output continues to soar with subscribership, connections, and data usage at all-time highs resulting in double-digit percentage growth. In 2017, wireless data traffic was up 14.3 percent compared to 2016, and up 40-fold compared to 2010.⁵³ As a result, a recent analysis estimates that the per-megabyte cost of data has declined by more than 99 percent since 2006.⁵⁴ Mr. Legere recently observed that, if “you go back to 2013, our customers have enjoyed a 12-fold increase in the data that they can use with about an 11% decline in price.”⁵⁵

T-Mobile and Sprint claim that they are currently competitively disadvantaged vis-à-vis AT&T and Verizon in terms of market share, spectrum holdings, and access to capital, and that the merger will enable them to attain similar footing on these metrics that will result in aggressive, disruptive competition that will trigger a competitive response.⁵⁶ In fact, T-Mobile and Sprint both have more MHz of spectrum per connection than AT&T or Verizon;⁵⁷ their parent companies, Deutsche Telekom AG and Softbank Group Corp., are among the largest telecommunications providers in the world, with substantial access to capital; and T-Mobile has previously argued that its lower market share, is a competitive advantage because it enables T-Mobile more flexibility and speed in transitioning to 5G.⁵⁸

⁵³ *Id.*

⁵⁴ Recon Analytics, *How America's 4G Leadership Propelled The U.S. Economy*, at 10 (Apr. 16, 2018), https://api.ctia.org/wp-content/uploads/2018/04/Recon-Analytics_How-Americas-4G-Leadership-Propelled-US-Economy_2018.pdf; see also Twentieth Report ¶ 50.

⁵⁵ T-Mobile US Inc., Q2 2018 Earnings Call (Aug. 1, 2018), <https://www.youtube.com/watch?v=WQrBSv3pBWw>.

⁵⁶ T-Mobile/Sprint Public Interest Statement at 85-86.

⁵⁷ See Cowen Industry Update, *The Wireless Snapshot – 1Q18*, at 14 (June 18, 2018) (showing Sprint with more than 3.5 MHz per connection; T-Mobile with more than 1.5 MHz per connection; and AT&T and Verizon with less than 1 MHz per connection; calculations include all spectrum counted toward FCC spectrum screen).

⁵⁸ T-Mobile Newsroom, *T-Mobile Building Out 5G in 30 Cities This Year . . . and That's Just the Start* (Feb. 26, 2018), <https://www.t-mobile.com/news/mwc-2018-5g> (T-Mobile is “in a unique position with 5G, with its unpopulated spectrum holdings and multi-spectrum strategy. While other wireless companies must kick customers off their congested LTE networks to build out 5G, the Un-carrier is building 5G on wide-open airwaves.”).

T-Mobile reported what Mr. Legere described as “incredible results” for the most recent quarter, its “best Q2 ever.”⁵⁹ T-Mobile claims that it “led the industry in postpaid phone growth for the 18th quarter in a row” and “captured about 2/3 of the industry’s postpaid phone growth.”⁶⁰ Moreover, T-Mobile says that its “[s]ervice revenues and adjusted EBITDA are hitting record highs.”⁶¹ T-Mobile contends that its network is “leading the industry in 4G LTE speeds” and “Q2 marks the 18th quarter in a row that T-Mobile was the fastest 4G LTE network.”⁶²

Sprint says that its latest financial results show it “delivering customer growth, profitability and improved network performance all at the same time.”⁶³ Sprint had “retail phone net adds for the sixth consecutive quarter,” the “highest adjusted EBIDTA in more than 11 years,” and “the most improved [network] of any national carrier in terms of average download speeds.”⁶⁴ Sprint describes itself as “the industry’s pioneer of unlimited plans” and claims to “offer the best price for unlimited in the industry,” with Hulu and Tidal available as bundled extras.⁶⁵ Sprint has been offering aggressive “flash” promotions, including a \$15/month unlimited plan⁶⁶ and an iPhone X lease for \$5 per month.⁶⁷

⁵⁹ T-Mobile US Inc., Q2 2018 Earnings Call (Aug. 1, 2018), <https://www.youtube.com/watch?v=WQrBSv3pBWw>.

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ Sprint Corp., Q1 FY 2018 Earnings Call (Aug. 1, 2018).

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ Chris Welch, *Sprint offering \$15 unlimited plan to those willing to switch carriers*, The Verge (June 7, 2018), <https://www.theverge.com/2018/6/7/17438632/sprint-15-dollar-unlimited-plan-deal-announced>.

⁶⁷ Sprint Corp., Press Release, *Sprint Exclusive: Get iPhone X for \$5/Month* (Aug. 10, 2018), <http://investors.sprint.com/news-and-events/press-releases/press-release-details/2018/Sprint-Exclusive-Get-iPhone-X-for-5Month/default.aspx>.

By all indicia, the wireless marketplace is fiercely competitive and growing increasingly so. This competition is delivering enormous consumer benefits, as reflected by sharply declining prices, increasing output, and ongoing innovation in consumer offerings. It also is driving massive investment in network upgrades and a race to deploy 5G technology among all of the major wireless providers.

Respectfully submitted,

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/s/ Michael P. Goggin
Michael P. Goggin
Gary L. Phillips
David L. Lawson
AT&T Services, Inc.
1120 20th Street, N.W., Suite 1000
Washington, D.C. 20036
(202) 457-2055

Attorneys for AT&T Services, Inc.

Maureen R. Jeffreys
Scott Feira
Arnold & Porter
601 Massachusetts Avenue, N.W.
Washington, D.C. 20001
(202) 942-6608

Counsel to AT&T Services, Inc.