Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 6002(b) of the	)	
Omnibus Reconciliation Act of 1993	)	WT Docket No. 17-69
	)	
Annual Report and Analysis of Competitive	)	
Market Conditions with Respect to Mobile	)	
Wireless, Including Commercial Mobile Services	)	

COMMENTS OF

THE FREE STATE FOUNDATION[1]

I. Introduction and Summary

These comments are submitted in response to the Commission's request for comments regarding the Communications Act Section 332(c)(1)(C)'s requirement that "[t]he Commission shall review competitive market conditions with respect to commercial mobile services and shall include in its annual report an analysis of those conditions." The primary focus of these comments is twofold: first, we show that the Commission's "analysis of whether or not there is effective competition" in the wireless market should result in a positive finding; second, the Commission must align its wireless policies with the market's effectively competitive conditions by removing harmful regulations, rejecting new controls, and promoting infrastructure investment. It must remove unwarranted public utility-style Title II regulation of wireless broadband services, return broadband privacy jurisdiction to the Federal Trade Commission, and re-establish a light-touch regulatory policy.

[1] These comments express the views of Randolph J. May, President of the Free State Foundation, and Seth L. Cooper, Senior Fellow of the Free State Foundation. The views expressed do not necessarily represent the views of others associated with the Free State Foundation. The Free State Foundation is a nonpartisan, non-profit free market-oriented think tank.

The dynamism and competitiveness of today's wireless marketplace is supported by several complementary, reinforcing lines of evidence. A good place to start is this morning's (May 8th) headlines. In reporting on the just-announced Comcast-Charter pact striking a new wireless partnership, the *Wall Street Journal* states that the two cable companies are joining forces, looking "to get a piece of the cutthroat business." The same May 8th article, "Comcast, Charter Invest in Wireless Pact," declares that "wireless companies are fighting it out in a fierce price war." Cutthroat business? Fierce price war? On the question of whether the wireless market is competitive, it is tempting to say "Enough said!" and lay down our pens.

But if you are a glutton for hard data, or an FCC official preparing the next *Wireless Competition Report*, please read on. As of December 2015, 99.7% percent of the U.S. population lived in census blocks with coverage by at least two wireless service providers. Meanwhile, 97.9% lived in census blocks with coverage by at least three providers, and 93.4% lived in census blocks with four or more providers. With respect to wireless broadband, 95.9% of the population lived in census blocks with LTE network coverage provided by three or more wireless broadband providers, and 89.1% lived in census blocks with four or more providers offering LTE coverage.

According to consumer price index (CPI) data, wireless service prices have continued to decline. From 2014 to 2015, the annual Wireless Telephone Services CPI decreased by 3.8% while the overall CPI increased by 0.1%. Smartphone use has continued to increase, as 80% of wireless subscribers had a smartphone in the first quarter of 2016, up from 77% in the third quarter of 2015. Monthly data usage per smartphone subscriber in 2015 averaged 2.9 GB per month, increasing 114% since year-end 2014. And the number of American homes with only

wireless phones continues to grow. As of December 2016, 50.8% of adults live in a household that has a wireless voice subscription but no landline voice service.

In view of the strong evidence of wireless market competition and dynamism, the Commission's forthcoming *Twentieth Wireless Competition Report* should expressly affirm that the commercial mobile radio services (CMRS) market and the overall wireless market are effectively competitive. Section 332(c)(1)(C) is best understood to require a yes-or-no conclusion as to "whether or not there is effective competition" for wireless services. Prior Commission reports, up to and including the *Thirteenth Wireless Competition Report* (2009), made positive findings of effective competition.

Further, the next wireless competition report's analysis should be informed by a competing provider test similar to that applied in the *Effective Competition Order* (2015) with respect to local cable markets. On a nationwide basis, competing wireless services far surpass competing provider test thresholds for effective competition. As indicated, 93.4% percent of the U.S. population lived in census blocks with coverage by four or more wireless voice service providers and 89.1% lived in census blocks with four or more providers offering LTE coverage, as of December 2015. And according to the *Nineteenth Report*, 715 out of 716 areas were served by two or more mobile service providers with at least a 5% market share. And 557 areas are served by three or more providers possessing at least a 5% market share. The foregoing data alone is sufficient to find that the CMRS or wireless services market is effectively competitive.

Moreover, the Commission should finally incorporate cross-platform competition between wireless and wireline services into its analysis of the wireless market. Over 50% of households are wireless-only, and a majority of consumers' digital consumption time is now mobile-based. Unlike past reports, the *Twentieth Report* should factor these developments into its

analysis of the wireless market. For the Commission, the proper policy response to cross-platform competition should be reductions in regulatory burdens and increasing reliance on existing dynamic market forces to enhance consumer welfare.

It is imperative that the Commission reclassify wireless broadband Internet access services as a Title I "information service," consistent with its draft proposed rulemaking in the *Restore Internet Freedom* proceeding. The Commission must remove from wireless broadband services its unjustifiable public utility-style regulations imposed by the *Open Internet Order* (2015). This includes elimination of the vague "good conduct" standard, upon which the Commission threatened to ban popular "free data" wireless plans that benefit consumers, especially low income ones.

The *Nineteenth Report* observed: "Wireless service providers spent an incremental $30.9 billion in 2015, which is a decline of approximately 3.2 percent from the $31.9 billion invested in 2014." Correlation between the Commission's decision to impose common carrier-like regulation on wireless broadband and declines in wireless infrastructure investment should not be dismissed lightly. Moreover, the *Nineteenth Report* contains evidence that undermines the gatekeeper and switching-costs rationales upon which the Commission based its public utility-style regulation on wireless broadband services in the *Open Internet Order*. The *Nineteenth Report* observed business decisions by major wireless providers to phase out equipment subsidy term contracts and to provide early termination fee (ETF) buyouts to lure new subscribers, providing ready means for consumers to avoid or significantly reduce switching costs.

The Commission's imposition of privacy regulations on wireless broadband providers, through its *Broadband Privacy Order* (2016), also poses a serious threat to wireless investment. The intrusive regulation it imposes on wireless and other broadband service providers – but not

on other online service providers that collect personal information – is arbitrary and will restrict the amount and choice of information that wireless and other broadband service providers offer consumers. The Commission should implement the draft rulemaking proposal in the *Restoring Internet Freedom* proceeding to restore the Federal Trade Commission's (FTC) jurisdiction over broadband consumer privacy. The FTC has experience addressing online privacy and should be the common enforcer of a common set of consumer protections.

II. Overwhelming Evidence Supplies a Basis for the Commission to Conclude That There is Effective Competition in the Wireless Market

Today's digital, broadband-centric wireless ecosystem features a dizzying array of new wireless service and product options, including choices among four nationwide providers as well as regional providers, 4G network capabilities, smartphone and countless wireless app features, and a variety of mobile data and voice pricing options.

Publicly available information clearly demonstrates that the wireless marketplace is characterized by investment, innovation, and competitive choices. Data cited in the *Nineteenth Wireless Competition Report* (2016) strongly supports the conclusion that both the commercial mobile radio services (CMRS) market – that is, the market consisting of wireless carriers – and the broader mobile wireless marketplace are effectively competitive[2]:

- "Over the past six years, wireless service providers in the United States have made capital investments of approximately $177 billion."
- Total mobile wireless connections grew from between 355-357 million in December 2014 to between 374-378 million in December 2015– an annual growth rate of 5%-6%;
- 95.9% of the population lived in census blocks with LTE network coverage provided by three or more wireless broadband providers as of December 2015,

[2] Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, *Nineteenth Report*, WT Docket No. 16-137 (released September 23, 2016), available at: https://apps.fcc.gov/edocs_public/attachmatch/DA-16-1061A1.pdf.

and 89.1% lived in census blocks with four or more providers offering LTE coverage;

- Consumer pricing options include both post-paid and prepaid service, with "[t]he four nationwide service providers offer prepaid service under their own prepaid brands," in addition to mobile virtual network operators (MVNOs), "which then resell service on the nationwide networks under a variety of prepaid brands." At the end of 2015, TracFone Wireless was the largest MVNO, with about 26 million subscribers.

- "According to CPI data, the price (in constant dollars) of wireless service has continued to decline. From 2014 to 2015, the annual Wireless Telephone Services CPI decreased by 3.8 percent while the overall CPI increased by 0.1 percent and the Telephone Services CPI fell by 1.8 percent."

- Smartphone use has continued to increase, as "approximately 80 percent of all mobile subscribers had a smartphone in the first quarter of 2016," up from about 77% in the third quarter of 2015, and way up from about 51% in the third quarter of 2012. Smartphone penetration rates among new mobile phone purchases stood at approximately 90 percent in the first quarter of 2016, up from about 88% in third quarter 2015, and up from approximately 67 percent in the third quarter of 2012.

- "Google Play offered approximately 2.2 million apps, and Apple App Store offered approximately 2 million apps as of June 2016."

- "Monthly data usage per smartphone subscriber in 2015 averaged 2.9 GB per month, increasing approximately 114 percent since year-end 2014." Other reports peg average smartphone consumer data usage between 3.5 and 4.5 MB per month. "This trend in increasing data use is due to multiple factors, including the increased adoption of smartphones and tablets, growth in streaming video, and the development of faster networks."

Market trends regarding the substitutability of wireless for rival platforms also point to the effective competition characterizing today's wireless market. For example, year after year the number of wireless-only subscribers has continued to increase, strongly suggesting wireless substitutability with landline service offered by traditional telephone or cable VoIP providers. According to the National Health Interview survey on wireless substitution. "50.8% of American

homes did not have a landline telephone but did have at least one wireless telephone" as of December 2016.[3]

Advanced 4G LTE wireless network upgrades continue to improve speeds and increase capacity, constituting an increasingly viable competitive alternative – indeed, in many instances a potential substitute for – wireline broadband. Increasingly, consumers use or have access to high-capacity wireless broadband services capable of streaming HD and other video content. Based on minutes spent, mobile-based digital usage through apps and mobile web browsing exceeded desktop-based digital usage 69% to 31%, as of December 2016.[4] According to an NTIA Chief Economist: "Mobile Internet service appears to be competing more directly with wired Internet connections."[5] Data collected by NTIA "shows that the proportion of online households that relied exclusively on mobile service at home doubled between 2013 and 2015, from 10 percent to 20 percent."[6] The growth in households that have wireless-only access to broadband services "appears to have come at the expense of wired broadband connections."[7]

Further, 5G technology, which is still being developed and now in trial stages, will potentially offer speeds 10 times higher than 4G.[8] The capabilities offered by 5G will further increase multi-media consumption choices for consumers and similarly increase the potential substitutability of wireless networks for alternative platforms. It is also projected that $275

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[3] Stephen J. Blumberg and Julian V. Lake, "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July-December 2016," Division of Health Interview Statistics, National Center for Health Statistics (released May, 2017), available at: https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201705.pdf.
[4] comScore, "2017 Cross-Platform Future in Focus (March 22, 2017), at 6, available at: https://www.comscore.com/Insights/Presentations-and-Whitepapers/2017/2017-US-Cross-Platform-Future-in-Focus.
[5] Giulia McHenry, Chief Economist, Office of Policy Analysis and Development, NTIA, "Evolving Technologies Change the Nature of Internet Use" (April 19, 2016), available at: https://www.ntia.doc.gov/blog/2016/evolving-technologies-change-nature-internet-use.
[6] *Id*.
[7] *Id*.
[8] Deloitte, "Wireless Connectivity Fuels Industry Growth and Innovation in Energy, Health, Public Safety, and Transportation" (January 2017), at 3, available at: http://www.ctia.org/docs/default-source/default-document-library/deloitte_20170119.pdf.

billion in 5G-related investments by industry will leading to the creation of as many as 3 million jobs and boost GDP by as much as $500 billion.[9]

III. Commission Policy Should Align with Realistic Conclusions About Effective Competition in the Wireless Market

Unfortunately, the last half-dozen wireless competition reports released by the Commission have refused to answer "whether or not there is effective competition" in the in commercial mobile radio services (CMRS) or in the wireless market overall. Instead, the Commission has relied on a shallow refrain that any conclusion it might reach about whether or not there is effective competition in the wireless market would be misleading.[10] But it is truly misleading to refuse to forthrightly acknowledge of clearly competitive state of the market.

The most straightforward reading of Section 332(c)(1)(C), calls for the Commission to make positive or negative findings as part of its "analysis whether or not there is effective competition" in the market. The *Thirteenth Wireless Competition Report* (2009), as well as prior reports, concluded that the wireless market *is* effectively competitive.[11] Moreover, it makes no sense for the Commission to confidently claim, as it has in its last half-dozen reports, that it has conducted "an analysis of whether or not there is effective competition" while simultaneously claiming that it does not know what "effective competition" means.

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[9] Accenture Strategy, "Smart Cities: How 5G Can Help Municipalities Become Vibrant Smart Cities" (January 2017), at 1, available at: https://www.ctia.org/docs/default-source/default-document-library/how-5g-can-help-municipalities-become-vibrant-smart-cities-accenture.pdf.

[10] *See Nineteenth Report*, at ¶ 4.

[11] *See* Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services ("*Thirteenth Report*"), WT Docket 08-27, at ¶¶ 1, 224 (released January 16, 2009), available at: https://apps.fcc.gov/edocs_public/attachmatch/DA-09-54A1.pdf. *See also Ninth Report*, 19 F.C.C.R. 20597, ¶¶ 2, 204 (2004); *Tenth Report*, 20 F.C.C.R. 15908, ¶¶ 2, 191 (2005); *Eleventh Report*, 21 F.C.C.R. 10947, ¶¶ 2, 195 (2006); *Twelfth Report*, 23 F.C.C.R. 2241, ¶¶ 290, 293 (2008).

IV. The Commission Should Use a Competing Provider Test in Its Wireless Analysis

The *Twentieth Wireless Competition Report*'s analysis of whether or not there is effective competition in the CMRS or wireless market should be informed by a competing provider test standard. The Commission applied such a test in its *Effective Competition Order* (2015).[12] Application of a similar test to the wireless market offers a consistent, objective basis for evaluating the market, providing perspective on the strong competition present today.

According to the Commission's "competing provider test," a franchise area is effectively competitive if it is served by at least two unaffiliated multi-video programming distributors (MVPDs) offering comparable video services to half of the households *and* the number of households subscribing to services other than that of the largest MVPD exceeds fifteen percent.[13] By analogous application of the Section 623(l)(1)(B) competing provider test to the wireless market, effective competition would be present if the given area is: (1) served by at least two competing wireless providers, each of which offers wireless voice and broadband services to at least 50% of all households in the area; and (2) the number of subscribers other than the largest wireless voice and broadband provider in the area exceeds 15% of the area's households.

Similar to its approach in the *Effective Competition Order*, the Commission should analyze nationwide population percentages covered by multiple wireless providers according to competing provider standards. As of December 2015, 99.7% percent of the U.S. population lived in census blocks with coverage by at least two commercial mobile service providers. Meanwhile, 97.9% lived in census blocks with coverage by at least three providers, and 93.4% lived in

[12] Amendment to the Commission's Rules ("*Effective Competition Order*"), MB Docket No. 15-135 (released June 3, 2015), available at: http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0610/FCC-15-62A1.pdf.
[13] 47 U.S.C. § 543(l)(1)(B).

census blocks with four or more providers.[14] With respect to mobile broadband, 95.9% of the population lived in census blocks with LTE network coverage provided by three or more wireless broadband providers as of December 2015, and 89.1% lived in census blocks with four or more providers offering LTE coverage.[15] While those competitor coverage figures are nationwide, they surely indicate the presence of at least two competing mobile service providers and lack of any dominant provider across all cellular marketing areas. The *Nineteenth Report* also cites provider coverage data by cellular marketing areas that clearly corroborate the nationwide figures. As of December 2015, 715 out of 716 areas are served by two or more mobile service providers with at least a 5% market share. And 557 areas are served by three or more providers possessing at least a 5% market share. Based on the foregoing data cited in the *Nineteenth Report*, the wireless market performs exceptionally well and should be deemed effectively competitive.

There is Commission precedent for using a standard like the competing provider test in its analysis of the wireless market. The *Ninth*, *Tenth*, and *Eleventh Wireless Competition Reports* identified the percentage of the U.S. population living in counties with access to multiple providers as an indicator of "effective competition" in the wireless market.[16] The *Tenth* and *Eleventh Reports* identified the absence of any provider having a dominant market share as another indicator.[17] Of course, the Commission's *Mobile Services Order* (1994) deemed wireless

[14] *See Nineteenth Report,* at ¶ 37.
[15] *See Nineteenth Report,* at ¶ 39.
[16] 19 F.C.C.R. 20597, ¶ 2; 20 F.C.C.R. 15908, ¶ 2; 21 F.C.C.R. 10947, ¶ 2.
[17] *See* 20 F.C.C.R. 15908, ¶ 2; 21 F.C.C.R. 10947, ¶ 2.

voice services non-dominant "[b]ecause non-dominant carriers lacked market power to control prices."[18] And consumers have superior choices for wireless voice services in 2017 than in 1994.

V. Wireless Substitution and Intermodal Competition Should Be Factored into the Commission's Analysis of the Wireless Market

The Commission's wireless market analysis needs to account for cross-platform competition, including wireless substitution trends. Potential substitutes and alternative platforms are indicators of dynamic competition and benefit consumers by giving them choices. From a public policy standpoint, cross-platform competition and the availability of substitute products and services should prompt the Commission to reduce existing regulatory burdens, avoid imposing new burdens, and rely more on dynamic market forces to enhance consumer welfare.

In this digital age of all-IP broadband networks, digital services are increasingly characterized by cross-platform convergence and competition. Consumer broadband data usage is increasingly dispersed across services and platforms. *Prima facie* evidence of substitutability and cross-platform competition exists in the form of consumer trends like cord-cutting for voice services and cord-shaving for video services. As indicated, over 50% of households are wireless-only and a majority of digital media consumption is now mobile-based.

Regrettably, the *Nineteenth Report* followed prior reports by offering no analysis of wireless substitution or competition between wireless and other platforms.[19] The next wireless competition report offers the Commission opportunity to take wireless substitutability and cross-competition seriously in its analysis of effective competition in the wireless market.

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[18] Implementation of Sections 3(n) and 332 of the Communications Act; Regulatory Treatment of Mobile Services, Second Report and Order ("*Mobile Services Order*"), 9 F.C.C.R. 1411 (1994).
[19] *See Nineteenth Report,* at ¶ 133-134.

VI. The Commission Should Restore a Light-Touch Approach to Wireless Policy

The Commission must align its wireless policies with the market's effectively competitive conditions by removing harmful regulations, rejecting new regulatory controls, and encouraging infrastructure investment. It should restore a light-touch regulatory approach.

It is imperative that the Commission reclassify wireless broadband Internet access services as a Title I "information service" consistent with its draft rulemaking in the *Restore Internet Freedom* proceeding.[20] The Commission must remove its unjustifiable public utility-style regulations of wireless broadband services imposed by the *Open Internet Order* (2015). This includes elimination of the vague "good conduct" standard, upon which the Commission threatened to ban "free data" wireless plans that benefit value conscious and low income consumers. Other bright-line rules should be removed or at least modified to be less intrusive.

There is reason to be concerned that regulation of wireless broadband services, imposed by the *Open Internet Order*, has had harmful effects on investment in mobile broadband infrastructure. The *Nineteenth Report* observed: "Wireless service providers spent an incremental $30.9 billion in 2015, which is a decline of approximately 3.2 percent from the $31.9 billion invested in 2014."[21] Correlation between the Commission's decision to impose common carrier-like regulation on wireless broadband for the first time and declines in wireless broadband infrastructure investment should not be dismissed lightly.

Clearly, consumers continue to enjoy competitive choices among wireless service providers – which the *Open Internet Order* misguidedly downplayed. As indicated, 95.9% of population lived in census blocks with LTE network coverage provided by three or more

[20] *See* Restoring Internet Freedom, WC Docket No. 17-108.
[21] *Nineteenth Report,* at ¶ 24

wireless broadband providers in December 2015. Effective market competition is an important check against wireless provider incentives or ability to engage in anti-competitive conduct.

Moreover, the *Nineteenth Report*, like its predecessor report, contains evidence that undermines the gatekeeper and switching-costs rationales upon which the Commission based its public utility-style regulation on wireless broadband services in the *Open Internet Order*. According to the *Nineteenth Report*: "Starting in 2013, as previously reported in the last two *Reports*, service providers have been promoting service plans without term contracts and equipment subsidies in favor of Equipment Installment Plans (EIPs)."[22] The report observed that in 2015, Sprint, Verizon, and AT&T all announced plans to phase out term contracts equipment subsidies. In addition, competing providers continue to offer ETF buyouts to encourage customers to switch from rivals. The *Open Internet Order* deemed ETFs "a significant factor in enabling the ability of mobile broadband providers to act as gatekeepers."[23] But term contract phase-out and ETF buyouts provide ready means for consumers to avoid or significantly reduce switching costs. In short, continuing trends in pricing options undermine the *Open Internet Order*'s analytical underpinnings for regulating wireless broadband services and support Title I reclassification.

The Commission's imposition of privacy regulations on wireless broadband providers, through its *Broadband Privacy Order* (2016), also poses significant threat to wireless broadband investment. The Commission lacks legal authority for its new privacy rules. The intrusive regulation it imposes on wireless and other broadband service providers – but not on other online service providers that collect personal information – is arbitrary and will restrict the choices that

[22] *Nineteenth Report,* at ¶ 86
[23] Protecting and Promoting the Open Internet, Report and Order on Remand and Declaratory Ruling and Order ("*Open Internet Order*"), GN Docket No. 14-28 (released March 12, 2015), at ¶ 97.

wireless and other broadband service offer consumers and the information made available to consumers. The Commission should implement the proposal, contained in its draft rulemaking in the *Restoring Internet Freedom* proceeding, to restore the Federal Trade Commission's (FTC) jurisdiction over broadband consumer privacy. The FTC has experience addressing online privacy and be the common enforcer of a common set of protections for consumers.

Similarly, its proceeding involving a petition requesting that the Commission declare text messaging and other wireless messaging to be subject to Title II regulation poses regulatory uncertainty.[24] If such a petition were granted it would saddle wireless broadband providers with special burdens and unnecessary costs and put text and other wireless messaging services at a disadvantage compared to competing IP-based alternatives, including instant messaging, social media, and email. Also, the effectively competitive state of the wireless market and existing alternatives to text messaging renders new Title II controls unjustifiable. The Commission should *not* grant the petition but should instead close the proceeding as soon as possible.

To facilitate continued investment and innovation in wireless broadband services, the Commission should focus on its efforts on streamlining cell tower, antennae, and small cell infrastructure deployment processes. It must also focus on licensing spectrum for commercial wireless usage. The Commission should follow through on its existing proceedings aimed at removing overly burdensome restrictions on wireless infrastructure siting. It should likewise continue efforts to remove outdated recordkeeping requirements and other restrictions on licensed spectrum usage, make new spectrum bands available for commercial use, and find ways to ensure a more efficient secondary market for spectrum licenses.

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[24] *See* Petition of Twilio Inc. For An Expedited Declaratory Ruling Clarifying the Regulatory Status of Mobile Messaging Services, Public Notice, WT Docket No. 08-7 (released October 13, 2015).

VII. Conclusion

For the foregoing reasons, the Commission should act in accordance with the views expressed herein.

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May 8, 2017