

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

In the Matter of

Expanding the Economic and Innovation  
Opportunities of Spectrum through Incentive  
Auctions

Policies Regarding Mobile Spectrum Holdings

GN Docket No. 12-268

WT Docket No. 12-269

**EX PARTE SUBMISSION OF THE MASSACHUSETTS  
DEPARTMENT OF TELECOMMUNICATIONS  
AND CABLE CONCERNING 600 MHz INCENTIVE AUCTION**

Commonwealth of Massachusetts  
Department of Telecommunications and Cable

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**I. INTRODUCTION.**

The Massachusetts Department of Telecommunications and Cable (“MDTC”)<sup>1</sup> respectfully submits this *ex parte* submission in response to two Notice of Proposed Rulemakings (“NPRMs”) the Federal Communications Commission (“FCC”) released on September 28, 2012, and October 2, 2012, as well as to several comments and *ex parte* submissions in the above-referenced dockets.<sup>2</sup> The MDTC generally agrees with comments submitted by the United States Department of Justice (“DoJ”),<sup>3</sup> as specified below. Specifically, the MDTC encourages the FCC to establish auction rules equally applicable to all carriers to ensure that valuable 600 MHz spectrum is allocated in a manner that maximizes expansion of

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<sup>1</sup> The MDTC regulates telecommunications and cable services within the Commonwealth of Massachusetts and represents the Commonwealth before the FCC. MASS. GEN. LAWS ch. 25C, § 1; MASS. GEN. LAWS ch. 166A, § 16.

<sup>2</sup> *In the Matter of Expanding the Econ. & Innovation Opportunities of Spectrum Through Incentive Auctions*, GN Docket No. 12-268, *Notice of Proposed Rulemaking*, FCC 12-118 (rel. Oct. 2, 2012) (“Incentive Auction NPRM”); *In the Matter of Policies Regarding Mobile Spectrum Holdings*, WT Docket No. 12-269, *Notice of Proposed Rulemaking*, FCC 12-119 (rel. Sept. 28, 2012) (“Spectrum Policy NPRM”).

<sup>3</sup> *In the Matter of Policies Regarding Mobile Spectrum Holdings*, WT Docket No. 12-269, U.S. Dep’t of Justice *ex parte* at 14 (Apr. 11, 2013) (“DoJ Comments”).

advanced wireless services while at the same enhancing competition in the wireless services marketplace, particularly where wireless broadband competition is lacking, such as parts of Massachusetts.<sup>4</sup>

The NPRMs sought comment on the FCC's mobile spectrum policy and the appropriate framework for the 600 MHz incentive auction, in which the FCC proposes to repurpose broadcasters' 600 MHz spectrum for commercial use.<sup>5</sup> While the deadline for the incentive auction is 2022, the FCC's Chairman now estimates that the agency will hold the incentive auction in 2015.<sup>6</sup> This *ex parte* submission focuses on spectrum policies that promote the public interest in the context of the design and implementation of the 600 MHz incentive auction.

## **II. SUMMARY.**

Generally, there are two approaches the FCC can take in this auction: unrestricted or tailored. The FCC should choose the latter and consider carefully tailored spectrum aggregation rules that enable more carriers the opportunity to win access to useful spectrum, ensuring a better competitive balance across the wireless marketplace.<sup>7</sup> Spectrum is a critical and essential input for any wireless network carrier. Over time, carriers' market shares are likely to reflect their respective share of spectrum ownership. The incentive auction rules that the FCC adopts will play a vital role in determining which carriers acquire spectrum and how much each acquires. An unrestricted auction could result in few carriers with large market shares winning sizeable

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<sup>4</sup> See Exhibit 1 (highlighting the areas in Massachusetts that are served by two or fewer wireless broadband providers).

<sup>5</sup> 47 U.S.C. § 309(j)(G); Incentive Auction NPRM; Spectrum Policy NPRM.

<sup>6</sup> See Posting of Tom Wheeler to Official FCC Blog, <http://www.fcc.gov/blog/path-successful-incentive-auction-0> (Dec. 6, 2013).

<sup>7</sup> See DoJ Comments at 23.

portions of the available spectrum, further concentrating the wireless market, particularly in parts of central and western Massachusetts.<sup>8</sup>

In designing the auction, the FCC should consider the post-auction landscape and adopt rules equally applicable to all carriers that result in increased overall consumer welfare. Although it does not recommend specific auction rules, the MDTC encourages the FCC to consider rules that, for example, generally limit total post-auction sub-1 GHz spectrum holdings to some specified percentage of the total available sub-1 GHz spectrum and specifically limit the total amount of 600 MHz spectrum that any one carrier can accumulate in an auction block. The post-auction landscape is particularly important because there is unlikely to be this quantity of sub-1 GHz spectrum available for commercial use in the near future. As demonstrated below, the courses of action described herein are sound policy and consistent with the FCC's legal mandate.

### **III. THE FCC HAS LEGAL AUTHORITY TO DESIGN THE 600 MHz INCENTIVE AUCTIONS IN A MANNER THAT BALANCES THE DESIRE TO MAXIMIZE REVENUES FOR VALUABLE SPECTRUM WITH THE FCC'S LEGAL OBLIGATION TO AVOID EXCESSIVE CONCENTRATION IN THE WIRELESS MARKETPLACE.**

The FCC has the legal authority, and, indeed, a mandate to design the 600 MHz incentive auction in such a way that values increased overall consumer welfare as a primary objective.<sup>9</sup> Specifically, Congress directed the FCC to ensure that it would promote competition and make wireless broadband available to all Americans “by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants.”<sup>10</sup> The Spectrum Act explicitly reserves the right of the FCC to “adopt and enforce rules of general applicability,

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<sup>8</sup> See *id.* at 14; DR. MARTYN ROETTER & DR. ALAN PEARCE, THE IMPACT OF BIDDING ELIGIBILITY CONDITIONS ON SPECTRUM AUCTION REVENUES 24 (2013); Exhibit 1.

<sup>9</sup> See 47 U.S.C. § 309(j)(3) (directing the FCC to include safeguards in its auction design that protect the public interest).

<sup>10</sup> See *id.* §§ 309(j)(3)(A)-(B).

including rules concerning spectrum aggregation that promote competition.”<sup>11</sup> Congress included this savings clause for a reason: so that the FCC would use the reserved authority to promote the pro-consumer objectives that Congress mandated previously.<sup>12</sup> As discussed below, to effectively utilize its authority and carry out Congress’s directive, the FCC must consider tailored auction rules that will prevent further wireless market concentration.<sup>13</sup>

Presently, larger incumbent wireless carriers have an incentive to prevent new competitors from entering the wireless market, which they can do by buying spectrum that otherwise would have gone to those new entrants.<sup>14</sup> If the large incumbents were to act on these incentives, the FCC may see an increase in the revenues raised through the incentive auction, but with an adverse impact on post-auction competition.<sup>15</sup> There is thus an obvious conflict between the objective of maximizing auction revenues and that of bringing about a competitive wireless marketplace through spectrum auctions. Given the current state of the wireless marketplace,<sup>16</sup> and the FCC’s statutory framework, the FCC should evaluate whether the latter goal should trump the former.<sup>17</sup>

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<sup>11</sup> Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6404 (codified at 47 U.S.C. § 309(j)(17)(B)).

<sup>12</sup> See 47 U.S.C. § 309(j)(3); 158 Cong. Rec. E261-03 (2012) (statement of Rep. Markey) (predicting that the FCC’s use of the savings clause in designing auction rules “will help ensure a competitive, creative, and consumer-friendly wireless marketplace.”); 158 Cong. Rec. E272-03 (2012) (statement of Rep. Eshoo) (stating that the savings clause “is critical to ensuring that the FCC can meet *its statutory obligation to ensure competition in the wireless marketplace . . .*”) (emphasis added).

<sup>13</sup> See 47 U.S.C. § 309(j)(3)(B).

<sup>14</sup> See DoJ Comments at 10-11, 16.

<sup>15</sup> Peter Cramton, et al., *Using Spectrum Auctions to Enhance Competition in Wireless Services*, 54 J.L. & ECON. 167, 170 (2011) (“[S]elling the rights to be a monopolist can raise much more revenue than selling licenses to many competing providers, to the detriment of postauction competition and efficiency.”).

<sup>16</sup> See *infra* Section IV.B. See generally *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, WT Docket No. 11-186, 28 FCC Rcd 3700, *Sixteenth Report & Order* (rel. Mar. 21, 2013) (“*Wireless Competition Report*”).

<sup>17</sup> See 47 U.S.C. § 309(j)(3)(B) (directing the FCC to seek to promote “economic opportunity and competition and ensur[e] that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women”).

While auction revenues are important, they must be balanced with a well-functioning, competitive marketplace, which is essential to keeping prices low, keeping outputs high, and driving innovation.<sup>18</sup> The FCC has the legal authority to balance these interests by implementing carefully tailored auction rules.

#### **IV. THE FCC SHOULD CONSIDER TAILORED AUCTION RULES GIVEN ITS EXISTING CONCERNS ABOUT WIRELESS MARKET CONCENTRATION.**

Given the FCC's lack of finding of effective competition in the wireless marketplace and its mandate to promote competition through the 600 MHz auction, the FCC should consider tailored auction rules to ensure that the auction does not lead to increased market concentration.<sup>19</sup>

##### **A. LOW FREQUENCY SPECTRUM IS A SCARCE AND VALUABLE RESOURCE FOR WIRELESS PROVIDERS TO USE TO EXPAND AVAILABILITY OF ADVANCED SERVICES, AND MUST BE ALLOCATED IN A MANNER THAT IS CONSISTENT WITH THE FCC'S STATUTORY OBLIGATIONS.**

The 600 MHz auction will bring between 80 and 120 MHz of extremely valuable, low frequency spectrum into the market, and is likely the last opportunity for wireless carriers to acquire meaningful amounts of low frequency spectrum.<sup>20</sup> Therefore, the FCC should remain mindful of its statutory obligations and consider framing the 600 MHz auction rules in a manner that reduces market concentration and enhances competition.<sup>21</sup>

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<sup>18</sup> In addition, high spectrum prices at an auction can limit the ability of carriers to invest in building out their networks. Auctions that extract high rents from operators may result in delays of investments or in concentration of network coverage in urban and high-income areas, while rural and low-income areas are not served. DR. PATRICK XAVIER, LICENSING OF THIRD GENERATION (3G) MOBILE: BRIEFING PAPER 48 (2001), *available at* [http://www.itu.int/osg/spu/ni/3G/workshop/Briefing\\_paper.PDF](http://www.itu.int/osg/spu/ni/3G/workshop/Briefing_paper.PDF). For example, after the 3G auctions in Europe, which had high auction revenues, 3G network deployment was delayed for several years and a number of licenses were returned. HAROLD GRUBER, 3G MOBILE TELECOMMUNICATIONS LICENSES IN EUROPE: A CRITICAL REVIEW 17-18 (2006).

<sup>19</sup> See 47 U.S.C. § 309(j)(3)(B); *Wireless Competition Report*, ¶ 2.

<sup>20</sup> FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN at Recommendation 5.8 (2010).

<sup>21</sup> See *supra* note 10 and accompanying text.

The wireless market in the United States, and, specifically, in parts of central and western Massachusetts, is marked by a dearth of smaller second tier operators and rural network operators.<sup>22</sup> One reason small and regional operators have not thrived in the market is the lack of access to low frequency spectrum.<sup>23</sup> Low frequency spectrum, such as those below 1 GHz, is considered more valuable than higher frequency spectrum by wireless carriers on account of the low frequency's superior propagation characteristics.<sup>24</sup> Low frequency spectrum is thus particularly suitable for covering wide geographic areas with lower intensity of usage, such as rural areas.<sup>25</sup>

At present, a few large incumbent carriers own most of the available low frequency spectrum.<sup>26</sup> New entrants, or incumbents with considerably lower holdings of low frequency spectrum, may be unable to compete effectively with these incumbents unless they have access to low frequency spectrum.<sup>27</sup> Rural and regional carriers in particular could use low frequency spectrum to provide advanced wireless and broadband services in unserved and underserved areas, which generally have lower population densities.

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<sup>22</sup> *Wireless Competition Report*, ¶ 52; see also Exhibit 1.

<sup>23</sup> *In the Matter of AT&T Inc. & Atl. Tele-Network, Inc. Seek FCC Consent to the Transfer of Control & Assignment of Licenses, Spectrum Leasing Authorizations & an Int'l Section 214 Authorization*, WT Docket No. 13-54, Rural Telecommunications Group, Inc. Reply Comments at 2-3 (Apr. 22, 2013).

<sup>24</sup> *In the Matter of Serv. Rules for the 698-746, 747-762, & 777-792 MHz Bands*, et al., WT Docket No. 06-150, et al., 22 FCC Rcd 15289, 15349, ¶ 158, *Second Report & Order* (rel. Aug. 10, 2007) (recognizing that low frequency spectrum has “excellent propagation characteristics, mak[ing] it ideal for delivering advanced wireless services to rural areas”). Low frequency signals penetrate buildings and walls better, and travel farther, than high frequency signals. OFCOM, CONSULTATION ON ASSESSMENT OF FUTURE MOBILE COMPETITION AND PROPOSALS FOR THE AWARD OF 800 MHZ AND 2.6 GHZ SPECTRUM AND RELATED ISSUES, Annexes 7-13 at 6 (2011) (stating that to achieve 90% population coverage of at least 4 Mbps, using 2600 MHz requires over 10 times as many towers as using 800 MHz).

<sup>25</sup> *Wireless Competition Report*, ¶ 119.

<sup>26</sup> Low frequency spectrum is currently available in the 700 MHz, SMR, and Cellular bands. Verizon Wireless holds 48.1% of Cellular spectrum and 42% of 700 MHz spectrum, while AT&T holds 43.6% of Cellular spectrum and 35.9% of 700 MHz band spectrum when measured on a licensed MHz-POP basis. *Id.*, ¶ 129. Sprint holds approximately 97% of the SMR spectrum. *Id.* On a population weighted basis, Verizon owns 54.7 MHz, AT&T owns 48 MHz, and Sprint owns 17.5 MHz, together representing almost 85% of the available low frequency spectrum. *Id.*, ¶ 131; see also DoJ Comments at 14.

<sup>27</sup> See DoJ Comments at 23.

Allocation of spectrum in the 600 MHz auction thus will have serious implications on the state of competition in the wireless marketplace. To promote competition, the FCC should distinguish the 600 MHz spectrum, and implement specific rules limiting spectrum aggregation, which will encourage wider ownership of this band.<sup>28</sup>

**B. WIRELESS MARKETS IN MASSACHUSETTS ARE CONCENTRATED, FURTHER EMPHASIZING THE NEED FOR THE FCC TO ENSURE RESPONSIBLE ALLOCATION OF 600 MHz SPECTRUM LEADING TO INCREASED COMPETITION IN THE WIRELESS MARKETPLACE.**

The MDTC agrees with the DoJ that “the fewer competitors in a market, the higher the risk that competitors can tacitly collude or act in concert to the detriment of consumers and innovation.”<sup>29</sup> In the absence of effective competition, rival carriers may not be able to discipline excessive profits of incumbent firms, and the absence of a disciplining device hurts consumers through higher prices and inferior choices.<sup>30</sup> Currently, the two largest wireless carriers have a combined 68% market share and the four national carriers have a combined 96% market share.<sup>31</sup> This competitive imbalance is particularly striking in parts of central and western Massachusetts where consumers have at most two choices for wireless broadband.<sup>32</sup> Given this current concentration, the FCC must develop rules in the 600 MHz auction that will bring about additional competitors, rather than holding an unrestricted auction which would further increase future exercise of market power by the large wireless carriers.<sup>33</sup>

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<sup>28</sup> See 47 U.S.C. § 309(j)(3)(B); DoJ Comments at 18.

<sup>29</sup> DoJ Comments at 7.

<sup>30</sup> See *id.* at 8 (“Carriers do have the ability and, in some cases, the incentive to exercise at least some degree of market power, particularly given that there is already significant nationwide concentration in the wireless industry.”).

<sup>31</sup> *Wireless Competition Report*, ¶ 52.

<sup>32</sup> See Exhibit 1.

<sup>33</sup> See DoJ Comments at 18.

## 1. Wireless Markets Are Highly Concentrated, As Measured By The FCC And DoJ.

According to the FCC and DoJ, the wireless marketplace in the United States is highly concentrated, as measured by the Herfindahl-Hirschman Index (“HHI”).<sup>34</sup> For antitrust purposes, the DoJ classifies markets with an HHI of less than 1500 as unconcentrated, markets with an HHI between 1500 and 2500 as moderately concentrated, and markets with an HHI of over 2500 as highly concentrated.<sup>35</sup> An FCC analysis of the national mobile wireless market shows that the market has remained “highly concentrated” since 2006, with concentration increasing steadily.<sup>36</sup> From 2003 (the first year the FCC calculated HHIs using this methodology) to year-end 2011, the average HHI in the mobile wireless market increased from 2151 to 2873.<sup>37</sup> Moreover, the HHI in Massachusetts as of December 2012 is even higher than the national average.<sup>38</sup> And that is for Massachusetts as a whole; residents of western Massachusetts generally have even fewer choices in wireless providers, particularly when it comes to broadband.<sup>39</sup> For example, 84% of Franklin County residents are covered by three or fewer wireless broadband providers and 26% of the county’s residents are covered by two or less.<sup>40</sup> In addition, 14% of the county’s residents do not have access to fixed broadband, let

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<sup>34</sup> *Wireless Competition Report*, ¶ 59; see also DoJ Comments at 8.

<sup>35</sup> U.S. DEP’T OF JUSTICE & THE FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES 5.3 (2010), available at <http://www.justice.gov/atr/public/guidelines/hmg-2010.html#5c>.

<sup>36</sup> *Wireless Competition Report*, ¶ 59; see also *In the Matter of Application of AT&T Inc. & Deutsche Telekom AG For Consent to Assign or Transfer Control of Licenses & Authorizations Held by T-Mobile USA, Inc. & Its Subsidiaries*, WC Docket No. 11-65, MDTC Reply Comments (June 20, 2011).

<sup>37</sup> *Wireless Competition Report*, ¶ 59.

<sup>38</sup> The MDTC obtains Massachusetts-specific wireless marketplace data via the FCC Form 477. The FCC produces publicly available semi-annual summaries of Form 477 data, referred to as “Local Telephone Competition and Broadband Deployment” at <http://transition.fcc.gov/wcb/iatd/comp.html>.

<sup>39</sup> See Exhibit 1.

<sup>40</sup> See NTIA & FCC, National Broadband Map, available at <http://www.broadbandmap.gov/summarize/state/massachusetts/county/franklin>. The situation is not much better in Berkshire County where 62% of residents are covered by three or fewer wireless broadband providers and 13% of

alone wireless.<sup>41</sup> Increasing the number and coverage of wireless providers in western Massachusetts could spur greater competition to reach these unserved areas through wireless broadband technologies.

The recent acquisitions of Metro PCS by T-Mobile and Leap Wireless by AT&T further increased the level of market concentration and leaders of the wireless industry predict further consolidation among wireless carriers.<sup>42</sup> The FCC should be cognizant of the potential for future consolidation in the wireless marketplace—many news agencies have reported recently a potential transaction between the nation’s third and fourth largest carriers.<sup>43</sup>

## **2. An Unrestricted Auction May Increase Market Concentration.**

The FCC should consider rules for the 600 MHz auction that create opportunities for more competitive wireless markets by encouraging new entrants. These rules and policies should be designed to prevent carriers from engaging in exclusionary conduct that preserves their dominance.<sup>44</sup> While the MDTC does not provide an exhaustive list of potential auction rules at this time, it shares the DoJ’s view that “a set of well-defined, competition-focused rules . . . would best serve the dual goals of putting spectrum to use quickly and promoting consumer welfare in wireless markets.”<sup>45</sup>

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residents are covered by two or less. *See* NTIA & FCC, National Broadband Map, *available at* <http://www.broadbandmap.gov/summarize/state/massachusetts/county/Berkshire>.

<sup>41</sup> FCC, Section 706 Fixed Broadband Deployment Map, *available at* <http://www.fcc.gov/maps/section-706-fixed-broadband-deployment-map>.

<sup>42</sup> *See* Larry Dignan, *AT&T: Telecom consolidation ‘logical,’ inevitable*, ZDNET (May 30, 2012), <http://www.zdnet.com/blog/btl/at-and-t-telecom-consolidation-logical-inevitable/78656> (quoting AT&T CFO, John Stephens: “I think it is logical to assume you’re going to have two or three and certainly not six and seven competitors in any marketplace.”); Dan Hesse, CEO, Sprint Corp., Interview at the IFA (Sept. 6, 2013) (“More consolidation in the industry is inevitable as phone carriers need more capacity to continue to invest and improve services.”).

<sup>43</sup> *See, e.g.*, Ryan Knutson, et al., *Sprint Working on a Bid for T-Mobile*, THE WALL STREET JOURNAL, Dec. 13, 2013, <http://online.wsj.com/news/articles/SB10001424052702303293604579256561000513396>.

<sup>44</sup> *See* DoJ Comments at 14.

<sup>45</sup> *See id.* at 1.

In the upcoming 600 MHz incentive auction, smaller existing market participants and potential new market entrants are in a weaker position than incumbents. New entrants in particular face a mature market with low churn rates in the profitable postpaid market, and due to the absence of an existing customer base, they are far more sensitive to the cost of spectrum and the need to quickly recoup that cost to run the network profitably. Incumbents, on the other hand, have an established customer base and have already made the necessary investments in their networks, which can be treated as sunk costs.<sup>46</sup> In an unrestricted auction setting, carriers, as the DoJ suggests, could place a high strategic value in blocking new entrants by purchasing more spectrum than what is actually required to meet their business goals—spectrum that may otherwise go to a new entrant.<sup>47</sup> Because this potential exists, the FCC should consider rules that would limit the ability of a carrier to engage in exclusive behavior, for example, by requiring carriers that win spectrum in the 600 MHz auction to deploy the spectrum within some specified amount of time.<sup>48</sup> This would prevent any carriers from stockpiling spectrum for unreasonable periods of time to the detriment of the marketplace.

## **V. THE FCC SHOULD DESIGN AUCTION RULES THAT WILL ACHIEVE CERTAIN POST-AUCTION WIRELESS MARKETPLACE OBJECTIVES.**

The 600 MHz spectrum, captured from existing broadcast television bands, is the only large block of contiguous low frequency spectrum that is planned to be made available for the wireless industry.<sup>49</sup> As spectrum is a scarce and essential input for wireless carriers, access to spectrum, and this auction, specifically, will be the primary determinant of future market share of

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<sup>46</sup> LINDA K. MOORE, CONG. RESEARCH SERV., SPECTRUM POLICY IN THE AGE OF BROADBAND: ISSUES FOR CONGRESS 14 (2013).

<sup>47</sup> See DoJ Comments at 10, 14.

<sup>48</sup> The MDTC leaves it to the FCC to determine what amount of time would be appropriate.

<sup>49</sup> See U.S. DEP'T OF COMMERCE, PLAN AND TIMETABLE TO MAKE AVAILABLE 500 MEGAHERTZ OF SPECTRUM FOR WIRELESS BROADBAND 6-7 (2010) (indicating that other low frequency bands are either unsuitable for wireless broadband service or already in use).

competing carriers.<sup>50</sup> As noted above, concentrated spectrum ownership would increase overall market concentration and open the door for potential exercise of market power by incumbents.<sup>51</sup> Thus, a primary objective of the auction should be to maximize participation and encourage market entry by new players, which would make spectrum ownership less concentrated in low frequency bands. Indeed the FCC has been tasked to do just that.<sup>52</sup>

The MDTC recommends that the FCC adopt some combination of auction rules applicable to all carriers—such as spectrum caps, set asides, roaming requirements, geographic license area sizes, and interoperability requirements—which in combination will reverse the trend towards greater market concentration, particularly in places such as western Massachusetts. The auction rules should lead to bids that reflect the intrinsic value of the spectrum for carriers and result in wider ownership of this scarce and critical resource. The FCC is best positioned to devise the specific auction rules that will foster a more competitive marketplace. In doing so, the FCC should consider using certain post-auction objectives to help guide the auction’s design. For instance, the FCC should consider whether a post-auction landscape in which (1) no carrier had sub-1 GHz spectrum holdings in excess of 33% of the available sub-1 GHz spectrum in each auction block,<sup>53</sup> and (2) no carrier had post-auction spectrum holdings in the 600 MHz spectrum in excess of 25% of the available spectrum in any auction block would be desirable. The MDTC does not recommend that the FCC adopt auction rules that only apply to certain carriers. Rather,

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<sup>50</sup> DoJ Comments at 9.

<sup>51</sup> *See also id.* at 23.

<sup>52</sup> 47 U.S.C. § 309(j)(3)(B).

<sup>53</sup> *See In the Matter of Expanding the Econ. & Innovation Opportunities of Spectrum Through Incentive Auctions*, GN Docket No. 12-268, *In the Matter of Policies Regarding Mobile Spectrum Holdings*, WT Docket No. 12-269, *T-Mobile USA, Inc. Ex Parte Notice* at 1 (Jan. 23, 2014); *Competitive Carriers Assoc. Ex Parte Notice* (Feb. 5, 2014).

the MDTC suggests that in adopting auction rules, the FCC should consider applying the same rules to all carriers from a post-auction spectrum holdings perspective.<sup>54</sup>

Currently, two large carriers together control approximately 85% of the sub-1 GHz spectrum on a MHz Pop basis.<sup>55</sup> Striving for diverse ownership of sub 1-GHz spectrum would prevent increased concentration of low frequency spectrum and lead to greater downstream competition. This auction has the potential to add 120 MHz of spectrum, which would almost double the available spectrum in the sub-1 GHz bands. In addition, striving for diversity in general post-auction 600 MHz ownership could ensure that several competitors are able to operate in the marketplace. Together, these objectives would create the opportunity for wider participation in these auctions, encourage new entrants in the marketplace, and bring about greater competition in accordance with Congress's direction.<sup>56</sup> This would also prevent a single carrier from acquiring a large part of the 600 MHz spectrum and using it to create a dominant post-auction market position.

While the rules that lead to these objectives could result in some current carriers being excluded from the auction in certain markets, these carriers' participation in the 600 MHz auction is essential for the rapid development of equipment and services in this band. Therefore, it is important that every carrier is guaranteed the opportunity to bid on a certain amount of spectrum, even if disqualified in some areas by these objectives.

## **VI. CONCLUSION.**

The first priority of the upcoming 600 MHz incentive auction should be to foster a competitive marketplace. Auction revenues are important, but should not be the lone deciding

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<sup>54</sup> See 47 U.S.C. § 309(j)(17)(B) (granting the FCC authority to “adopt and enforce rules of general applicability, including rules concerning spectrum aggregation that promote competition.”).

<sup>55</sup> *Wireless Competition Report*, ¶ 131. MHz Pop is defined as the total cost of spectrum divided by the population covered by its coverage area.

<sup>56</sup> 47 U.S.C. § 309(j)(3)(B).

factor when adopting the rules for the forward auction of licenses. To establish this marketplace, the MDTC encourages the FCC to consider rules applicable to all carriers that, for example, generally limit the total post-auction sub-1 GHz spectrum holdings to some specified percentage of the total available sub-1 GHz spectrum, and specifically limit the amount of 600 MHz spectrum that any one carrier can accumulate in each auction block.

Respectfully submitted,

GEOFFREY G. WHY, COMMISSIONER

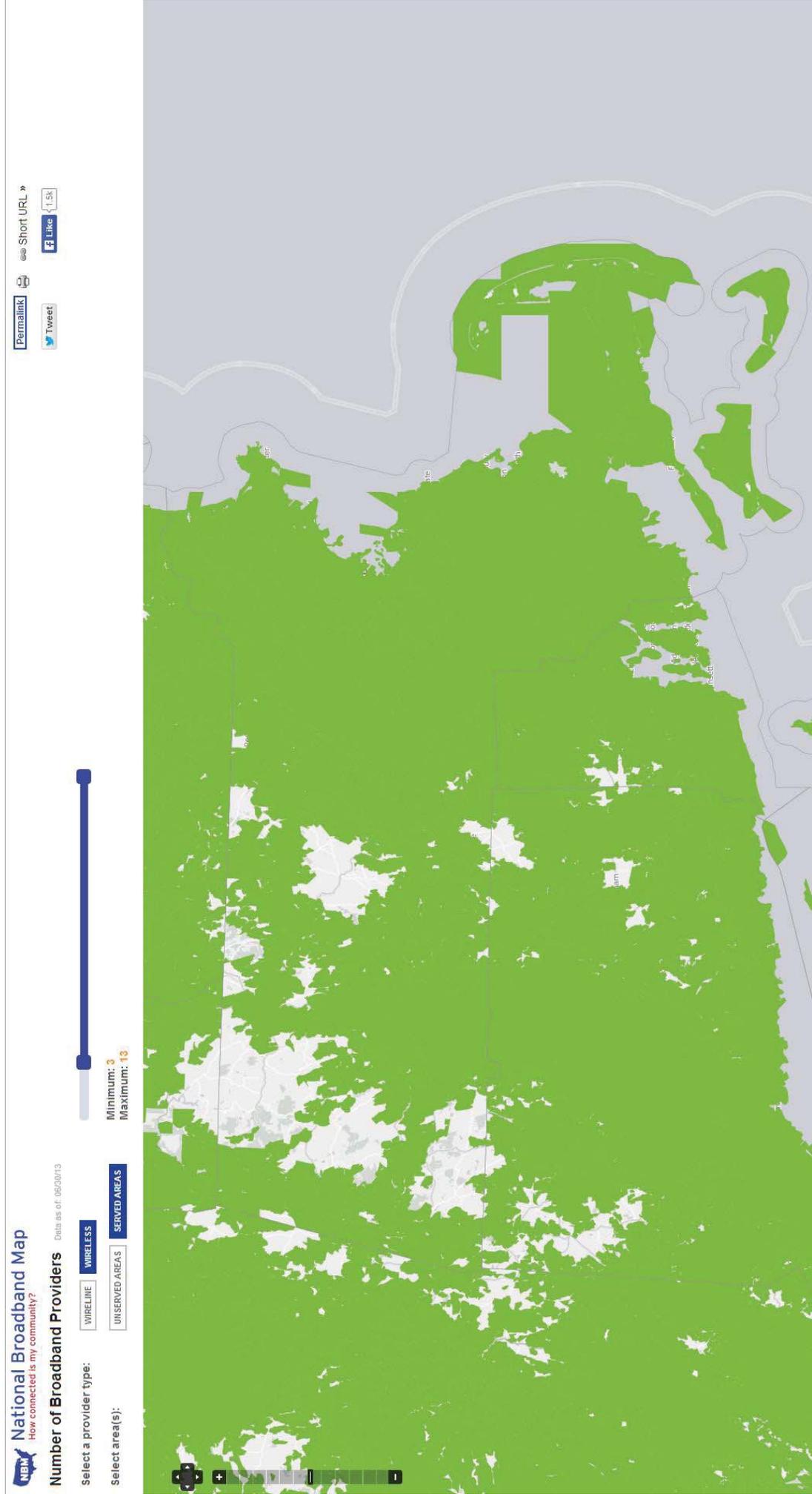
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# Exhibit 1



White and grey areas are served by two or fewer wireless broadband providers.