December 9, 2013

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W., Room TW-B204
Washington, D.C. 20554

Re: Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions
GN Docket No. 12-268

Madam Secretary:

Selecting geographic licensing areas for the 600 MHz band is a key issue in the incentive auction rulemaking proceeding.¹ N.E. Colorado Cellular, Inc., d/b/a Viaero Wireless (“Viaero”) urges the Commission to distribute 600 MHz licenses utilizing Cellular Marketing Areas (“CMAs”).² Many commenters who understand challenges to rural economic development, as well as the need for rural-focused carriers to have a fair opportunity at the auction support the use of CMAs.³ Viaero agrees with the SRG Study findings, as well as the negative impact that larger licensing areas would have on small carriers’ opportunity to compete for, and utilize, spectrum in


² The Commission has proposed to auction licenses in the 600 MHz band based on the 176 Economic Area (“EA”) territories. Incentive Auction NPRM, 27 FCC Rcd at 12411 (para. 148). “[C]ompetitive carriers have urged the FCC to consider smaller geographic license areas, such as the 734 CMA-based territories.” Ex Parte Letter from Steven K. Berry, President and CEO, Competitive Carriers Association (“CCA”), to Tom Wheeler, Chairman, FCC (Nov. 20, 2013) (“CCA Ex Parte”), Attachment, William Lehr & J. Armand Musey, Summit Ridge Group, LLC (“SRG”), Right-Sizing Spectrum Auction Licenses: The Case for Smaller Geographic License Areas in the TV Broadcast Incentive Auction (Nov. 20, 2012) (“SRG Study”), at 14 (footnote omitted).

³ See, e.g., CCA Ex Parte at 1 (footnote omitted) (noting that “[o]ne issue of critical importance to our rural and regional carrier members is the size of geographic licenses that will be offered in the forward auction,” and that “the use of right-sized licenses will promote robust bidding and a successful auction”).
the 600 MHz band Forward Auction.\textsuperscript{4} Licensing the 600 MHz band based on CMAs is the best way “to unleash investment and innovation, benefit consumers, drive economic growth, and enhance our global competitiveness…”\textsuperscript{5} An EA-based licensing scheme would make it virtually impossible for Viaero to acquire 600 MHz spectrum covering its service area.

The Case for Smaller 600 MHz Band License Areas

Viaero agrees with CCA that “right-sized licenses will promote robust bidding and a successful auction.”\textsuperscript{6} The ability of smaller wireless carriers to obtain and utilize 600 MHz spectrum for the deployment of broadband in unserved and underserved rural areas is substantially dependent upon the Commission’s use of CMAs as the basis for licensing 600 MHz spectrum.\textsuperscript{7} The Commission should license at least some of the available spectrum on a CMA basis, as it did in Auction 66, to preserve opportunity for smaller carriers. The use of CMAs not only favors small, rural-focused carriers, but it also assists women- and minority-owned businesses, which often lack access to large pools of capital.

These advantages contrast with the effects that would result from the Commission’s proposal to use EAs exclusively as the basis for licensing 600 MHz spectrum.\textsuperscript{8} The Commission’s proposal would tend to benefit a very small number of large wireless carriers that have both the incentives and the financial resources to acquire licenses spanning large geographic areas. An EA-based licensing mechanism would cripple any attempt by smaller wireless carriers to obtain and utilize 600 MHz spectrum to facilitate their bringing broadband services to rural areas that currently have inadequate broadband service or no broadband at all.

The Commission has estimated that the majority of wireless carriers are small entities with less than 1,000 employees.\textsuperscript{9} These carriers, many of which operate in rural areas, are in the best

\begin{itemize}
  \item \textsuperscript{4} The 600 MHz “Forward Auction” is the auction the Commission will conduct to assign licenses for the use of spectrum that it reallocates in connection with its reorganization of broadcast TV spectrum. \textit{See} Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6403(c), 125 Stat. 156 (2012).
  \item \textsuperscript{5} \textit{Incentive Auction NPRM}, 27 FCC Rcd at 12361 (para. 10).
  \item \textsuperscript{6} CCA Ex Parte at 1.
  \item \textsuperscript{7} Viaero also agrees with SRG that, in addition to right-sizing the 600 MHz licensing areas, the Commission should set spectrum aggregation limits that prohibit “one or two wireless carriers [from] aggregat[ing] all of the offered spectrum, contrary to the goal of promoting competition in wireless services[.]” SRG Study at 5 n.5. \textit{See} CCA Ex Parte at 1 n.3.
  \item \textsuperscript{8} \textit{See Incentive Auction NPRM}, 27 FCC Rcd at 12411 (para. 148).
  \item \textsuperscript{9} \textit{Id.} at 12533 (App. B., para. 46). The Commission explains that:

  \begin{quote}
  \textit{[T]he SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. For [the Wireless Telecommunications Carrier] category, census data for 2007 show that there were 11,163 firms that operated for the entire year. Of this total, 10,791 firms had
  \end{quote}
position to further the Commission’s policy of bringing broadband service to all Americans, including those living in rural communities. Isolating these carriers from access to 600 MHz spectrum—which would be the likely result of an EA-based licensing scheme—would forfeit a prime opportunity to bring broadband to rural America.

**Increased Participation in the Forward Auction.**—SRG argues persuasively that using smaller geographic areas, such as CMAs, for 600 MHz band licensing would bring smaller and rural carriers into the Forward Auction, explaining that the Commission “has recognized that small license territories facilitate participation [by] . . . rural carriers in spectrum auctions” and pointing out that “recent auction results suggest smaller carriers have a particularly strong interest in bidding for spectrum, in rural areas.” Viaero also agrees with SRG’s assessment that, even though larger carriers favor larger spectrum license areas, they would not be disadvantaged by the use of smaller license areas because, for example, “if licenses are available in smaller sizes, a national operator has the opportunity to aggregate bids on such licenses equivalent to a national license.”

The SRG Study also demonstrates convincingly that right-sizing 600 MHz licensing areas will mean “fewer resources devoted to excess spectrum resources, and more resources available to bid for the spectrum that is actually desired and to make the complementary investments required to realize the value from spectrum assets.” Given that build-out costs for EAs significantly exceed build-out costs for CMAs, if a carrier with a service area smaller than an EA wins an EA-based 600 MHz license in the Forward Auction, the carrier would be forced either to “leav[e] a

employment of 999 or fewer employees and 372 had employment of 1000 employees or more. Thus under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our proposed action.

*Id.*

10 SRG Study at 19. Leap Wireless International, Inc. and Cricket Communications, Inc. (“Leap”), agree with this analysis. Leap points out that “[a]uctioning spectrum in blocks that are too large in size for small, midsize, and regional carriers to use effectively would disadvantage those carriers relative to their larger brethren, and diminish their ability and incentive to participate[,]” and that, “[c]onversely, using smaller geographic units would enable smaller carriers to participate and tailor spectrum acquisition to their service territories, while also allowing national carriers who seek to acquire larger amounts of spectrum to bid on multiple blocks.” Leap Comments, GN Docket No. 12-268 (filed Jan. 25, 2013) (“Leap Comments”) at 4.

11 SRG Study at 19. See U.S. Cellular Comments, GN Docket No. 12-268 (filed Jan. 25, 2013) (“U.S. Cellular Comments”) at 11 (footnote omitted) (arguing that “[t]hese smaller [CMA] license areas are necessary to preserve opportunities for small and regional carriers, as well as new entrants, to provide an important source of competition, variety, and diversity in rural and less densely populated areas”).

12 SRG Study at 19.

13 *Id.* at 20.

14 *Id.* at 21.
large chunk of newly acquired spectrum fallow,“\(^{15}\) dispose of the excess spectrum, or substantially expand its network investments and enter new markets.\(^{16}\) As Viaero discusses in its case study below, none of these is an attractive—or even viable—option for smaller carriers serving rural areas.

**Clearing the Maximum Amount of Spectrum.**—Viaero agrees with SRG that using CMAs or other smaller licenses in the Forward Auction “would allow more flexibility in the repacking of broadcast spectrum for licensees that decline to participate, . . . will contribute to overall auction efficiency[, and] will allow the repurposed spectrum to be more easily mapped to higher-value, unencumbered licenses for sale in the Forward Auction.”\(^{17}\) On the other hand, using EAs as the basis for licensing could complicate efforts to clear the 600 MHz spectrum because, for example, this “would increase the population covered by areas encumbered by interference protection zones for remaining television broadcasters.”\(^{18}\)

**The 600 MHz Band Is Tailor-Made for Rural Areas.**—U.S. Cellular has explained that including CMAs in the mix of licensing areas for the 600 MHz band is important because 600 MHz spectrum “is particularly well-suited for the rapid and efficient deployment of mobile and other advanced services in high-cost rural areas.”\(^{19}\) “It is essential that additional licensing opportunities be made available for regional, rural and local carriers to acquire licenses so that they can be in a position to provide the same cost-effective advanced services as national carriers with the financial resources to acquire licenses covering large service areas.”\(^{20}\)

**Maximizing Auction Revenues.**—SRG explains that basing 600 MHz band licenses on CMAs or other small geographic areas will likely increase auction revenues,\(^{21}\) as compared to using EAs or larger territories.\(^{22}\) Right-sized licenses will increase auction participation, and give all bidders an opportunity to right-size their bids.\(^{23}\) This would enhance auction revenues because

\(^{15}\) Id. at 22.

\(^{16}\) Id.

\(^{17}\) Id. at 14.

\(^{18}\) Id. at 15.

\(^{19}\) U.S. Cellular Comments at 18 (footnote omitted). See SRG Study at 26-27.

\(^{20}\) U.S. Cellular Comments at 18-19.

\(^{21}\) Viaero agrees with SRG’s qualification that maximizing auction revenue is subservient to the ultimate goals of the auction process, \textit{i.e.}, “to promote economic growth, innovation, and consumer welfare.” SRG Study at 22.

\(^{22}\) Id. at 23.

\(^{23}\) See Rural Telecommunications Group ("RTG") Comments, GN Docket No. 12-268 (filed Jan. 25, 2013) ("RTG Comments") at 3 (arguing that “[l]icensing the 600 MHz band on the basis of smaller license areas
it “alleviate[s] the need to reduce bids to compensate for the costs of acquiring wrong-sized spectrum licenses.” Viaero thus supports SRG’s overall conclusion that, “[t]o the extent smaller areas help reduce the risk and costs of participation, that will further help reduce revenue volatility[,]” which, in turn, is likely to enhance auction revenues.

The Viaero Case Study

Viaero represents a real-world case study of the competitive, economic, and consumer benefits that would be realized if the Commission right-sizes spectrum licenses in the Forward Auction by basing licenses on CMA territories instead of EA territories.

Viaero’s existing service area spans 10 EAs, only three of which (EAs 120, 121, and 142) are entirely within Viaero’s service area. If the Commission auctions licenses based on EAs, then Viaero would be required to bid successfully for spectrum blocks in each of the 10 EAs in order to obtain 600 MHz spectrum coverage throughout its service area. To accomplish this, Viaero would be forced to buy a substantial amount of spectrum that it does not need, since the spectrum would be outside its service area.

EA 141 (the Denver, Colorado, market) illustrates the problem that Viaero would face. There are 3,984,105 potential subscribers (or POPs) in EA 141, but only 979,477 of these POPs (24.6 percent) are within Viaero’s licensed service area. Assuming that Viaero successfully bids for a 5 megahertz spectrum block in EA 141, and assuming a spectrum value of $0.25 per MHz-POP, this would mean that Viaero’s cost for the spectrum would amount to $4,980,131. But the cost for spectrum located within Viaero’s service area in EA 141 would amount to $1,224,346. Thus, the use of EAs as licensing areas would force Viaero to overpay by $3.8 million to obtain 600 MHz spectrum in EA 141. As the Table on the following page illustrates, Viaero would be

would . . . result in greater auction and market efficiency because it would allow bidders to tailor their auction strategy and spectrum acquisitions to meet a wider variety of business plans”.

SRG Study at 23. See Wireless Internet Service Providers Association (“WISPA”) Comments, GN Docket No. 12-268 (filed Jan. 25, 2013) (“WISPA Comments”) at 31 (arguing that, “[b]y auctioning smaller areas, the Commission would invite more participation in the auction, not less, which would tend to drive up auction revenues”).

SRG Study at 23.

WISPA has described a similar problem with basing 600 MHz band licenses on larger geographic areas:

Because WISPs generally operate in local and regional areas, CMAs more closely approximate their service territories and the 600 MHz spectrum would act as an overlay to help alleviate congestion and capacity constraints. Most WISPs do not have the financial wherewithal to compete in auctions for [larger service areas], and have no desire to acquire large geographic areas when they only want the spectrum to cover a smaller area.

WISPA Comments at 30-31.
required to absorb a total cost of $7.1 million to acquire spectrum outside its service area in the Forward Auction, if the Commission were to use EAs to license 600 MHz spectrum.

### Economic Areas Inside or Overlapping Viaero’s Service Area

<table>
<thead>
<tr>
<th>EA MARKET</th>
<th>TOTAL POps</th>
<th>MHZ-POPs</th>
<th>TOTAL COST ($)</th>
<th>VIAERO POps</th>
<th>MHZ-POPs</th>
<th>VIAERO COST ($)</th>
<th>ADDED COST ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>115 Rapid City</td>
<td>213,696</td>
<td>1,069,480</td>
<td>267,120</td>
<td>209,743</td>
<td>1,048,715</td>
<td>262,179</td>
<td>4,941</td>
</tr>
<tr>
<td>116 Sioux Falls</td>
<td>519,143</td>
<td>2,595,715</td>
<td>648,929</td>
<td>36,878</td>
<td>184,390</td>
<td>46,098</td>
<td>991,764</td>
</tr>
<tr>
<td>118 Omaha</td>
<td>1,044,156</td>
<td>5,220,780</td>
<td>1,305,195</td>
<td>250,745</td>
<td>1,253,725</td>
<td>313,431</td>
<td>991,764</td>
</tr>
<tr>
<td>119 Lincoln</td>
<td>379,321</td>
<td>1,896,605</td>
<td>474,151</td>
<td>63,597</td>
<td>317,985</td>
<td>79,496</td>
<td>394,655</td>
</tr>
<tr>
<td>120 Grand Island</td>
<td>288,047</td>
<td>1,440,235</td>
<td>360,059</td>
<td>288,047</td>
<td>1,440,235</td>
<td>360,059</td>
<td>0</td>
</tr>
<tr>
<td>121 North Platte</td>
<td>61,758</td>
<td>308,790</td>
<td>77,198</td>
<td>61,758</td>
<td>308,790</td>
<td>77198</td>
<td>0</td>
</tr>
<tr>
<td>122 Wichita</td>
<td>1,175,577</td>
<td>5,877,885</td>
<td>1,469,471</td>
<td>110,965</td>
<td>554,825</td>
<td>138,706</td>
<td>1,330,765</td>
</tr>
<tr>
<td>140 Pueblo</td>
<td>279,600</td>
<td>1,398,000</td>
<td>349,500</td>
<td>265,431</td>
<td>1,327,055</td>
<td>331,764</td>
<td>17,736</td>
</tr>
<tr>
<td>141 Denver</td>
<td>3,984,105</td>
<td>19,920,525</td>
<td>4,980,131</td>
<td>979,477</td>
<td>4,897,385</td>
<td>1,224,346</td>
<td>3,755,785</td>
</tr>
<tr>
<td>142 Scottsbluff</td>
<td>92,360</td>
<td>461,800</td>
<td>115,450</td>
<td>92,360</td>
<td>461,800</td>
<td>115,450</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>8,037,763</strong></td>
<td><strong>40,188,815</strong></td>
<td><strong>$10,047,204</strong></td>
<td><strong>2,358,981</strong></td>
<td><strong>11,794,905</strong></td>
<td><strong>$2,948,727</strong></td>
<td><strong>$7,098,477</strong></td>
</tr>
</tbody>
</table>

2. The MHZ-POP calculations assume that Viaero acquires one 5 megahertz spectrum block in each EA.
3. The cost calculations are based on an estimated value of $0.25 per MHz-POP.

Another real-world fact is that Viaero is a small company and it simply is not in a position to spend $7.1 million for spectrum it does not need. Over the course of its operations, Viaero has made 16 spectrum acquisitions; the largest acquisition was $3.9 million, and the average of the 16 acquisitions was $1.2 million. Viaero is not in a position to spend $7.1 million for an asset it does not need. Moreover, a purchase of this size for a small company threatens existing loan covenants and limits financing opportunities.\(^\text{27}\) Lastly, an excess investment of this size limits what a small company can do inside of its existing footprint in terms of new cell site construction and technology upgrades.

The inescapable conclusion is that, if the Commission selects EAs as the basis for 600 MHz licensing, Viaero would be closed out from competing for the spectrum in its service area. Another real-world fact is that Viaero would not be the only small rural carrier facing this dilemma. As the SRG Study points out, “[t]he cost of adopting larger sized territories is likely to asymmetrically

\(^\text{27}\) See Leap Comments at 4 (explaining that “[s]maller licenses give smaller carriers better opportunities to obtain financing for new projects, and enable a range of companies to participate in the auction and acquire ‘beachfront’ spectrum, which increases their incentive and ability to innovate”)


penalize smaller rural and regional operators with smaller service coverage areas[,,]28 in part because, “[f]or many smaller operators, an EA-sized license is significantly larger than needed.”29

In proposing to license the 600 MHz band on an EA basis,30 the Commission criticizes the use of CMAs because “having a large number of very small licenses may raise implementation risks for the auction designs contemplated in this proceeding.”31 Viaero respectfully suggests that this proposed approach seems to have the tail wagging the dog. One of the objectives of the incentive auction rulemaking should be to right-size license areas to maximize utilization of 600 MHz spectrum in rural areas.

The Commission has determined in other proceedings that “it is clear that much more remains to be done to ensure that every American has the opportunity to participate in the broadband era. The best data available indicate that more than 20 million Americans lack access to broadband . . . . Significantly, approximately 73 percent of these Americans reside in rural areas.”32 The Commission is committed to “mak[ing] affordable broadband available to all Americans” because “[u]nserved communities across the nation cannot continue to be left behind[,]”33 and the Commission also has observed that “a ‘rural-rural’ divide persists in broadband access—some parts of rural America are connected to state-of-the-art broadband, while other parts of rural America have no broadband access, because the existing [universal service] program fails to direct money to all parts of rural America where it is needed.”34

It would be counterproductive for the Commission use its universal service mechanism to facilitate broadband deployment in unserved and underserved rural areas, while at the same time opting for a 600 MHz band licensing scheme that would foreclose smaller wireless carriers from utilizing 600 MHz spectrum—and spending their own money—to make affordable broadband available in their service areas. As the Commission uses the universal service program to advance

28 SRG Study at 18.
29 Id. at 19 (footnote omitted). See id. at 16 (reporting that “[a] number of wireless operators have already indicated to the FCC that they will not participate in the Incentive Auction if licenses are allocated using EAs”).
30 Incentive Auction NPRM, 27 FCC Rcd at 12411 (para. 148).
31 Id. at 12411 (para 147).
34 Id. at 17669 (para. 7).
broadband, it should also enable smaller wireless carriers to use their own resources to work toward the same goal. Adopting an auction design that facilitates broadband deployment should take precedence over other priorities.

The Commission expresses concern that “more licenses could complicate potential bidders’ efforts to plan for, and participate in, the auction for [600 MHz] licenses, as well as subsequent roll-out of service.”\footnote{Incentive Auction NPRM, 27 FCC Rcd at 12411 (para. 147).} It is not clear how these problems would materialize. If, for example, the Commission decided to use a mix of EAs and CMAs as the basis for licensing 600 MHz spectrum, this would enhance planning and bidding strategies for larger carriers because they “have the opportunity to [compete for EAs and] supplement their spectrum in other bands with CMAs, or aggregate CMAs as needed.”\footnote{U.S. Cellular Comments at 10.} From the perspective of smaller carriers, it would be better to have to deal with any auction planning and participation complications that may arise, rather than to be priced out of the auction altogether because of the Commission’s exclusive use of EAs for licensing.

It also should be noted that the concerns expressed in the Incentive Auction NPRM regarding auction planning and participation complications have been overcome in previous spectrum auctions that utilized CMA license areas. The Commission has observed, for example, that the “opportunities afforded by providing licenses with a mix of geographic areas were seen in the results of Auction No. 66 involving AWS-1 licenses, where many different bidders won smaller and mid-sized licenses, such as CMAs and EAs.”\footnote{Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, et al., WT Docket No. 06-150, et al., Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 8064, 8083 (para. 43) (2007), quoted in U.S. Cellular Comments at 19. See SRG Study at 31 (footnote omitted) (explaining that, “[g]iven its past use of both large and small license territories, the FCC clearly has the expertise to handle an auction with many licenses. Importantly, the Commission successfully managed auctions within 493 BTA regions in the mid 1990s. Since then, the experience and expertise of the FCC and the industry in auctions have advanced significantly. They have developed analytical tools and software to support increasingly complex auction frameworks, including combinatorial clock auctions.”}. Thus, in Viaero’s view, the potential for planning and bidding complications is not a compelling basis for bypassing the proven benefits that can be derived from using CMA license areas.
Lastly, we note that Chairman Wheeler has expressed that “competitive markets produce better outcomes than regulated or uncompetitive markets. . . . [C]ompetition does not always flourish by itself; it must be supported and protected if its benefits are to be enjoyed.”38 Using CMAs will increase the number of participants at the auction, especially in rural areas where the Commission must encourage market entrants. By making it easier for small rural carriers to succeed, the Commission will not only increase overall auction revenues, but it will encourage new entrants and strengthen existing small competitors, all to the benefit of rural citizens.

Pursuant to Section 1.1206 of the Commission’s Rules,39 this ex parte letter is being filed electronically via the Electronic Comment Filing System with the Office of the Secretary. If there are any questions regarding the letter, please contact undersigned counsel directly.

Sincerely,

David A. LaFuria
John Cimko
Counsel for N.E. Colorado Cellular, Inc.
d/b/a Viaero Wireless

cc: Roger Sherman
James Schlichting
Margaret Wiener
Gary Michaels
Craig Bomberger
William Huber
Erik Salovaara
Martha Stancill


39 47 C.F.R. § 1.1206.