

**Written Statement
Of**

**The Honorable Kevin J. Martin
Chairman
Federal Communications Commission**

**Before the
Committee on Energy and Commerce
U.S. House of Representatives**

April 15, 2008

Summary

The 700 MHz spectrum auction closed almost one month ago. It achieved a number of significant milestones, including:

- the largest auction in FCC history, raising a record \$19.6 billion in bids;
- advancing new open platform policies;
- affirming aggressive build-out obligations;
- creating what will be a new wireless broadband provider to compete with the incumbent telephone and cable companies in nearly every home in the U.S.; and
- providing small businesses, new entrants, rural providers and existing nationwide wireless providers with access to additional spectrum needed to deploy the next generation of wireless networks.

All told, 101 bidders won 1090 licenses, over half of whom (56) were small businesses taking advantage of the Commission's bidding credits program. A total of 99 bidders other than the nationwide wireless incumbents won 754 licenses – representing approximately 69 percent of the 1090 licenses sold in the 700 MHz auction. In the A and B blocks alone, small and rural providers won spectrum that covered almost the entire country.

The sheer size of this auction is a harbinger of the benefits to come. The next generation of wireless networks to be deployed in the 700 MHz Band will be faster than those available today, and will extend to both urban and rural areas of the country. These networks will bring increased competition to a broadband sector currently served primarily by DSL and cable providers. And just like users of those *wired* networks, *wireless* consumers will now be able to use the wireless devices and applications of their choice. These developments will enable the U.S. to promote broadband deployment and spread the benefits of broadband to all consumers.

Of course, one important issue remains from the previous auction – the lack of a successful bidder for the D Block of spectrum that was a part of the Public Safety/Private Partnership. Put simply, during a crisis public safety has to be able to communicate, regardless of where they are from or the uniform they wear. In the absence of the financial resources for public safety to build out their own network, we should continue to try to explore ways in which we can help facilitate using the D Block as a tool to achieve a nationwide interoperable public safety network. I believe that a Public/Private Partnership remains a viable means for achieving a nationwide interoperable broadband public safety network. More importantly, I believe it remains the only tool at the Commission's disposal to solve the public safety interoperability challenge. However, we will look at all options in considering the appropriate path, and look forward to hearing from the members with respect to their views.

Good morning Chairman Dingell, Chairman Markey, Ranking Member Barton, Ranking Member Stearns, and Members of the Committee. Thank you for inviting me to be here with you today.

Introduction

The 700 MHz spectrum auction closed almost one month ago. It achieved a number of significant milestones, including:

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- affirming aggressive build-out obligations;
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Largest Auction Ever

The 700 MHz auction was the largest auction in FCC history, raising a record \$19.6 billion in bids. Even in a difficult economic climate, revenues raised in this auction well exceeded congressional estimates – nearly doubling the ten billion dollars Congress had anticipated would be raised. The \$19.1 billion in winning bids and \$19.0 billion in net winning bids makes this the largest auction in FCC history even without the sale of the D block. In comparison, the 2006 Advanced Wireless Service (AWS-1) Auction sold approximately 50 percent more spectrum (90 MHz compared to 62 MHz in the 700 MHz auction,) yet generated one-third less revenue (approximately \$13.9 billion in winning bids and \$13.7 billion in net winning bids). Even with the open platform requirement and aggressive build-out obligations, each of these blocks sold for more than AWS-1 blocks with comparable bandwidth and license areas. *See Exhibit 1.* All other 68 auctions conducted by the FCC in the past 15 years collectively produced a total of only \$19.1 billion in actual receipts. *See Exhibit 2.*

The Commission made several changes to its rules that helped make this auction a record success. We implemented anonymous bidding for the first time in an auction of this size. By foreclosing opportunities for anti-competitive bidding behaviors, anonymous bidding increased the efficiency of the auction and helped ensure a fair result. Without anonymous bidding, auction revenue would likely have been substantially lower, and bidders would have had an opportunity to retaliate against smaller bidders and block new entrants.

We also changed the power limits for the A and B blocks, which were not tailored to the provision of mobile broadband services. With this modification, those blocks became much more suited to the provision of these mobile services. This made a significant difference in the attractiveness of these blocks to service providers wanting to provide mobile broadband.

Finally, we provided for a new form of combinatorial bidding that allowed bidders to bid on packages of licenses without the risk of winning only some of the licenses needed to execute their business plan. Several bidders took advantage of this new opportunity by bidding on packages during the auction, with one successfully winning a package.

An Open Platform Achieved

While clearly a success in terms of dollars, this auction also attained significant public interest objectives that benefit the consumer. Perhaps the most significant achievement of this auction is our new open platform policy. With the open platform requirements on one-third of the spectrum offered in this auction, consumers will be able

to use the wireless device of their choice on those networks and download whatever legal software or applications they choose onto it. A network that is more open to devices and applications will help foster innovation on the edge of the network, and give consumers greater freedom to use the wireless devices and applications of their choice. Putting these choices into the hands of consumers, rather than network operators, will spur the next phase of wireless broadband innovation – innovation that can make us more productive, keep us entertained, and improve our quality of life.

When adopting the open platform requirement in the 700 MHz band, we saw it as a rare chance to promote innovation and consumer choice while writing on a clean slate. We targeted only one block of the spectrum. We did not propose to apply this requirement to the entire 700 MHz band or other existing networks. And we did not apply mandatory unbundling or wholesale requirements, which might undermine investment incentives. We achieved a careful balance of spurring innovation and consumer choice while encouraging infrastructure investment. I believe this minimal regulatory touch had maximum impact.

The auction had an impact on innovation in the wireless industry even before the bidding began. In less than a year, many wireless providers evolved from vocal opponents to vocal proponents, embracing the open platform concept. Verizon Wireless has committed to open its *entire* network to devices and applications for consumers. More and more wireless providers, including T-Mobile and Sprint through their participation in the Open Handset Alliance, and AT&T, are also embracing more openness in terms of devices and applications. Less than a month after the auction

concluded, this interest now appears to be shared across the industry and has taken hold without the FCC imposing retroactive rules on existing investments.

Finally, some have argued that the C block should have been divided into smaller areas to ensure that smaller and rural providers could win additional spectrum. Breaking up the C block could have prevented the emergence of a nationwide open platform. The economies of scope and scale enabled by this near nationwide open platform will provide significantly greater benefits to small businesses and entrepreneurs that design wireless handsets and applications than would multiple networks with differing open platform specifications. This was a key advantage to making the C block available in large regional license areas with nationwide package bidding.

Most Aggressive Build-Out Policies Ever

To help ensure that rural and underserved areas of the country benefit from the new services that this spectrum will facilitate, the Commission adopted the most aggressive build-out requirements ever applied to wireless spectrum. These rules will ensure that the spectrum is quickly put to use by all auction winners – no matter who they are – to deploy new technologies and offer new services in both urban and rural areas of the country. If auction winners do not put their spectrum to use serving consumers, the Commission will reclaim it and make it available to someone else who will.

Small Business Success

Small businesses eligible for bidding credits were very successful in the auction that ended last month. In this auction, 56 (55%) of 101 total winning bidders claimed

designated entity bidding credits as small businesses, 49 of whom are also new entrants. This is very similar to past auctions. *See Exhibit 3.* Small businesses eligible for bidding credits won 379 (35%) of 1,090 licenses - which again is similar to past auctions. *See Exhibit 4.* These licenses covered a large portion of the country primarily in rural areas. *See Exhibit 5.*

Bidding credits made a significant difference for these bidders, with designated entities winning over half of their licenses by outbidding a non-designated entity that placed the second highest bid without a bidding credit. In all, small businesses claiming bidding credits won licenses valued at over half a billion dollars, and had success in this auction similar to the success they had in comparable PCS and AWS auctions. *See Exhibit 6.*

Opportunities for New Entrants, Small and Rural Providers

The structure of the auction also provided significant opportunities for new entrants, rural providers and non-nationwide incumbents. The auction drew wide-ranging interest from a number of new players. A bidder other than a nationwide incumbent won a license in every market. A total of 99 bidders other than the nationwide wireless incumbents won 754 licenses – representing approximately 69 percent of the 1,090 licenses sold in the 700 MHz auction.

In fact, most auction winners are new entrants. Of the 101 winning bidders, 72 are new entrants who won 675 licenses. In the unpaired E block, new entrant Frontier Wireless LLC (Dish Network) won 168 licenses to establish a near nationwide footprint. *See Exhibit 7.*

Some have argued that small and rural providers were unable to win any spectrum. One recent analyst claimed, “Firms that would willingly set up shop in rural America were priced out of the market because so few frequencies were made available in licenses that only covered smaller communities.”¹ This is simply not true. In fact, new entrants, small and rural providers did especially well in rural areas. In the A and B blocks alone, small and rural providers won spectrum that covered almost the entire country. *See Exhibit 8.* Where they were unsuccessful was not in rural America or even in medium size markets but in twenty large metropolitan areas such as New York, Los Angeles, Dallas, Chicago and Atlanta.

In fact, a large portion of the money spent by Verizon and AT&T - - approximately \$8 billion - - was used to obtain spectrum in only the top 15 markets in the A and B blocks. The small and rural providers won 500 licenses covering almost 60 percent of MHz/pops available outside the top 15 markets in the A and B blocks.² These 500 licenses outside the top 15 markets sold for an average price of only \$0.66 per MHz-pop, which is significantly lower than the average price of \$1.92 per MHz-pop for all licenses in these blocks. Winners in these smaller and rural markets will provide increased access to broadband and greater choice in wireless service for consumers living in rural areas.

Some have argued we should have provided more smaller geographic areas, as we did in AWS-1. However, the percentage of spectrum available in smaller geographic areas was very comparable. *See Exhibit 9.* The band plan makes nearly half of the

¹ Coleman Bazelon, The Brattle Group, *Broadcasting and Cable* 4/7/2008.

² These providers include all bidders with fewer than one million mobile telephony subscribers, including those with no such subscribers (new entrants).

spectrum available over smaller and medium-sized geographic areas, about one-third of the spectrum available over larger regional areas, and about one sixth of the spectrum available on a nationwide basis that will be used exclusively as part of a public/partnership with a national public safety licensee. This distribution is very similar to the geographic distribution in the AWS-1 Auction from 2006.

Moreover, in these largest markets the geographic size of the license did not seem to matter. The nationwide incumbents' need for wireless broadband spectrum in major markets drove them to bid substantial amounts for even the smallest urban licenses in the B block, where they often were bidding only against one another. Unless the Commission had banned the nationwide incumbents - - an idea few advocated - - smaller and rural providers would likely not have succeeded in the largest markets.

A Wireless “Third Pipe”

Significantly, because this spectrum is well-suited for the provision of wireless broadband, the auction represents a critical opportunity to continue deploying wireless broadband services. All Americans should enjoy the benefits of broadband competition – availability, high speeds and low prices. In much of the country, consumers have a choice of only two broadband services: cable or DSL. Wireless service is fast becoming critically important as another platform to provide broadband. Last summer, I testified that one of the most important steps we could take to provide affordable broadband to all Americans is to facilitate the deployment of a third “pipe” into the home.

Although the Commission adopted a plan urged by a coalition supporting a new national wireless broadband alternative (*i.e.*, 11 MHz paired, large geographic areas and

combinatorial bidding) the auction did not result in a single, nationwide new entrant.

While it might have been better if a new nationwide provider had emerged, that does not mean that this auction did not ensure that a third provider will be able to use a wireless broadband platform to compete against the incumbent telephone and cable companies. For example, Verizon, which is not the incumbent DSL or cable provider in Chicago, won licenses in that area. As a result of the auction then, Verizon will be able to provide a more robust wireless broadband service to compete with the incumbent telephone and cable companies. The same can be said of Metro PCS winning licenses in Boston and AT&T winning licenses in New York City. In those areas these companies will be providing an alternative wireless broadband service in competition with the broadband services currently provided by the incumbent telephone and cable companies.³

A bidder other than the incumbent DSL or cable provider won a 700 MHz spectrum license in the paired A, B, or C blocks in nearly every area in the country. *See Exhibit 10.* In most areas, these non-wired bidders include rural and smaller providers (including new entrants). As a result, we have greatly enhanced the potential for an additional wireless “third-pipe” in nearly every home across the country. In fact, both nationwide incumbents that participated in the 700 MHz auction have announced they will deploy the very latest generation of wireless broadband services using this spectrum, which will operate at speeds competitive with the latest DSL and cable modem services.

³ Even where the nationwide incumbents do have wires, any incentives to limit their nationwide wireless networks to protect their regional wired revenues appear to have been outweighed by the need to compete with other wireless providers and the greater nationwide growth opportunities available in the wireless broadband market. For example, even though Verizon has an extensive wired broadband network, Verizon Wireless has historically been the most aggressive nationwide wireless incumbent in rolling out wireless broadband service in *both* Verizon’s wired and un-wired territories.

Competitive Impact Going Forward

The impact of this auction on the emerging wireless broadband market cannot be measured in isolation. During my time as Chairman, the Commission has made vast amounts of spectrum available for the next generation of innovative wireless services, including 90 MHz of spectrum in the Advanced Wireless Service and the 62 MHz of spectrum in the 700 MHz band being discussed today. With this additional spectrum, the four nationwide incumbent wireless providers are more equal competitors in terms of spectrum ownership in the top 100 markets. *See Exhibit 11.*

Including Auction 73, AT&T holds an average of 83 MHz of spectrum in the top 100 markets post auction, and Verizon Wireless holds an average of 79 MHz of spectrum in those markets. Although Sprint and T-Mobile did not participate in the 700 MHz auction, they hold significant amounts of spectrum in other bands, including the Broadband Radio Service and Advanced Wireless Services bands. Sprint currently holds an average of 100 MHz of commercial spectrum in the top 100 markets, and T-Mobile holds an average of 48 MHz of spectrum in those markets. Other providers, including rural carriers, new entrants, and small businesses, hold significantly more spectrum in the top 100 markets than any one of the nationwide incumbents alone and hold even more spectrum on average in rural areas.

Solving the Public Safety Interoperability Crisis

Of course, one important issue remains from the previous auction – the lack of a successful bidder for the D Block of spectrum that was a part of the Public Safety/Private Partnership.

While the results of the last auction will help inform our decision with respect to the D Block, our decision must also be informed by the continuing need for a truly nationwide interoperable broadband network for public safety agencies to use during times of emergency. Put simply, during a crisis public safety has to be able to communicate, regardless of where they are from or the uniform they wear.

I remain committed to finding a solution that will facilitate a nationwide interoperable broadband network for public safety. It has been more than six years since brave police and fire fighters ran into the Twin Towers and the Pentagon without an effective emergency communications system. The Public Safety/Private Partnership was intended to ensure that public safety keeps pace with the advances in communications, and gives first responders the interoperable broadband communications capabilities they need to protect the life and property of the American public. The Commission could not have afforded to let the opportunity that the 700 MHz band offers for public safety pass us by.

My Republican and Democratic colleagues all agreed. The Commission unanimously adopted the Public Safety/Private Partnership approach for the D Block as an innovative means to address the critical need for nationwide public safety interoperability. Many national and local public safety organizations also expressed support for a public-private partnership approach as their last, best chance to make this network a reality.

While I and some of my colleagues would have preferred for public safety to have their own funding to build a network, the simple reality is that funding remains a

significant challenge with respect to public safety interoperability. The Public/Private Partnership was designed to address this crucial issue, as the only tool reasonably available to the Commission. In the absence of the financial resources for public safety to build out their own network, I believe we should continue to try to explore ways in which we can help facilitate using the D Block as a tool to achieve a nationwide interoperable public safety network.

The Commission will, however, also need to take into account why the D Block did not attract a successful bidder. For example, the Commission needs to consider whether the demands that were being placed on the prospective D Block winner were too great. Were the network expectations reasonable? Was the build-out requirement imposed on the D block winner too ambitious?

I am aware of allegations made with respect to the Public Safety Spectrum Trust and their advisor, and I have asked the Inspector General to look into these claims. We await the results of the Inspector General's investigation, which will inform our actions going forward.

I also believe that we will need to revisit the obligations of the D Block within the partnership, and ensure that there is sufficient certainty in the process. We will need to evaluate ways to restructure the Public Safety/Private Partnership. With respect to the Public Safety Broadband Licensee, we need to be clearer about the role that the public safety licensee will play in the day-to-day operations of the network. For example, I do not believe the Commission envisioned that the Public Safety Broadband Licensee would function as a commercial reseller of the D Block licensee's services, nor did the

Commission envision large-scale network operations being undertaken by the public safety licensee.

I believe that a Public/Private Partnership remains a viable means for achieving a nationwide interoperable broadband public safety network. More importantly, I believe it remains the only tool at the Commission's disposal to solve the public safety interoperability challenge. However, we will look at all options in considering the appropriate path, and look forward to hearing from the members with respect to their views.

Conclusion

This auction stands as the most successful FCC auction ever conducted, but there is still more to be done. We must still find a way to help public safety build a nationwide interoperable broadband network, and we must license the D block so that it can be put to use as soon as possible after the end of the digital television transition. I look forward to working with this Committee and my colleagues on these difficult issues in the months to come.

EXHIBITS

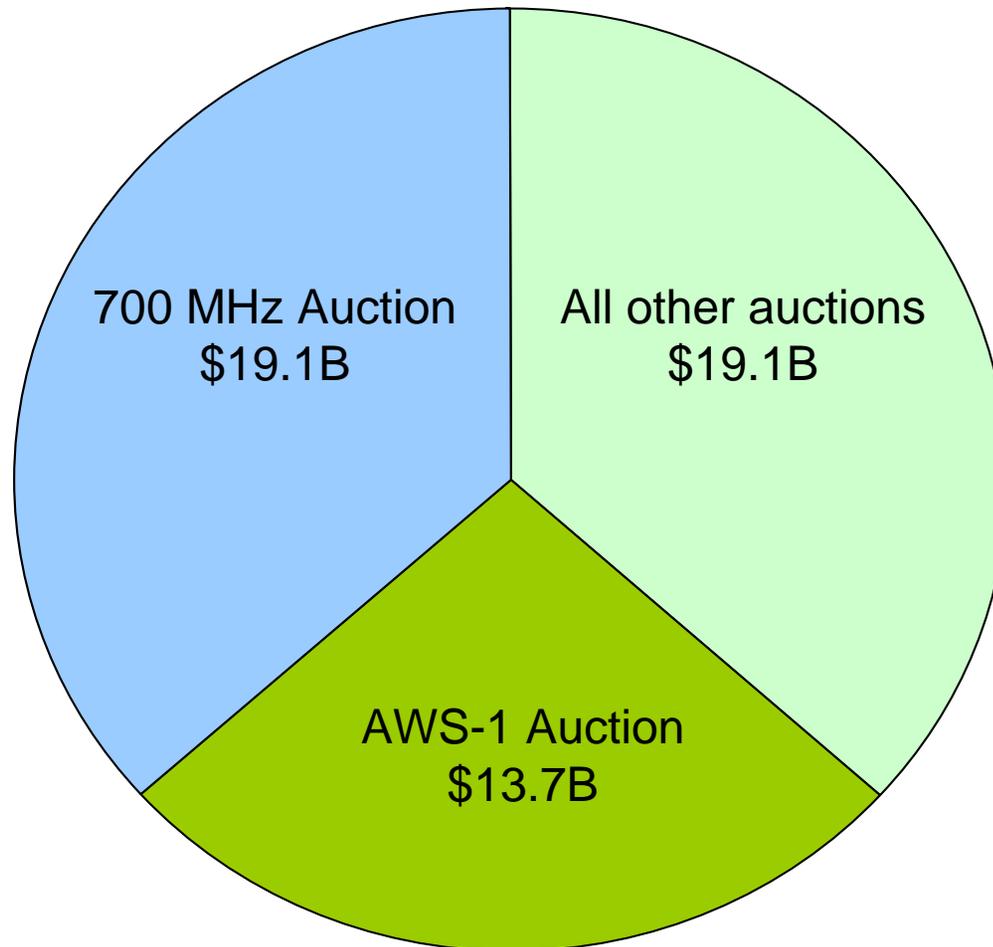
Average Prices per Block in 700 MHz and AWS-1 Auctions

700 MHz Auction Results (Auction 73)					AWS-1 Auction Results (Auction 66)				
700 MHz Block	Geographic Area	Bandwidth (MHz)	Total Provisionally Winning Bids	\$'s per MHz-Pop	Comparable AWS-1 Block	Geographic Area	Bandwidth (MHz)	Comparable Total Provisionally Winning Bids	\$'s per MHz-Pop
A	EA	12	\$3,961,174,000	\$1.16	C	EA	10	\$1,491,238,000	\$0.52
B	CMA	12	\$9,143,993,000	\$2.67	A	CMA	20	\$2,268,029,200	\$0.40
C	REAG	22	\$4,748,319,000	\$0.76	F	REAG	20	\$4,174,486,000	\$0.73
E	EA	6	\$1,266,892,000	\$0.74	C	EA	10	\$1,491,238,000	\$0.52
Total			\$19,120,378,000	\$1.29					

* Calculation of Dollars per MHz-Pop is based on the total population of the block

** All Provisionally-Winning-Bid and Dollars-per-MHz-Pop calculations are in gross dollars

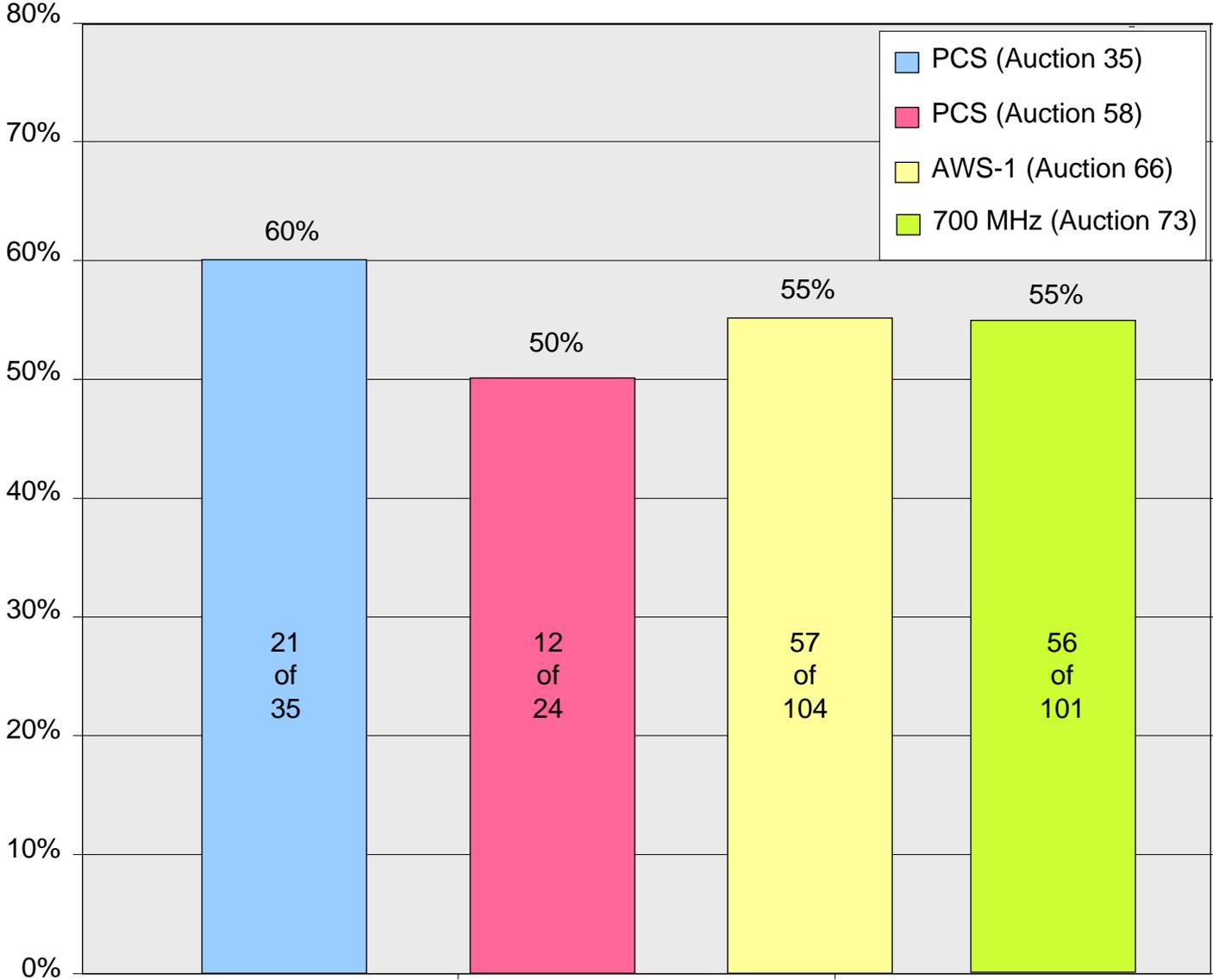
Comparison of 700 MHz and AWS-1 Auction Revenues vs. All Others



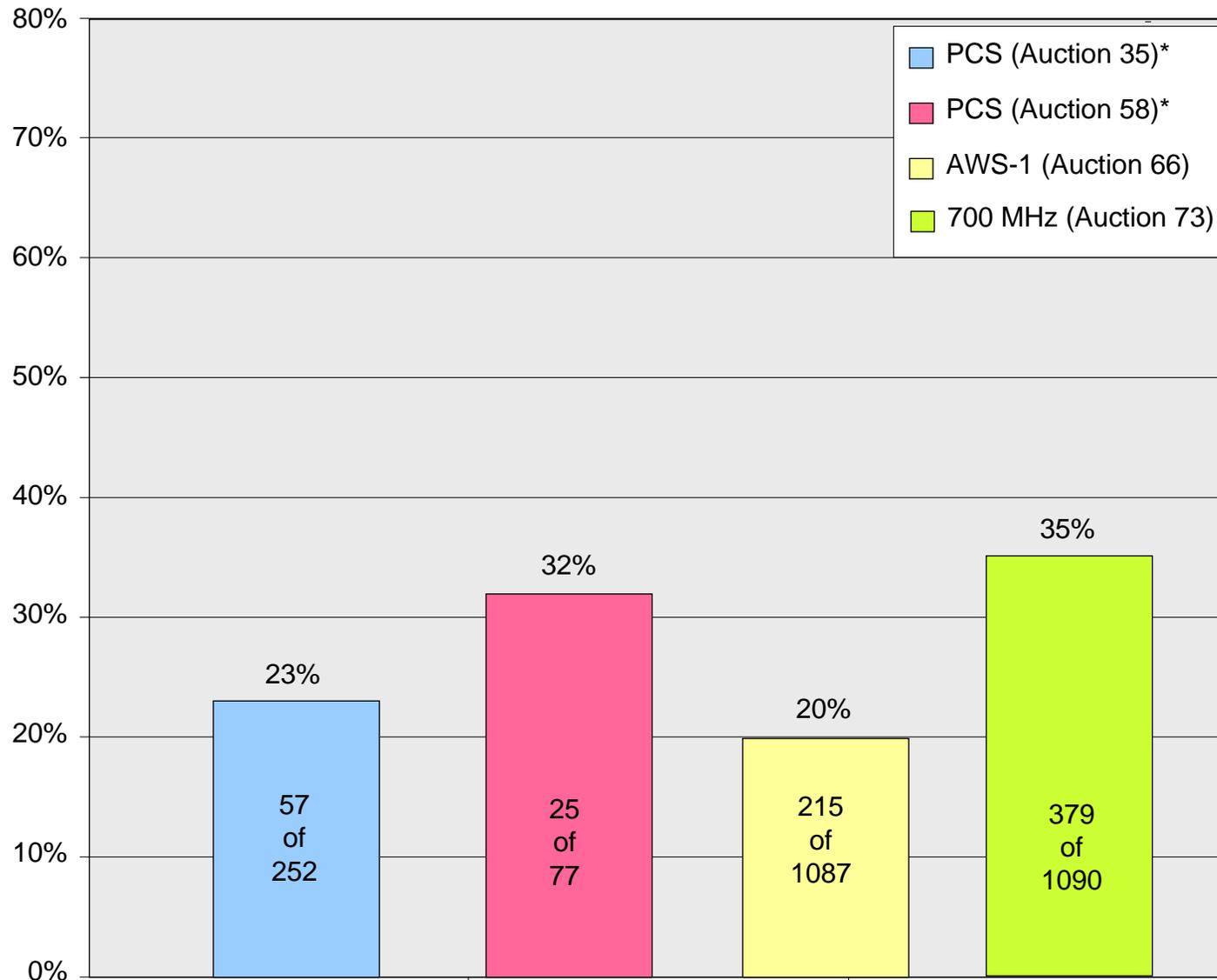
Note: 700 MHz Auction revenues do not account for bidding credits. (FCC, April 2008)

Exhibit 2

Winning Bidders with Bidding Credits



Licenses Won with Bidding Credits

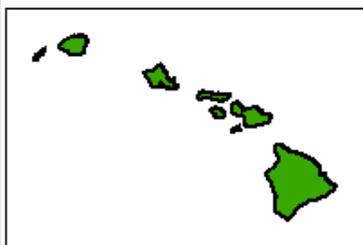
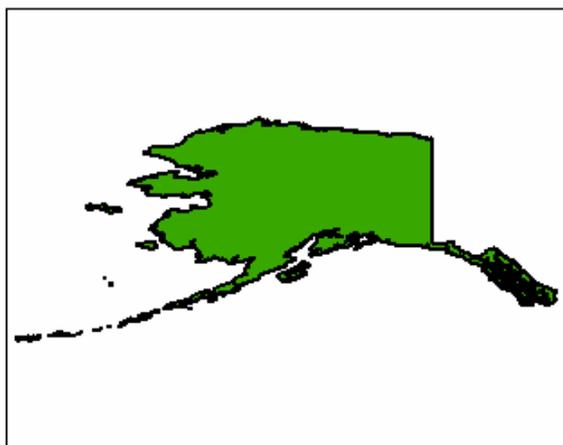
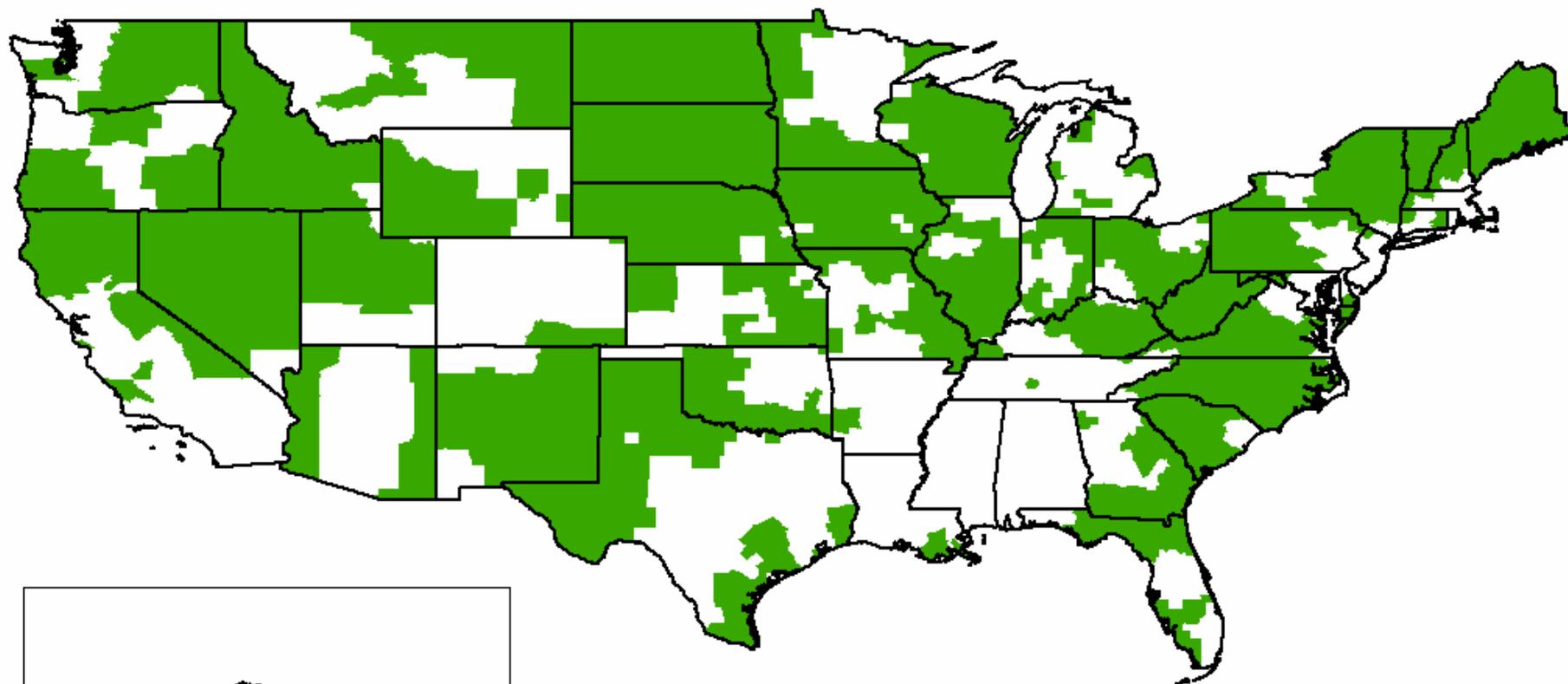


Licenses won with bidding credits as a fraction of licenses won that were eligible for bidding credits

*Excluding all designated entities in these auctions that partnered with nationwide incumbent carriers, specifically AT&T, Sprint and T-Mobile or their predecessors. No designated entities partnered with nationwide incumbent carriers in the AWS-1 and 700 MHz auctions.

Exhibit 4

Licenses Won by Designated Entities



Licenses Won by Block

 A (79 licenses)

 B (293 licenses)

Note: Map includes A and B Block licenses in the 700 MHz Band in the 50 states. (FCC, April 2008)

Exhibit 5

Total Bidding Credit Dollars

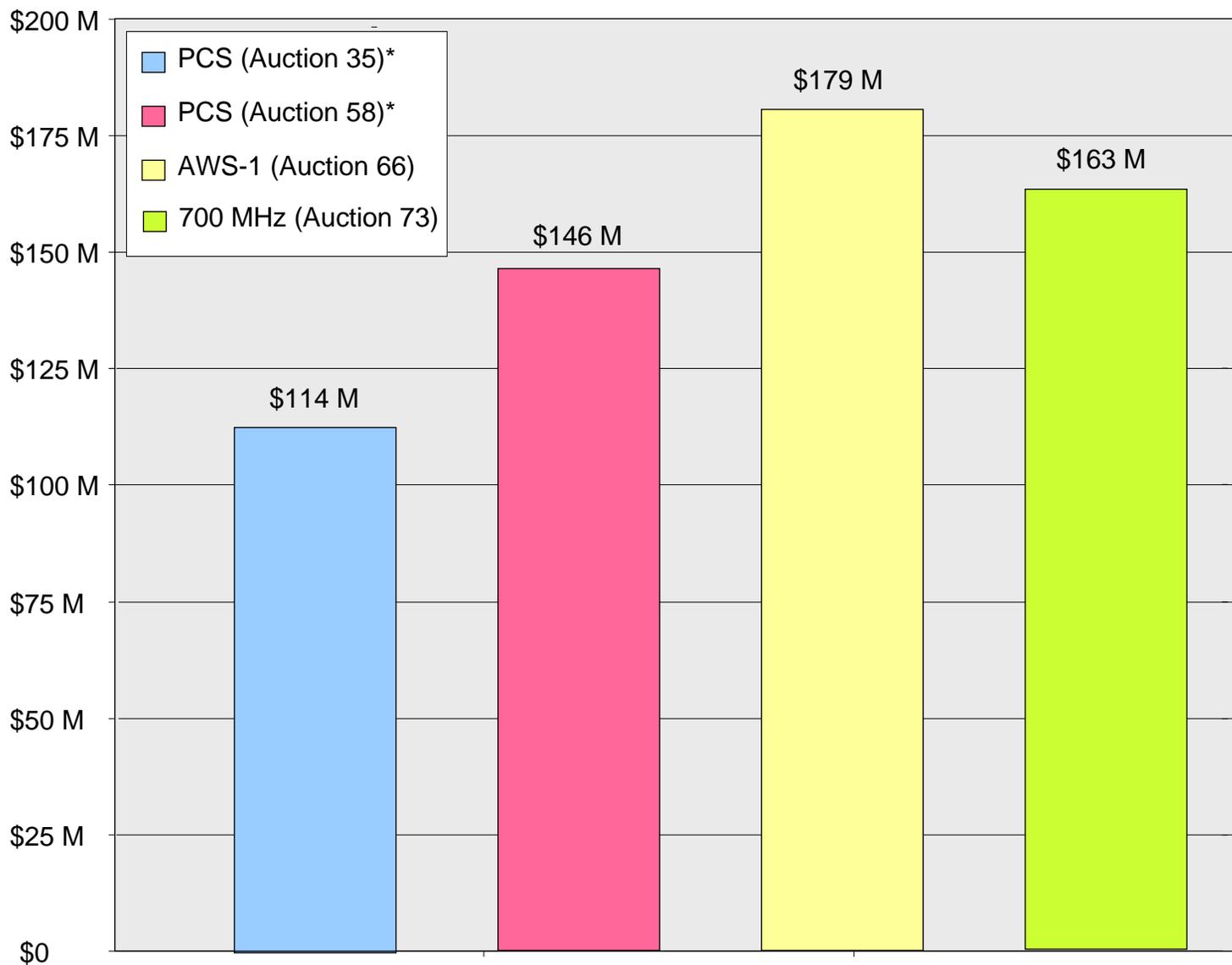
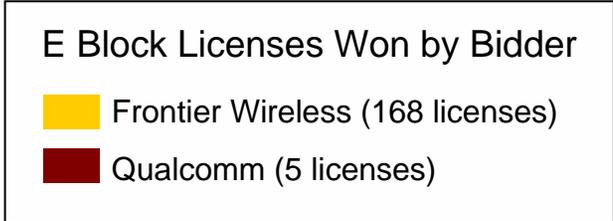
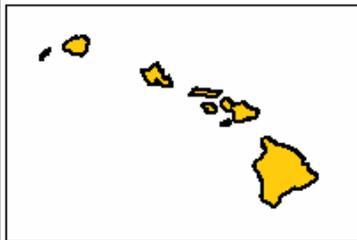
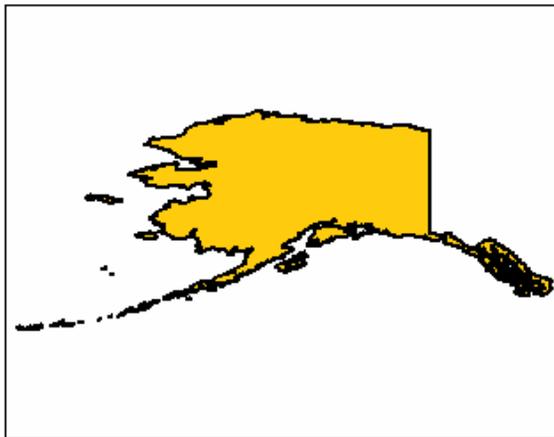
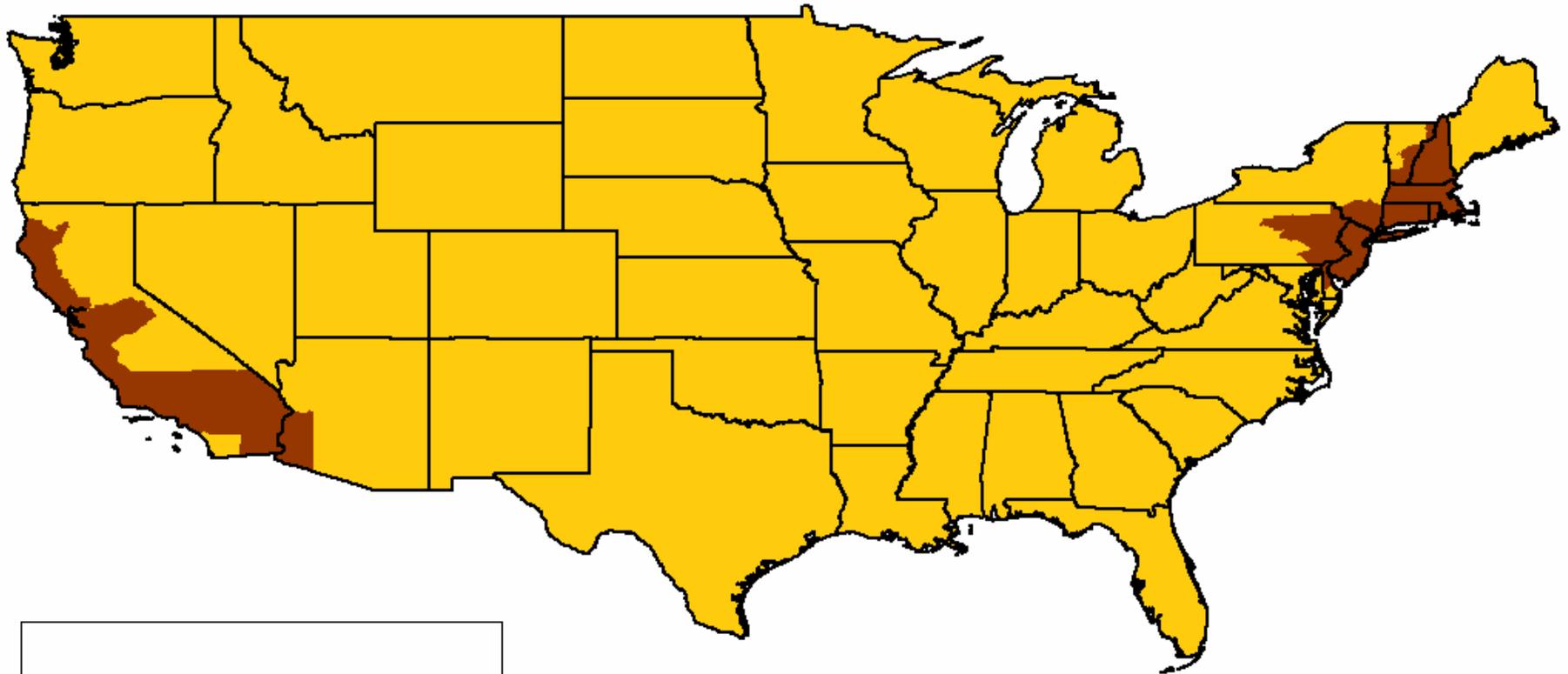


Exhibit 6

***Excluding all designated entities in these auctions that partnered with nationwide incumbent carriers, specifically AT&T, Sprint and T-Mobile or their predecessors. No designated entities partnered with nationwide incumbent carriers in the AWS-1 and 700 MHz auctions.**

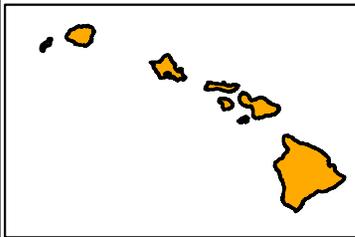
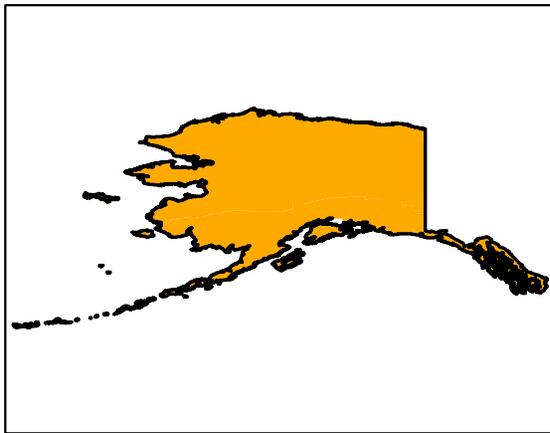
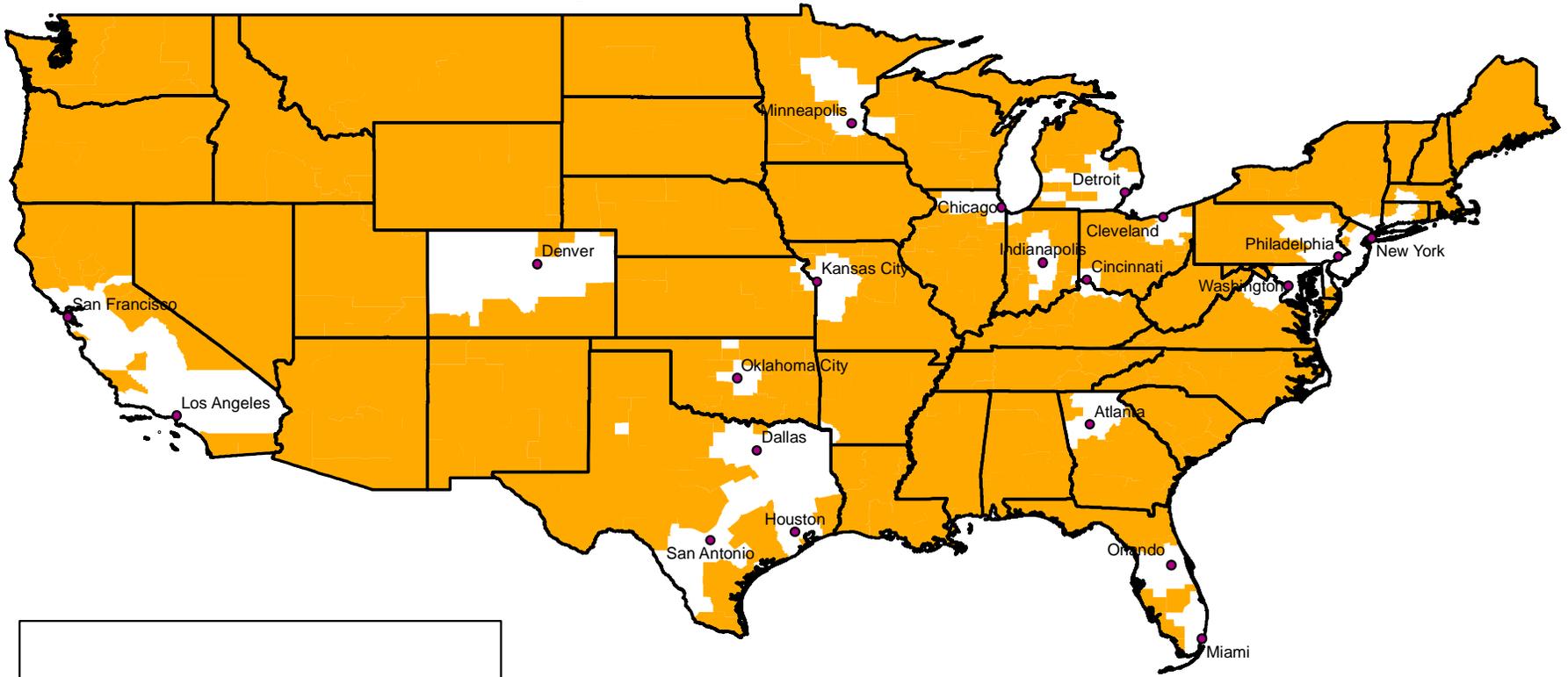
Licenses Won by New Entrant – Frontier Wireless (Dish Network)



Note: Map shows E Block licenses in the 700 MHz Band in the 50 states. (FCC, April 2008)

Licenses Won by New Entrants, Small, and Rural Providers

(Excluding AT&T and Verizon Wireless)



License Areas

- Orange square: Won by Providers other than AT&T and Verizon
- White square: Won Solely by AT&T and/or Verizon
- Red dot: Large Metropolitan Markets

Note: Map includes A and B Block licenses in the 700 MHz Band in the 50 states. (FCC, April 2008)

License Area Sizes in AWS-1 and 700 MHz Auctions

	AWS-1 Auction		700 MHz Auction	
	<u>Spectrum</u> (megahertz)	<u>Percentage</u>	<u>Spectrum</u> (megahertz)	<u>Percentage</u>
Paired Spectrum Only				
CMA [*]	20	22.20%	12	26.10%
EA ^{**}	30	33.30%	12	26.10%
REAG ^{***}	40	44.40%	22	47.80%
Total	90		46	
Paired and Unpaired Spectrum				
CMA	20	22.20%	12	23.10%
EA	30	33.30%	18	34.60%
REAG	40	44.40%	22	42.30%
Total	90		52	

Note: Analysis does not include 10 megahertz of spectrum in the 700 MHz D block and 4 megahertz for 700 MHz Guard Bands.

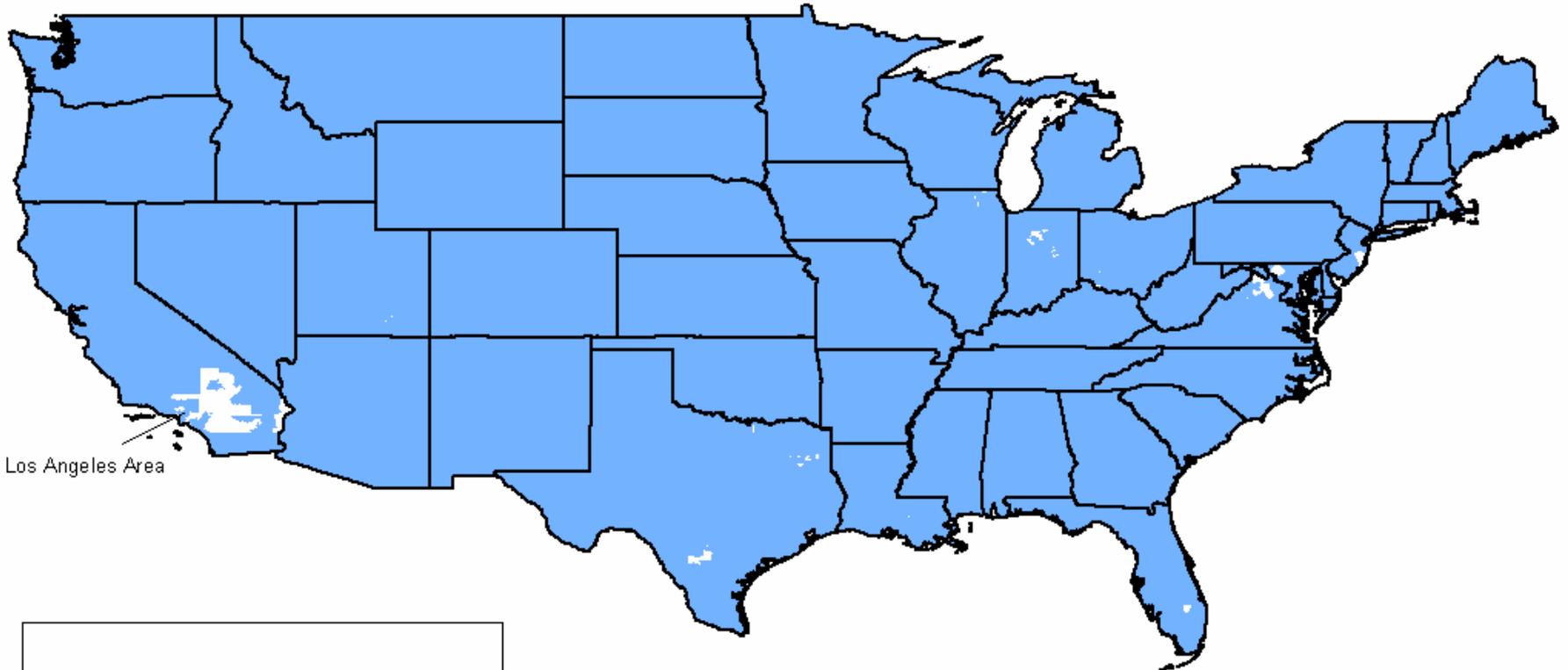
* -- Cellular Market Area or "CMA" blocks consist of 734 license areas.

** -- Economic Area or "EA" blocks consist of 176 license areas.

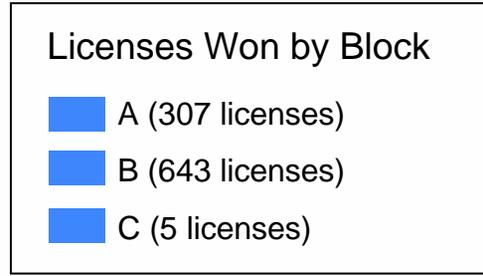
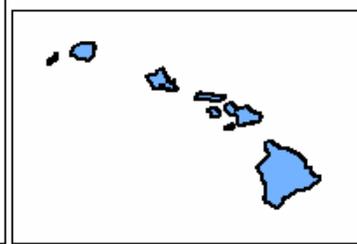
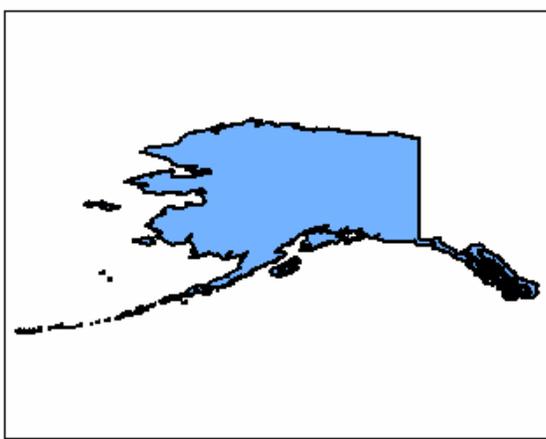
*** -- Regional Economic Area Grouping or "REAG" blocks consist of 12 license areas.

Licenses Won by Providers Other Than Incumbent Telephone or Cable Company

700 MHz Spectrum for Wireless "Third Pipe"



Los Angeles Area



Note: Map includes 700 MHz A, B, and Upper C Block licenses in the 50 states won by bidders in areas without wired networks. (FCC, April 2008)

Nationwide Incumbent Spectrum Holdings After 700 MHz Auction

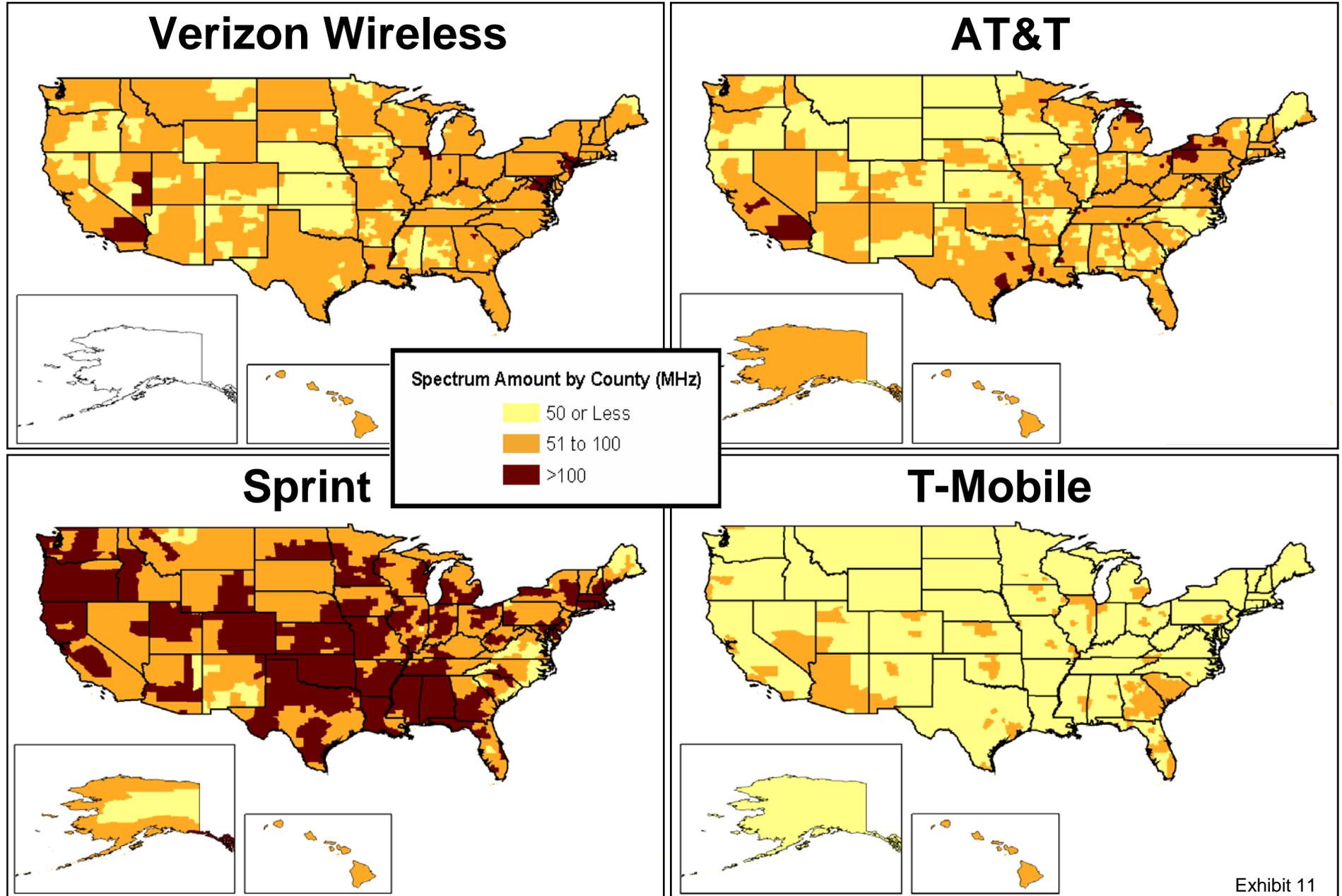


Exhibit 11

Note: Maps include spectrum in the Cellular, Broadband PCS, ESMR, AWS, BRS, and 700 MHz Bands. (FCC, April 2008)