DESCRIPTION OF THE TRANSACTION AND PUBLIC INTEREST STATEMENT

By this Application, and pursuant to Section 310(d) of the Communications Act of 1934, as amended ("Act"), Cellco Partnership d/b/a Verizon Wireless ("Cellco" or "Verizon Wireless") and Cox TMI Wireless, LLC ("Cox Wireless") request the consent of the Federal Communications Commission ("FCC" or "Commission") to the assignment of 30 Advanced Wireless Services ("AWS")¹ licenses from Cox Wireless to Verizon Wireless. As discussed in more detail below, the proposed license assignments – which involve transferring only spectrum and no other assets, facilities, or customers – will serve the public interest. In particular, the transaction will move spectrum that is not currently being used to serve consumers to a provider that will make efficient use of that spectrum to serve the public. The transaction will enable Verizon Wireless to add network capacity to meet growing demand, so that customers will continue to enjoy the high-quality, high-speed services that state-of-the-art wireless broadband technology can provide.

I. DESCRIPTION OF THE TRANSACTION

This transaction involves only assignments of spectrum and does not include the transfer of any other assets, facilities, or customers. Cox Wireless will assign to Verizon Wireless its 30 AWS licenses in full, which are listed in the attached Form 603. These 30 licenses are in 29 markets because in one market (Los Angeles-Riverside-Orange County, CA-AZ), Cox Wireless holds two AWS licenses, each covering a discrete, partitioned area of the market. In each of the 29 markets, Cox Wireless has 20 MHz of spectrum. The licenses correspond generally with Cox Communications, Inc.'s ("Cox") cable system footprint and include territory in Arizona,

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[&]quot;AWS" refers to the 1710-1755/2110-2155 MHz bands.

Arkansas, California, Florida, Georgia, Iowa, Kansas, Louisiana, Mississippi, Missouri, Nebraska, Nevada, Oklahoma, Rhode Island, and Virginia. Because Cox Wireless is not currently using the licenses to provide service to customers, the assignment will not create any customer transition issues nor any discontinuance, reduction, or impairment of service to customers. There are also no international Section 214 authorizations that will be assigned.²

II. DESCRIPTION OF THE APPLICANTS

A. Cox Wireless

Cox Wireless is a subsidiary of Cox, which is the third largest cable company in the country, and a long-time provider of high-speed Internet and local telephone services. Cox was one of the pioneers of local telephone competition, and began providing circuit-switched telephone service over its cable plant in 1997. It also was one of the first cable companies to offer high-speed Internet services, starting in 1996. In the last 15 years, Cox has invested more than \$16 billion in the technology upgrades necessary to bring these services and advanced video services to its customers. Today, Cox provides service to more than 6 million customers, including more than 2.6 million local and long distance voice service customers and nearly 4 million high-speed Internet customers, in markets across the country.

Cox also has expended significant effort in the area of wireless services. Cox was a successful applicant for one of the initial cellular licenses in the early 1980s, was awarded a Pioneer's Preference for PCS for its development of an innovative integration of cable networks

² Cox Wireless has two spectrum leases currently in effect: one in which it is leasing spectrum to Qualcomm (Lease ID L000008865) and one in which it is leasing spectrum from SpectrumCo (Lease ID L000005368). The required Commission filings for these leases previously were made. Because Cox Wireless intends to terminate these leases at or prior to closing of the assignment of its licenses to Verizon Wireless, they are not being assigned to Verizon Wireless.

with PCS technologies, and also was a participant in the Sprint Telecommunications Venture in the mid-1990s. Most recently, Cox sought to re-enter wireless by purchasing the spectrum that is the subject of this application and additional spectrum in the 700 MHz band. Cox, through its affiliate, Cox CWI Investments ("CWI"), was an original member of SpectrumCo LLC ("SpectrumCo"), which was created in 2006 as a joint venture among CWI and subsidiaries of Comcast Corp. ("Comcast"), Time Warner Cable Inc. ("Time Warner Cable"), Bright House Networks, LLC ("Bright House"), and Sprint Nextel Corporation ("Sprint").³ SpectrumCo was the successful bidder for 137 wireless spectrum licenses in the Commission's AWS auction, which concluded in September 2006. In 2007, Sprint withdrew from SpectrumCo, and the SpectrumCo members purchased Sprint's interests for an amount equal to Sprint's capital contribution to the joint venture. In 2008, CWI redeemed its interest in SpectrumCo and in exchange received the 30 AWS licenses that are the subject of the instant transaction.⁴

B. Verizon Wireless

Cellco is a general partnership, which is ultimately owned and controlled by Verizon

Communications Inc. and Vodafone Group Plc. ("Vodafone"). Additional information as to

Cellco's ownership is provided in its Form 602, which is on file with the Commission.

Vodafone's interest in the partnership, and its qualifications as a foreign corporation to hold

³ On December 16, 2011, Verizon Wireless and SpectrumCo filed an application with the Commission seeking approval to assign SpectrumCo's 122 AWS licenses to Verizon Wireless. *See* ULS File No. 0004993617; *see also* Press Release, *Comcast Corp., Comcast, Time Warner Cable, and Bright House Networks Sell Advanced Wireless Spectrum to Verizon Wireless for \$3.6 Billion* (Dec. 2, 2011), <u>http://www.comcast.com/About/ PressRelease/</u> PressReleaseDetail.ashx?PRID=1134. Because many of the Cox Wireless licenses were

<u>PressReleaseDetail.ashx?PRID=1134</u>. Because many of the Cox Wireless licenses were partitioned when Cox Wireless left SpectrumCo, the total number of licenses assigned to Verizon Wireless will be 152 (122 from SpectrumCo and 30 from Cox Wireless). Also, the Cox Wireless AWS license holdings do not overlap the SpectrumCo licenses in any market area.

⁴ See Wireless Telecommunications Bureau Assignment of License Authorization Applications Actions Taken, Report No. 4726, Public Notice at 6-7 (rel. Feb. 11, 2009).

indirect ownership interests in common carrier licenses, have been previously authorized by the Commission under the Act.⁵ Since that time, there have not been changes in Cellco's foreign ownership information required to be submitted to the Commission.⁶

III. THE TRANSACTION WARRANTS PROMPT REVIEW.

This application seeks the Commission's consent to assign spectrum licenses – and no more. Unlike a merger or other transaction involving consolidation of operating businesses and customers, the only assets being transferred are AWS licenses that are not currently in commercial use.⁷ The transaction will not combine the Applicants' businesses, does not involve the acquisition of any non-spectrum assets, facilities, or customers, and will not reduce the number of choices for wireless services that consumers have in each of the licensed areas. What it <u>will</u> accomplish is to supply Verizon Wireless with additional spectrum resources to respond to

⁵ See Applications of Cellco Partnership d/b/a Verizon Wireless and Atlantis Holdings LLC for Consent to Transfer Control of Licenses, Authorizations, and Spectrum Manager and De Facto Transfer Leasing Arrangements and Petition for Declaratory Ruling, Memorandum Opinion and Order and Declaratory Ruling, 23 FCC Rcd 17444 (rel. Nov. 10, 2008) ("Verizon Wireless-ALLTEL Order"); Applications of Vodafone AirTouch Plc and Bell Atlantic Corp., for Consent to the Transfer of Control or Assignment of License and Authorizations, Memorandum Opinion and Order, 15 FCC Rcd 16507, 16514 ¶ 19 (IB and WTB rel. Mar. 30, 2000); International Authorizations Granted, Public Notice, 15 FCC Rcd 116, 116 (IB rel. Dec. 30, 1999); AirTouch Communications, Inc., Transferor, and Vodafone Group, Plc., Transferee, for Consent to Transfer of Control of Licenses and Authorizations, Memorandum Opinion and Order, 14 FCC Rcd 9430, 9434 ¶ 9 (WTB rel. June 22, 1999); International Authorizations Granted, Public Notice, 21 FCC Rcd 13575 (IB rel. Nov. 24, 2006).

⁶ *See Exhibit 2* concerning Verizon Wireless' foreign ownership.

⁷ As discussed below, Cox Wireless has provided 3G wireless service as a mobile virtual network operator ("MVNO") utilizing Sprint's network. *See, e.g.*, Press Release, Cox Communications, Inc., *Cox Unveils Unprecedented "Unbelievably Fair" Wireless Plans, Bringing More Value to the Bundle* (Nov. 19, 2010), <u>http://cox.mediaroom.com/</u> <u>index.php?s=43&item=516</u>. On November 15, 2011, Cox announced its intention to exit that business. *See* Press Release, Cox Communications, Inc., *Cox Communications to Discontinue Cox Wireless Service, Effective March 30, 2012* (Nov. 15, 2011), <u>http://cox.mediaroom.com/</u> index.php?s=43&item=569. This transaction will have no impact on that process.

customers' accelerating use of broadband applications and features. In short, it will help ensure that consumers can continue to enjoy high-quality, high-speed wireless services.

The Commission's review of this application under Section 310(d) of the Act, and under applicable precedent, should be limited. The Commission previously has determined that applications which demonstrate on their face that a transaction meets the public interest, and will neither violate the Act or Commission rules, nor undermine Commission policies, do not require extensive review or merit expenditures of scarce Commission resources.⁸ Indeed, no detailed showing of benefits is required for transactions where there are no anti-competitive effects.⁹ The Commission has determined that, where a transaction will not reduce competition and the acquiring party possesses the requisite qualifications to control the licenses in question, a "demonstration that benefits will arise from the transfer is not . . . a prerequisite to our approval, provided that no foreseeable adverse consequences will result from the transfer."¹⁰

The instant application meets this standard of limited review and should be granted expeditiously. The spectrum transfers comply with all Commission rules, require no waivers,

⁸ See Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Tele-Communications, Inc., Transferor, to AT&T Corp., Transferee, 14 FCC Rcd 3160, 3170 ¶ 16 (rel. Feb. 18, 1999); Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines, Memorandum Opinion and Order, 14 FCC Rcd 14712, 14740-41 ¶ 54 (rel. Oct. 8, 1999).

See Applications for Consent to the Transfer of Control of Licenses and Section 214
Authorizations from Southern New England Telecommunications Corp., Transferor To SBC
Communications, Inc., Transferee, Memorandum Opinion and Order, 13 FCC Rcd 21292, 21315
¶ 45 (rel. Oct. 23, 1998).

¹⁰ Applications of Pacific Telesis Group Transferor, and SBC Communications, Inc. Transferee, For Consent to Transfer Control of Pacific Telesis Group and its Subsidiaries, Memorandum Opinion and Order, 12 FCC Rcd 2624, 2627 ¶ 2 (rel. Jan. 31, 1997); see also Applications of Comcast Cellular Holdings, Co., Transferor, and SBC Communications, Inc., Transferee, for Consent to Transfer of Control of Licenses and Authorizations, Memorandum Opinion and Order, 14 FCC Rcd 10604, 10608-09 ¶ 10 (WTB rel. July 2, 1999).

and will not result in any violation of the Communications Act or any other applicable statutory provision. The acquiring entity, Verizon Wireless, is plainly qualified to hold the licenses, and the Commission repeatedly has found this to be the case.¹¹ The license assignments also raise no competitive concerns. Because only spectrum is being transferred, and not an operating entity, the proposed transaction will not result in any diminution in competition. Moreover, the spectrum screen is not triggered in any affected markets and this transaction will not change the choices that consumers have today among wireless providers. Finally, because none of the licenses currently is subject to any installment financing, bidding credits, or restrictions on ownership based on designated entity status, approval of this application will not result in any unjust enrichment concerns.¹² In short, the assignments will not frustrate or impair the Commission's implementation of the Act, and will in fact further the public interest as discussed below.

IV. THE TRANSACTION WILL SERVE THE PUBLIC INTEREST BY TRANSFERRING CURRENTLY UNUSED SPECTRUM TO MEET GROWING CONSUMER DEMAND FOR VERIZON WIRELESS' BROADBAND SERVICES.

The transaction will serve the public interest by enabling Verizon Wireless to obtain spectrum that will help the company meet the growing demands of its customers. As demonstrated below, there is great demand for wireless broadband services, and consumers' accelerating broadband use on Verizon Wireless' network is driving the company's need for more spectrum. The spectrum obtained through this transaction will help provide necessary

¹¹ See, e.g., Verizon Wireless-ALLTEL Order, 23 FCC Rcd at 17465 ¶ 33; Applications of Cellco Partnership d/b/a Verizon Wireless and Rural Cellular Corp. for Consent to Transfer Control of Licenses, Authorizations, and Spectrum Manager Leases, and Petitions for Declaratory Ruling, Memorandum Opinion and Order and Declaratory Ruling, 23 FCC Rcd 12463, 12477-78 ¶ 27 (rel. Aug. 1, 2008).

¹² See 47 C.F.R. § 1.2111.

capacity for Verizon Wireless to continue to provide state-of-the-art wireless services that meet consumers' demand. This application will move currently unused spectrum to a provider that will make efficient and effective use of it – the very type of transaction the Commission's secondary markets policies were designed to facilitate.

A. The Public's Demand for Wireless Services Is Growing Rapidly.

Consumer demand for broadband services across the wireless industry is rapidly growing. Commission staff reported a year ago that, "[a]s smartphones, laptops, and other devices become increasingly integral to consumers' mobile experiences, mobile data demand is expected to grow between 25 and 50 times current levels within 5 years."¹³ Cisco estimates that global mobile traffic will increase 26-fold between 2010 and 2015.¹⁴ CTIA reports that data usage on wireless networks more than doubled during 2010,¹⁵ and that the average user's data usage grew 132 percent to over 350 megabytes per month.¹⁶ CTIA recently filed data with the Commission for the first half of 2011, which again shows a doubling of customers' data usage over the previous year. Wireless carriers in the United States "currently transmit the equivalent of two times the entire Library of Congress book collection every hour of every day; that equated to 388 billion

¹³ See FCC, MOBILE BROADBAND: THE BENEFITS OF ADDITIONAL SPECTRUM 5 (Oct. 2010) ("MOBILE BROADBAND TECHNICAL PAPER"), <u>http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-302324A1.pdf</u>.

¹⁴ Cisco, *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update*, 2010-2015 at 2 (Feb. 1, 2011) ("*Cisco 2010-2015 Forecast*"), <u>http://www.cisco.com/en/US/</u>solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.pdf.

¹⁵ Robert F. Roche and Liz Dale, CTIA's WIRELESS INDUSTRY INDICES 10 (May 2011) ("CTIA's WIRELESS INDUSTRY INDICES") (providing year-end 2010 results) ("Wireless carriers reported carrying 226.5 billion MB of data traffic in the last six months of 2010, up 110 percent from 107.8 billion MB in the last half of 2009."); *see* Robert Roche, *Wireless Data Traffic Grew 110% from 2009-2010*, CTIA: THE WIRELESS ASSOCIATION® BLOG, May 31, 2011, http://blog.ctia.org/2011/05/31/wireless-data-traffic-grew-110-from-2009-2010 (finding 110 percent growth rate year-over-year from 2009 to 2010).

¹⁶ CTIA'S WIRELESS INDUSTRY INDICES at 227-28.

megabytes in all of 2010 and more than 341 billion megabytes in just the first half of 2011."¹⁷ 2011 wireless data consumption is once again on track to double the previous year's level of traffic. CTIA reported the following industry-wide customer data usage for the last four sixmonth periods:

July-December 2009	109 billion MB
January-June 2010	161 billion MB
July-December 2010	227 billion MB
January-June 2011	341 billion MB^{18}

Smartphone adoption continues to surge, driving up data consumption: 59 percent of

mobile handsets sold in the United States in the third quarter of 2011 were smartphones,¹⁹ and

currently 43 percent of all U.S. mobile phone subscribers own a smartphone.²⁰ As consumers

experience higher speeds through the use of smartphones, they consume more data.²¹ Today,

¹⁹ Aaron Baar, *NPD: Smartphone Prices Are Dropping*, MEDIAPOSTNEWS MARKETINGDAILY (Nov. 14, 2011), <u>http://www.mediapost.com/publications/article/162325/npd-smartphone-prices-are-dropping.html</u>.

²⁰ Generation App: 62 percent of Mobile Users 25-34 own Smartphones, NIELSENWIRE (Nov. 3, 2011), <u>http://blog.nielsen.com/nielsenwire/online_mobile/generation-app-62-of-mobile-users-25-34-own-smartphones/</u>.

¹⁷ Comments of CTIA-The Wireless Association, WT Docket No. 11-186, at 51 (filed Dec. 5, 2011) (emphasis omitted).

¹⁸ *Id.* at 52.

²¹ See, e.g., FCC, Connecting America: The National Broadband Plan at 84 (2010) ("National Broadband Plan") ("More bandwidth begets more data-intensive applications which begets a need for more bandwidth. Indeed, it is this virtuous cycle that has made broadband an innovation growth engine over the past decade – but also makes forecasting difficult."); Rysavy Research, THE SPECTRUM IMPERATIVE: MOBILE BROADBAND SPECTRUM AND ITS IMPACTS FOR U.S. CONSUMERS AND THE ECONOMY, AN ENGINEERING ANALYSIS 4 (Mar. 16, 2011), <u>http://www.mobilefuture.org/page/-/rysavy-spectrum-effects-301611.pdf</u> ("As mobile devices become more powerful, as device resolution increases, as users employ more applications and as connectivity increasingly is embedded in virtually every manner of machine, this flow of bits is increasing at a dramatic rate."); MOBILE BROADBAND TECHNICAL PAPER at 9 ("Devices with enhanced functionality tend to consume more data.").

smartphones use 24 times more spectrum capacity than traditional phones.²² According to public estimates, the average smartphone will generate 1.3 GB of traffic per month in 2015 (a 16-fold increase over the 2010 average), and aggregate smartphone traffic in 2015 will be 47 times greater than it is today.²³ Similarly, the rapid adoption of tablets places even more demand on spectrum resources. Tablets use approximately 120 times the capacity of traditional phones.²⁴ By 2015, it is projected that mobile-connected tablets alone will generate as much traffic as the entire global mobile network in 2010.²⁵ Taken together, these trends demonstrate the soaring consumer demand for, and use of, mobile broadband.

B. Consumers' Accelerating Wireless Broadband Use on Verizon Wireless' Network Is Driving the Need for Additional Spectrum.

The industry trends discussed above directly impact Verizon Wireless as well. As Bill Stone, Verizon Wireless' Executive Director of Network Strategy, explains in his Declaration, the company must constantly assess whether it has sufficient and suitable spectrum to meet the needs of its customers, both in the short run and in the longer term, because spectrum is the raw material for all of its services.²⁶ The spectrum to be obtained through this transaction will help provide necessary capacity for future growth in demand. The explosion in customers' use of wireless data services over the past several years shows no signs of abating and is in fact

²² Julius Genachowski, Chairman, FCC, Remarks As Prepared for Delivery, CTIA Wireless 2011, at 5 (Mar. 22, 2011), <u>http://hraunfoss.fcc.gov/ edocs_public/attachmatch/DOC-</u> <u>305309A1.pdf</u> ("Genachowski CTIA Remarks").

²³ *Cisco 2010-2015 Forecast* at 3.

²⁴ Genachowski CTIA Remarks at 5.

²⁵ *Cisco 2010-2015 Forecast* at 2.

²⁶ Declaration of William H. Stone, Executive Director of Network Strategy for Verizon, at \P 17 ("Stone Declaration"), attached as *Exhibit 3*; *see also id.* at \P 26.

accelerating. This is because of the following trends, which compound one another and contribute to the fast-escalating demand for data:

<u>First</u>, the volume of traffic on Verizon Wireless' network is growing and, in the case of data, that growth is accelerating – what Mr. Stone refers to as the "hockey stick" of data growth.²⁷ While voice and text usage have both continued to increase, the accelerating amount of data usage (growing at double-digit figures each quarter) has the most significant impact on the network due to the greater bandwidth demands of data. Indeed, over the past two years that rate of growth has more than doubled each year.²⁸ Reports indicate, moreover, that in the first half of 2011, Verizon Wireless smartphone users consumed more data on average than in the preceding six months – and had the biggest percent increase in data consumption among the major carriers.²⁹

Second, there are many more devices using the Verizon Wireless network, and that figure is growing even faster than the growing number of individual customers because more customers are using multiple devices.³⁰ Many customers have two, three, or even more devices, which can include a data card for connecting laptops or PCs, a smartphone, a netbook, a tablet, and/or a mobile hotspot that provides WiFi connections for multiple devices. The company typically reports total "connections," which represents the number of devices that customers own and use to access the network. That number has grown steadily every year. At the end of 3Q11, the company served 107.7 million connections – an increase of 6.5 percent over 3Q10 – consisting

²⁸ *Id*.

Id. at \P 6.

²⁹ See, e.g., Marguerite Reardon, CNET NEWS, *The very hungry smartphone data user* (Aug. 17, 2011), <u>http://news.cnet.com/8301-30686_3-20093446-266/the-very-hungry-smartphone-data-user/</u>.

³⁰ See Stone Declaration at \P 6.

of 90.7 million retail and 17.0 million wholesale and other connections.³¹ Verizon Wireless serves more customers and has more connections than any other provider, and this growth alone puts increasing demand on the Verizon Wireless network and its spectrum resources.

Third, the mix of devices is shifting toward more bandwidth-intensive smartphones and other broadband-capable devices, driving even more data usage.³² Customers are changing their preferences for devices in favor of smartphones and other broadband-capable devices. While 24 percent of the company's postpaid customers had smartphones as of 3Q10, that percentage grew dramatically in just the next year, reaching 39 percent in 3Q11, and Verizon Wireless expects that more than 50 percent of its customers will have smartphones relatively soon.³³ Verizon Wireless sold 5.6 million smartphones in 3Q11 alone, and fully 60 percent of postpaid phone sales were smartphones.³⁴ And as customers have more devices, they are spending an increasing amount of time connected to the network, also driving network usage, as they use their devices more often to check Internet sites, watch sports or entertainment, or send email.³⁵

<u>Fourth</u>, the types of data usage are shifting toward more spectrum-intensive uses. While several years ago accessing static, text-based web sites was the predominant form of data usage, today many web sites are dynamic, featuring bandwidth-intensive video and other features.³⁶ An increasing number of customers use their devices to access video programming and VoIP applications with video capability, and they are constantly downloading feature-rich applications

- ³² *Id.*
- ³³ *Id*.
- ³⁴ *Id*.
- ³⁵ *Id*.
- ³⁶ *Id.*

³¹ *Id.*

which themselves place sizeable capacity demands on the network. Such applications can consume anywhere from five to 10 times as much bandwidth as accessing a web site.³⁷

Moreover, with data, unlike with voice or text messaging, speeds are an increasingly important consideration for customers. Carriers continually strive to achieve (and regularly promote) the speeds at which customers can access the Internet and run applications. Speed and capacity, however, are directly related: high-speed services demand substantial bandwidth. Verizon Wireless engineers its network not only to provide customers with connections, but also with speeds through those connections that are designed to achieve the goals set for data services – for Ev-DO, typical download speeds of 600 kbps-1.4 Mbps and upload speeds of 500-800 kbps; for Long Term Evolution ("LTE"), typical download speeds of 5-12 Mbps and upload speeds of 2-5 Mbps.³⁸ Despite the spectral efficiencies and enhanced throughput provided by LTE technology, maintaining these typical speeds across the network, particularly as customers use more and more bandwidth-intensive applications, will require additional spectrum resources, part of which can be met by this transaction.

C. Securing Spectrum Resources Today Is Essential to Building a Network that Meets Consumers' Needs over the Long Term.

While Verizon Wireless has sufficient spectrum to meet its immediate needs, and generally to meet increased demands in many areas until 2015, the company will need to acquire and deploy considerable additional spectrum in the interim to meet projected future demand. Verizon Wireless cannot wait to acquire spectrum until it is needed, because, once spectrum is obtained, it is Verizon Wireless' experience that it can take a period of years to put that spectrum

³⁷ *Id.*

³⁸ *Id.* at ¶ 8.

to use.³⁹ Based on current projections, as that date approaches, Verizon Wireless may begin to experience some capacity constraints that will increasingly have an effect on customers in various markets covered by the spectrum in this transaction. It thus needs to secure spectrum today to engage in the engineering, investment, and deployment necessary to meet its customers' future needs.

Verizon Wireless must respond to spectrum needs not merely on a short-term (1-2 years) time frame but also on a longer term (3-7 years) time frame to meet the ever-increasing demands of over 100 million-plus mobile connections.⁴⁰ Forward-looking, long-term spectrum planning is essential at Verizon Wireless because long lead times are needed to complete the many steps that can be required before new spectrum is put to work for our broad and diverse customer base and so that new spectrum can be integrated into an already-complex network. The company typically must complete some or all of the following actions: (1) complete the RF design, which essentially determines the most efficient way to deploy cell sites and antennas on those sites to cover the desired area with the desired signal level, (2) work with network infrastructure vendors to design and build base station equipment and antennas, (3) work with original equipment manufacturers to design and produce mobile devices, (4) negotiate with landlords to acquire space on existing towers or to acquire new sites, (5) complete the permitting process which is necessary for almost every site, even when it involves merely collocating additional antennas or replacing existing antennas -a process which often consumes six months or more, (6) deploy the equipment at the sites, (7) obtain and install backhaul facilities to connect new sites to the Verizon Wireless core network, which can require additional zoning approvals and negotiations

Id.

³⁹ *Id.* at ¶ 12.

⁴⁰

with backhaul providers, and (8) test and fine-tune the network to ensure it performs optimally and meets the company's performance specifications.⁴¹ These steps are essential to create the state of the art consumer experience that Verizon Wireless customers have come to expect.

While Verizon Wireless constantly looks for ways to use spectrum in the most efficient manner, it is already pursuing most if not all of the benefits it can achieve from more efficient use. Verizon Wireless serves more customers per MHz today than other national carriers.⁴² It has a national average spectrum depth of 88 MHz, which serves 107 million connections, or more than 1.2 million connections for every one MHz. This spectrum efficiency is the direct result of Verizon Wireless investing billions of dollars in deploying more advanced radio technologies and optimizing network design. It has invested in and expanded the capabilities of its network, making huge investments in successive wireless technologies – CDMA, Ev-DO Rev. A, and now LTE – each of which has brought major improvements in spectral efficiency. New technologies and network design, however, can increase capacity only so far. While Verizon Wireless can sometimes use cell splitting to meet increased demand, the benefits of that technology are limited. As more sites are placed close together, the benefits of additional sites decline, particularly relative to the zoning, equipment, construction, and other expenses necessary to deploy more sites. Moreover, the costs of deploying additional sites are substantial. Finally, LTE is the most spectrum-efficient air interface technology available today. In short, techniques to enhance the efficient use of the spectrum the company currently holds cannot alone meet the accelerating demand for more network capacity.⁴³

⁴¹ *Id.* at \P 13.

⁴² *Id.* at \P 14.

⁴³ *Id.*

Further, projections of future spectrum need must also take into account that previous projections have often understated actual growth in traffic; slight variations between projected and actual use can have a substantial impact on spectrum needs. Because there could be adverse impacts on customers whenever the desired usage exceeds the available capacity, spectrum planning needs to build in some flexibility to account for higher-than-projected demand. For example, Verizon Wireless' 4Q11 data traffic volume will be approximately double what its 2009 projection was; similarly, the company's most recent projections for data traffic in 4Q15 are now approximately seven times higher than the company's 2009 projection.⁴⁴ The spectrum included in this transaction will help meet part of the expected spectrum needs in the covered markets in the years ahead, by assigning the spectrum to a provider who will best put it to use.

D. The Commission Has Encouraged Carriers to Use the Secondary Market to Put Spectrum to Better Use.

This application involves precisely the type of transaction that the Commission's secondary market policies are designed to facilitate. Beginning with its 2000 *Policy Statement* on secondary markets,⁴⁵ the Commission launched an ongoing effort to promote transfers of spectrum to those who can put the spectrum to better use:

In this new effort, we seek to significantly expand and enhance the existing secondary markets for spectrum usage rights to permit spectrum to flow more freely among users and uses in response to economic demand, to the extent consistent with our other statutory mandates and public interest objectives. . . Our goal in this effort is to promote the operation of competitive markets for the sale and lease of spectrum usage rights by licensees, and thereby facilitate both the transfer of the right to use spectrum for existing services to new, higher valued uses, and the

⁴⁴ *Id.* at ¶ 25.

⁴⁵ Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets, Policy Statement, 15 FCC Rcd 24178 (rel. Dec. 1, 2000).

availability of unused and under utilized spectrum to those who would use it for providing services. 46

This transaction represents a "higher valued" use for the AWS licenses in light of the determination by Cox not to provide commercial service on its AWS spectrum.⁴⁷

Over the years, the Commission has adopted policies to foster secondary markets that have helped achieve the goal of "permit[ting] spectrum to flow more freely among users and uses in response to economic demand."⁴⁸ Today, a robust secondary market in spectrum is ever more critical as wireless service providers strive to meet skyrocketing capacity demands for mobile broadband.

As recognized in the National Broadband Plan (the "Plan"), "[s]econdary markets provide a way for some network providers to obtain access to needed spectrum for broadband deployment."⁴⁹ Moreover, secondary markets provide a crucial means to transition spectrum to more efficient use, as "existing licensees may not fully utilize or plan to utilize the entire spectrum assigned to them."⁵⁰ The Plan suggests that "the pressing spectrum requirements of

⁴⁹ National Broadband Plan at 83 (Recommendation 5.7). See also Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, Fifteenth Report, 26 FCC Rcd 9664, 9828 ¶ 282 (2011) ("Fifteenth Report") ("The Commission's secondary market policies allow existing licensees to obtain additional spectrum capacity and expand their coverage areas to better meet the needs of their customers").

⁴⁶ *Id.* at 24178 ¶ 1, 24185-86 ¶ 18.

⁴⁷ See discussion infra Section V.A.

⁴⁸ Fostering Innovation and Investment in the Wireless Communications Market; A National Broadband Plan for Our Future, Notice of Inquiry, 24 FCC Rcd 11322, 11331 n.27 (rel. Aug. 27, 2009); see also Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, 19 FCC Rcd 17503, 17505 ¶ 1 (rel. Sept. 2, 2004).

⁵⁰ *National Broadband Plan* at 83.

broadband necessitate the need for a second look" at new incentives for secondary markets.⁵¹ In this case, the Commission's existing secondary markets policy and procedures for approving spectrum-only transactions will put this AWS spectrum in the hands of a licensee that will put it to use to meet the needs of consumers.

Secondary market transactions such as this are especially important because the Government has not made additional spectrum blocks available for mobile wireless services through spectrum auctions since the 700 MHz auction – which was held nearly four years ago. Although the Government has recognized that demand for wireless networks has been rapidly growing, it has not brought any "new" spectrum to market. Moreover, there is no imminent spectrum auction that Verizon Wireless can look to as an alternative path to meet its growing spectrum needs. Even were additional suitable spectrum allocated for mobile use in 2012, several years (based on past history) may be needed to bring it to auction. With many potential blocks of such spectrum, significant issues would need to be resolved to clear incumbent users.⁵² In short, the growing demands of Verizon Wireless customers necessitate that Verizon Wireless acquire additional spectrum resources through the secondary market – action that Commission policies fully support.

* * *

In sum, Verizon Wireless' acquisition of Cox Wireless' AWS licenses will advance the public interest by supplementing the spectrum on which Verizon Wireless currently relies in offering services to its subscribers. Commission approval of the license assignments will benefit consumers by enabling the company to expand the capacity of its network to address increasing

⁵¹ *Id.*

⁵² See Stone Declaration at \P 15.

consumer demand and deliver high quality, high-speed, state-of-the-art services. Approval of the application will thus enable Verizon Wireless to continue fulfilling the Commission's and the Administration's goals of mobile broadband innovation, deployment, and adoption.

V. THE TRANSACTION WILL NOT HARM COMPETITION.

This transaction will not diminish competition or consumer choice in any of the 29 markets where Cox Wireless is assigning the AWS spectrum to Verizon Wireless, for the reasons explained below.

A. Because Verizon Wireless Is Acquiring Only Spectrum, There Is No Market Consolidation and No Reduction in Competition or Consumer Choice.

This is a spectrum-only transaction. Verizon Wireless is acquiring only AWS licenses that are not currently being used to serve consumers. The company is not acquiring an operating business or any customers, or any assets other than the AWS licenses. The Commission thus does not face any issues in this application relating to the competitive impacts of a consolidation of two operating entities or their customers, as it does in mergers or other combinations of carriers that both provide service. Rather, because only spectrum is involved, and because Cox Wireless is not currently using the AWS spectrum to serve customers, the transaction does not reduce the number of local or national competitors.

As explained in the accompanying declaration of Suzanne Fenwick,⁵³ since its successful acquisition of these licenses, Cox has taken a number of steps to develop its AWS spectrum. For example, Cox has entered into equipment contracts with various vendors, initiated an actual build of wireless infrastructure, and conducted limited network trials in several areas, although it

⁵³ Declaration of Suzanne Fenwick, Executive Director for Corporate Development for Cox Communications, Inc. ("Fenwick Declaration"), attached as *Exhibit 4*.

never launched commercial facilities-based service.⁵⁴ In total, Cox has made substantial investments in spectrum, network equipment, device purchases, negotiating roaming arrangements, and developing mobility offerings for its customers.⁵⁵

In order to speed market entry while building out its network, Cox Wireless launched its 3G wireless offering as an MVNO using Sprint's CDMA network and focused its efforts on promoting its Cox Wireless branded services. Cox Wireless launched MVNO services in eight markets and initially had planned to cover more than half of Cox's cable footprint by the end of 2011.⁵⁶

By May of 2011, Cox Wireless had concluded that it was uneconomic to provide 3G mobile wireless services over its own network infrastructure and announced that it would begin decommissioning the facilities it had constructed, a process that remains ongoing. Instead of providing 3G facilities-based service, Cox Wireless stated that it would focus on its 3G MVNO services using the Sprint network.⁵⁷ On November 15, 2011, however, Cox Wireless announced that it would transition its as announced that it would transition its existing customers to other providers by March 30, 2012.⁵⁸ Cox Wireless has not added new MVNO customers since the November announcement.⁵⁹

Cox has a strong commitment to the wireless marketplace and has expended significant resources to provide facilities-based services. It became increasingly clear, though, that Cox

- ⁵⁵ *Id.* at \P 7.
- ⁵⁶ *Id.* at \P 4.
- ⁵⁷ *Id.* at ¶ 5.
- ⁵⁸ *Id.* at \P 6.
- ⁵⁹ *Id.*

⁵⁴ *Id.* at ¶¶ 3-5.

Wireless would not be able to deploy a 3G service without sustaining unacceptably large losses.⁶⁰ Among the challenges confronting Cox Wireless were the roll-out of 4G services by other providers in its markets, while its MVNO services were limited to 3G products, and the cost and complexities associated with obtaining access to the wireless devices most attractive to consumers.⁶¹

Under its new strategy, Cox has decided to pursue other, separate business arrangements with Verizon Wireless that will enable the company to offer wireless services to its customers. These arrangements are not contingent in any way on this AWS spectrum assignment. Specifically, Cox has entered into independent separate commercial agreements with Verizon Wireless, which are not subject to Commission review, that include agency agreements under which Cox and Verizon Wireless will sell each other's services on a market-standard commission basis, with the new subscribers becoming customers of the other service provider (*i.e.*, wireless customers signed up by Cox would become customers of Verizon Wireless, and cable customers signed up by Verizon Wireless would become customers of Cox). The agreements also provide Cox with the future option of transitioning to resale of Verizon Wireless services, offering unique, branded wireless services.⁶²

⁶⁰ *Id.* at \P 7.

⁶¹ Id.

⁶² In addition, Cox expects to enter into arrangements with the innovation technology joint venture formed by Verizon Wireless, Comcast, Time Warner Cable and Bright House to better integrate wireline and wireless products and services. The joint venture will work to create a seamless environment in which consumers can enjoy multiple services across multiple communications platforms.

B. Verizon Wireless Will Not Exceed the Spectrum Screen in Any Affected Market, Eliminating the Need for Further Commission Review.

An analysis using the screens that the Commission typically applies confirms that this transaction is consistent with the public interest. As an initial matter, because the transaction would effect no change in customer market share, two of the three screens the Commission uses to identify markets where there may be potential competitive harm – which both pertain to changes to the post-transaction Herfindahl-Herschman Index ("HHI") – simply do not apply. The only other screen the Commission uses to determine whether to conduct a competitive analysis, the "spectrum screen," is not triggered in any market included in this transaction.⁶³ The screen is 145 MHz in nearly all markets nationally,⁶⁴ and Verizon Wireless would remain below this level in all markets covered by the Cox licenses. In fact, Verizon Wireless would hold 132 MHz or less post-transaction in all Cox markets. Where the spectrum screen is not exceeded (and where the HHI screen is also not triggered), the Commission has held that no further

⁶³ Consistent with informal guidance from Commission staff in other recent transactions, attached as *Exhibit 5* is a chart depicting Verizon Wireless' CMRS spectrum holdings in each of the subject markets both before and subsequent to consummation of the license assignments. *Exhibit 5* assumes the consummation of other pending transactions involving Verizon Wireless, and thus the columns listing current spectrum holdings incorporate those transactions. Also attached as *Exhibit 6* is a chart depicting the identity of the various terrestrial-based wireless licensees holding spectrum in each market.

⁶⁴ Verizon Wireless-ALLTEL Order, 23 FCC Rcd at 17473 ¶ 53 (noting that the screen includes those spectrum bands designed for cellular, PCS, SMR and 700 MHz services, as well as AWS and BRS spectrum). For markets in which AWS and BRS spectrum is available, the screen is 145 MHz; for markets in which AWS is available but BRS is not available, the screen is 125 MHz; for markets in which BRS available but AWS is not available, the screen is 115 MHz; and for markets in which neither BRS nor AWS is available, the screen is 95 MHz. *Id.* at 17477-78 ¶ 64. As *Exhibit 5* depicts, while there are a small number of markets where the screen is 115 MHz, Verizon Wireless would still remain below this lower screen.

competitive inquiry is conducted because there is "clearly no competitive harm."⁶⁵ Thus, no further review is appropriate under Commission precedent for the licenses being assigned here.

VI. CONCLUSION

For the foregoing reasons, grant of this application is consistent with the Act and the Commission's rules, the Commission's actions in prior license assignments, and the public interest. Accordingly, the Applicants respectfully request that the Commission expeditiously approve the application.

⁶⁵ See, e.g., Sprint Nextel Corp. and Clearwire Corp., Applications for Consent to Transfer Control of Licenses, Leases, and Authorizations, Memorandum Opinion and Order, 23 FCC Rcd 17570, 17601 ¶ 76 (rel. Nov. 7, 2008) ("[T]he purpose of this initial screen is to eliminate from further review those markets in which there is clearly no competitive harm relative to today's generally competitive marketplace."); Applications of AT&T Inc. and Dobson Communications Corp. for Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, 22 FCC Rcd 20295, 20317 ¶ 39 (rel. Nov. 19, 2007); Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, 19 FCC Rcd 21522, 21568-69 ¶¶ 106-109 (rel. Oct. 26, 2004).