Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)
Notification of Triangle Communication System, Inc. and Cellco Partnership d/b/a Verizon Wireless	WT Docket No. 15-210
For a Long-Term Spectrum Manager Leasing Agreement))

MEMORANDUM OPINION AND ORDER

Adopted: January 22, 2016 Released: January 22, 2016

By the Chief, Wireless Telecommunications Bureau:

I. INTRODUCTION

In this Memorandum Opinion and Order, we consider the notification of Triangle and Verizon Wireless regarding a long-term spectrum manager leasing arrangement. Triangle is leasing from Verizon Wireless spectrum under one partitioned Upper 700 MHz C Block license covering five counties in parts of two very rural local markets in Montana. The Commission determined in the *Mobile Spectrum* Holdings Report and Order that increased aggregation of below-1-GHz spectrum would be treated as an "enhanced factor" under its case-by-case review of license transfers if post-transaction the acquiring entity would hold approximately one-third or more of the suitable and available spectrum below 1 GHz.¹ The Mobile Spectrum Holdings Report and Order also requires that, where the entity acquiring below-1-GHz spectrum already holds approximately one-third or more of the below-1-GHz spectrum in a particular market, the demonstration of the public interest benefits of the proposed transaction would need to clearly outweigh the potential public interest harms, irrespective of other factors.² As a result of this spectrum manager leasing arrangement, Triangle is increasing its attributable low-band spectrum holdings in certain counties in these two local market areas.³ After carefully evaluating the likely competitive effects of the leasing arrangement, we find that the likelihood of competitive harm is low. Further, we find that some public interest benefits are likely to be realized, such as the expansion of broadband services, increased network quality, and a better consumer experience for consumers living in these very rural areas. Based on the record before us and our competitive review, we find that the long-term spectrum manager leasing arrangement would serve the public interest, convenience, and necessity, and therefore we accept the notification.

¹ See Policies Regarding Mobile Spectrum Holdings; Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, WT Docket No. 12-269, GN Docket No. 12-268, Report and Order, 29 FCC Rcd 6133, 6238-40 ¶¶ 282-88 (2014) ("Mobile Spectrum Holdings Report and Order"), recon. denied, Order on Reconsideration, 30 FCC Rcd 8635 (2015).

² See Mobile Spectrum Holdings Report and Order, 29 FCC at 6240 ¶ 287.

³ The *Mobile Spectrum Holdings Report and Order* states that the Commission attributes long-term spectrum leasing arrangements to both the lessor and the lessee for purposes of our competitive review. *See Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6245 ¶¶ 301-2.

II. BACKGROUND AND PUBLIC INTEREST FRAMEWORK

- 2. Description of the Leasing Participants. Triangle Communication System, Inc. ("Triangle") provides telecommunications services including broadband internet, local, long distance and mobile telephone service to its approximately 17,000 subscribers in Central Montana. Cellco Partnership d/b/a Verizon Wireless ("Verizon Wireless," and together with Triangle, the "Leasing Participants") provides wireless communication services across one of the most extensive wireless networks in the U.S., including its 4G LTE network.
- 3. Description of the Leasing Arrangement. On June 2, 2015, Triangle and Verizon Wireless filed a notification pursuant to section 310(d) of the Communications Act of 1934, as amended (the "Act"),⁶ seeking Commission acceptance of a long-term spectrum manager leasing arrangement involving spectrum under one partitioned Upper 700 MHz C Block license.⁷ In the instant arrangement, Triangle is leasing 22 megahertz of low-band spectrum from Verizon Wireless in parts of two Cellular Market Areas ("CMAs") in Montana,⁸ as part of Verizon Wireless's "LTE in Rural America" program.⁹ After implementation of this leasing arrangement, Triangle is attributed with 76 megahertz to 101 megahertz of spectrum in total, including 46 megahertz to 71 megahertz of below-1-GHz spectrum in four counties in CMA 524 (Montana 2 Toole) and one county in CMA 525 (Montana 3 Phillips).¹⁰
- 4. Standard of Review. Pursuant to section 310(d) of the Act,¹¹ we here consider whether the Leasing Participants have demonstrated that the spectrum leasing arrangement would serve the public interest, convenience, and necessity.¹² In making this determination, we first assess whether the spectrum

As set out in the docket, the Bureau accepted the Notification for filing and established a pleading cycle, released a public notice announcing that Numbering Resource Utilization and Forecast ("NRUF") reports and local number portability ("LNP") data would be placed into the record and adopted the associated protective order, adopted a protective order covering the submission of confidential and highly confidential information, and sent Triangle an information request seeking further specific information relating to the proposed transaction.

⁴ See Triangle Communication System, Inc., "About Us," available at http://www.itstriangle.com/about-us.

⁵ See Verizon Communications Inc., SEC Form 10-K, at 3 (filed Feb. 20, 2015), available athttp://www.sec.gov/Archives/edgar/data/732712/000119312515057710/d820819d10k.htm.

⁶ 47 U.S.C. § 310(d).

⁷ See generally Notification of Triangle Communication System, Inc. and Cellco Partnership d/b/a Verizon Wireless for a Long-Term Spectrum Manager Leasing Arrangement, ULS File No. 0006824167, Ex. 1 – Summary and Public Interest Statement (filed June 2, 2015; amended June 23, 2015) ("Public Interest Statement").

⁸ See Triangle Communication System, Inc. and Cellco Partnership d/b/a Verizon Wireless Have Filed a Long-Term Spectrum Manager Leasing Notification Involving an Upper 700 MHz C Block License in Montana, WT Docket No. 15-210, *Public Notice*, 30 FCC Rcd 10711, 10711-12 (WTB 2015) ("Accepted for Filing Public Notice"). See also Application, Exhibit 2 – Spectrum Aggregation.

⁹ See Public Interest Statement at 1.

¹⁰ In particular, in two counties (Chouteau County in Montana 2 – Toole and Phillips County in Montana 3 – Phillips), Triangle is attributed with, as a result of this leasing arrangement, more than one-third of the low-band spectrum (46 megahertz and 59 megahertz, respectively). In Blaine, Hill, and Liberty counties in Montana 2 – Toole, Triangle was attributed, before this leasing arrangement, with 49 megahertz of below-1-GHz spectrum, which is more than one-third of the currently suitable and available below-1-GHz spectrum. With this leasing arrangement, Triangle is attributed with 71 megahertz of low-band spectrum. *See Accepted for Filing Public Notice*, 30 FCC Rcd at 10711-12. *See also* Application, Exhibit 2 – Spectrum Aggregation.

¹¹ 47 U.S.C. § 310(d).

¹² In adopting rules and policies authorizing spectrum manager leasing arrangements, the Commission stated that it would apply its general competition policies to spectrum manager leasing arrangements, explaining that "assessment of potential competitive effects of transaction, whether they be transfers of control, license assignments, or spectrum leasing arrangements, remains an important element of our policies to promote facilities-based competition and

leasing arrangement complies with the specific provisions of the Act, other applicable statutes, and the Commission's rules. ¹³ If the spectrum leasing arrangement does not violate a statute or rule, we next consider whether the arrangement could result in public interest harms by substantially frustrating or impairing the objectives or implementation of the Act or related statutes. ¹⁴ We then employ a balancing test weighing any potential public interest harms of the spectrum leasing arrangement against any potential public interest benefits. ¹⁵ The Leasing Participants bear the burden of proving, by a preponderance of the evidence, that the spectrum leasing arrangement, on balance, serves the public interest. The *Mobile Spectrum Holdings Report and Order* also made clear that spectrum manager leases will be considered as part of the Commission's mobile spectrum policy competitive review. ¹⁶ Accordingly, although the subject spectrum manager leasing arrangement has gone into effect under the applicable rules, ¹⁷ it is entirely appropriate for us to undertake the competitive review set forth in this order.

5. Our competitive analysis, which forms an important part of the public interest evaluation, is informed by, but not limited to, traditional antitrust principles. ¹⁸ The Commission and the Department of Justice ("DOJ") each have independent authority to examine the competitive impacts of proposed mergers and transactions involving transfers of Commission licenses and spectrum leases thereunder, but the Commission's competitive analysis under the public interest standard is somewhat broader. ¹⁹ The Commission's public interest authority enables us, where appropriate, to impose and enforce narrowly tailored, transaction-specific conditions that ensure that the public interest is served by the transaction. ²⁰ If we are unable to find that the spectrum leasing arrangement serves the public interest for any reason or

¹³ See, e.g., AT&T-Consolidated Order, 30 FCC Rcd at 9799-9800 ¶ 6; Applications of AT&T Inc., E.N.M.R Telephone Cooperative, Plateau Telecommunications, Inc., New Mexico RSA 4 East Limited Partnership, and Texas RSA 3 Limited Partnership for Consent To Assign Licenses and Authorizations, WT Docket No. 14-144, Memorandum Opinion and Order, 30 FCC Rcd 5107, 5111 ¶ 8 (2015) ("AT&T-Plateau Wireless Order"); Applications of AT&T Inc., Leap Wireless International, Inc., Cricket License Co., LLC and Leap Licenseco, Inc. for Consent To Transfer Control and Assign Licenses and Authorizations, WT Docket No. 13-193, Memorandum Opinion and Order, 29 FCC Rcd 2735, 2741-42 ¶ 13 (WTB, IB 2014) ("AT&T-Leap Order").

¹⁴ See id.

¹⁵ See id.

 $^{^{16}}$ See 47 C.F.R. § 20.22; see also Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6245 $\P\P$ 301-02.

¹⁷ See 47 C.F.R. § 1.9020(f).

¹⁸ See, e.g., AT&T-Consolidated Order, 30 FCC Rcd at 9800 \P 7; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5111-12 \P 9; AT&T-Leap Order, 29 FCC Rcd at 2742-43 \P 15.

¹⁹ See id.

²⁰ See, e.g., AT&T-Consolidated Order, 30 FCC Rcd at 9800 ¶ 7; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5111-12 ¶ 9; AT&T-Leap Order, 29 FCC Rcd at 2743-44 ¶ 16.

if the record presents a substantial and material question of fact, we must designate the application(s) for hearing.²¹

6. Qualifications of the Leasing Participants. As a threshold matter, the Commission must determine whether the parties to the spectrum leasing arrangement meet the requisite qualifications requirements to hold and transfer licenses and lease spectrum under section 310(d) and the Commission's rules.²² We note that no issues were raised with respect to the basic qualifications of Triangle or Verizon Wireless. In addition, Triangle has been found qualified to hold Commission licenses.²³ We therefore find there is no reason to reevaluate the requisite citizenship, character, financial, technical, or other basic qualifications under the Act and our rules, regulations, and policies, of Triangle or Verizon Wireless.²⁴

III. POTENTIAL PUBLIC INTEREST HARMS

- 7. Competitive Overview. In its examination of a spectrum leasing arrangement, the Commission evaluates the potential public interest harms and undertakes a case-by-case review of the competitive effects of any increase in market concentration or in spectrum holdings in the relevant markets.²⁵ In the past, the Commission has used a two-part screen to help identify those markets that provide particular reason for further competitive analysis, but has not limited its consideration of potential competitive harms solely to markets identified by its screen if it encounters other factors that may bear on the public interest inquiry.²⁶ In the *Mobile Spectrum Holdings Report and Order*, the Commission found that it is in the public interest to continue to use its spectrum screen and case-by-case review,²⁷ and, in addition, to require that any increase in spectrum holdings of below 1 GHz be treated as an "enhanced factor" in its review if post-transaction the acquiring entity would hold approximately one-third or more of such spectrum.²⁸
- 8. The Commission stated that it anticipated "that any entity that would end up with more than one third of below-1-GHz spectrum as a result of a proposed transaction would facilitate our case-by-case review with a detailed demonstration regarding why the public interest benefits outweigh harms." The Commission further stated, however, that when the other factors ordinarily considered indicate a low potential for competitive or other public interest harm, the acquisition of below-1-GHz

²¹ 47 U.S.C. § 309(e); see also AT&T-Consolidated Order, 30 FCC Rcd at 9800 ¶ 7; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5111-12 ¶ 9; AT&T-Leap Order, 29 FCC Rcd at 2743 ¶ 15; Application of EchoStar Communications Corp., General Motors Corp. and Hughes Electronics Corp., and EchoStar Communications Corp., CS Docket No. 01-348, Hearing Designation Order, 17 FCC Rcd 20559, 20574 ¶ 25 (2002).

²² See 47 U.S.C. § 310(d); 47 C.F.R. § 1.948; see also, e.g., Application of Hardy Cellular Telephone Company and McBride Spectrum Partners, LLC for Consent To Assign License, WT Docket No. 14-240, Memorandum Opinion and Order, 30 FCC Rcd 9899, 9902 ¶ 8 (WTB 2015) ("USCC-McBride Order"); AT&T-Plateau Wireless Order, 30 FCC Rcd at 5112 ¶ 10; AT&T-Leap Order, 29 FCC Rcd at 2744 ¶ 17.

²³ See, e.g., Wireless Telecommunications Bureau Grants 700 MHz Licenses, Auction Event No. 73, *Public Notice*, DA 09-8, Att. A at 6-7 (WTB rel. Jan. 6, 2009).

²⁴ See 47 U.S.C. § 310(d); 47 C.F.R. § 1.948.

²⁵ See, e.g., AT&T-Plateau Wireless Order, 30 FCC Rcd at 5113 ¶ 12. See also USCC-McBride Order, 30 FCC Rcd 9902-3 ¶ 9; AT&T-Consolidated Order, 30 FCC Rcd at 9800-1 ¶ 9; AT&T-Leap Order, 29 FCC Rcd at 2745 ¶ 20.

²⁶ See, e.g., AT&T-Plateau Wireless Order, 30 FCC Rcd at 5113 ¶ 12. See also USCC-McBride Order, 30 FCC Rcd 9902-3 ¶ 9; AT&T-Consolidated Order, 30 FCC Rcd at 9800-1 ¶ 9; AT&T-Leap Order, 29 FCC Rcd at 2752 ¶ 39, 2753 ¶ 41, 2755-56 ¶ 47.

²⁷ See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6223-24 ¶ 231.

²⁸ See id., 29 FCC Rcd at 6240 ¶¶ 286-88. See also, e.g., USCC-McBride Order, 30 FCC Rcd 9902-3 ¶ 9; AT&T-Consolidated Order, 30 FCC Rcd at 9800-1 ¶ 9; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5108 ¶ 2.

²⁹ *Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6240 ¶ 286.

spectrum resulting in holdings of approximately one-third or more would not preclude a conclusion that a proposed transaction, on balance, furthers the public interest.³⁰ The Commission also set out a heightened standard of review for cases in which the proposed transaction would result in an entity that already holds approximately one-third or more of below-1-GHz spectrum in a market acquiring additional below-1-GHz spectrum in that market, especially with regard to paired low-band spectrum. In these cases, the Commission stated that the required demonstration of the potential public interest benefits of the proposed transaction would need to clearly outweigh the potential public interest harms associated with such additional concentration of below-1-GHz spectrum, irrespective of other factors.³¹

9. The Commission stated in the *Mobile Spectrum Holdings Report and Order* that lowband spectrum is less costly to deploy and provides higher quality coverage than higher-band spectrum,³² and the leading nationwide service providers hold most of the low-band spectrum available today.³³ The Commission found that if they were to acquire all, or substantially all, of the remaining low-band spectrum, they would benefit, independently of any deployment, to the extent that rival service providers are denied its use.³⁴ As the Commission found, without access to this low-band spectrum, rival service providers that may lack a mix of low-band and higher-band spectrum would be less able to provide a robust competitive alternative, and may not be able to quickly expand coverage or provide new services.³⁵ We consider below whether there would be an increased likelihood as a result of the spectrum leasing arrangement that rival service providers or potential entrants would be foreclosed from expanding capacity, deploying mobile broadband technologies, or entering the market, and whether rivals' costs would be increased to the extent that they would be less likely to be able to compete robustly.³⁶

A. Market Definitions

- 10. We begin our competitive analysis by determining the appropriate market definitions in our review of this spectrum leasing arrangement,³⁷ including a determination of the product market, the geographic market, the input market for spectrum suitable and available for the provision of mobile wireless services, and the market participants.
- 11. Product and Geographic Markets. Consistent with recent transaction orders, we find that the relevant product market is a combined "mobile telephony/broadband services" product market that comprises mobile voice and data services, including mobile voice and data services provided over advanced broadband wireless networks (mobile broadband services).³⁸ In addition, we find that the

³⁰ See id., 29 FCC Rcd at 6240 ¶ 286.

 $^{^{31}}$ See id., 29 FCC Rcd at 6240 ¶ 287. See also, e.g., Application of AT&T Mobility Spectrum LLC and Club 42CM Limited Partnership for Consent To Assign Licenses, WT Docket No. 14-145, Memorandum Opinion and Order, 30 FCC Rcd 13055, 13057-58 ¶ 7, 13062 ¶ 15, 13072-73 ¶ 37, 13077-78 ¶ 48, 13078-79 ¶ 51 (2015) ("AT&T-Club 42 Order"); USCC-McBride Order, 30 FCC Rcd at 9903 n.31; AT&T-Consolidated Order, 30 FCC Rcd at 9801 n.34; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5111 ¶ 8 n.31, 5113 ¶ 13, 5114 ¶ 15, 5123 ¶ 36 n.114, 5130 ¶ 56.

³² See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6164 ¶ 60.

³³ See id., 29 FCC Rcd at 6156-57 ¶ 46, 6164 ¶ 60.

³⁴ See id., 29 FCC Rcd at 6164 ¶ 60.

³⁵ See id., 29 FCC Rcd at 6164-65 $\P\P$ 60-61; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5113-14 \P 14. See also USCC-McBride Order, 30 FCC Rcd at 9903 \P 10; AT&T-Consolidated Order, 30 FCC Rcd at 9801-2 \P 10.

³⁶ See, e.g., USCC-McBride Order, 30 FCC Rcd at 9903 ¶ 10; AT&T-Consolidated Order, 30 FCC Rcd at 9801-2 ¶ 10; Applications of AT&T Mobility Spectrum LLC and KanOkla Telephone Association, WT Docket No. 14-199, Memorandum Opinion and Order, 30 FCC Rcd 8555, 8559-60 ¶ 10 (WTB 2015) ("AT&T-KanOkla Order").

³⁷ See, e.g., USCC-McBride Order, 30 FCC Rcd at 9904 ¶ 11; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5114-15 ¶ 16; AT&T-Leap Order, 29 FCC Rcd at 2746 ¶ 22.

 $^{^{38}}$ See, e.g., USCC-McBride Order, 30 FCC Rcd at 9904 \P 12; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5115-16 \P 18; AT&T-Leap Order, 29 FCC Rcd at 2746 \P 23.

relevant geographic market is local:³⁹ Triangle and Verizon Wireless are seeking Commission acceptance of a notification of the leasing of 22 megahertz of spectrum that covers five counties in parts of two local markets that account for well under one half of one percent of the population of the United States.

12. *Input Market for Spectrum and Market Participants*. For our analysis, we include the spectrum bands, or portions thereof, found in recent Commission orders as the input market.⁴⁰ Similarly, we apply recent Commission precedent and consider facilities-based entities providing mobile telephony/broadband services using cellular, PCS, SMR, 700 MHz, AWS-1, BRS, WCS, AWS-4, H Block, EBS, and AWS-3 and 600 MHz spectrum (as both the latter become available) to be market participants.⁴¹

B. Competitive Effects of the Spectrum Leasing Arrangement

13. *Initial Review.* As discussed above, to help identify those local markets in which competitive concerns are more likely, initially, we apply a two-part screen, and if the acquiring entity would increase its below-1-GHz spectrum holdings to hold approximately one-third or more of such spectrum post-transaction, we apply enhanced factor review. The first part of the screen is based on the size of the post-transaction Herfindahl-Hirschman Index ("HHI") and the change in the HHI. The second part of the screen, which is applied on a county-by-county basis, identifies local markets where an entity would hold approximately one-third or more of the total spectrum suitable and available for the provision of mobile telephony/broadband services, post-transaction. In instances where an applicant is gaining spectrum below 1 GHz, we also carefully examine the possible competitive effects resulting

³⁹ The Commission has found that the relevant geographic markets for certain wireless transactions generally are local, but has held that a transaction's competitive effects should also be evaluated at the national level where a transaction exhibits certain national characteristics that provide cause for concern. *See*, *e.g.*, *AT&T-Plateau Wireless Order*, 30 FCC Rcd at 5116 ¶ 19. *See also USCC-McBride Order*, 30 FCC Rcd at 9904 n.40; *AT&T-Consolidated Order*, 30 FCC Rcd at 9801-2 n.43; *AT&T-Leap Order*, 29 FCC Rcd at 2748 ¶ 27.

⁴⁰ See, e.g., AT&T-Plateau Wireless, 30 FCC Rcd at 5117 ¶ 22; Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6169-70 ¶¶ 70, 72. See also USCC-McBride Order, 30 FCC Rcd at 9904 ¶ 13; AT&T-Consolidated Order, 30 FCC Rcd at 9801-2 ¶ 13; AT&T-Leap Order, 29 FCC Rcd at 2749-50 ¶ 32.

 $^{^{41}}$ See, e.g., USCC-McBride Order, 30 FCC Rcd at 9904 \P 13; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5117 \P 23; AT&T-Leap Order, 29 FCC Rcd at 2751 \P 35.

⁴² See, e.g., AT&T-Club 42 Order, 30 FCC Rcd at 13065-66 ¶ 23; USCC-McBride Order, 30 FCC Rcd at 9904-5 ¶ 15; AT&T-KanOkla Order, 30 FCC Rcd at 8561 ¶ 15; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5118 ¶ 24; Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6240 ¶ 286. The current total amount of below-1-GHz spectrum that is suitable and available is 134 megahertz, approximately one-third of which is 45 megahertz. See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6156-57, 6240 ¶ 46, ¶¶ 286-88. As with our application of the initial total spectrum screen, we evaluate increases in below-1-GHz spectrum concentration on a county-by-county basis. See, e.g., USCC-McBride Order, 30 FCC Rcd at 9904-5 n.45; AT&T-KanOkla Order, 30 FCC Rcd at 8561 n.48; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5121, 5123 ¶¶ 31, 35.

 $^{^{43}}$ See, e.g., USCC-McBride Order, 30 FCC Rcd at 9904-5 \P 15; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5118 \P 24; AT&T-Leap Order, 29 FCC Rcd at 2753 \P 41 n.140.

⁴⁴ See, e.g., AT&T-Club 42 Order, 30 FCC Rcd at 13065-66 ¶ 23; USCC-McBride Order, 30 FCC Rcd at 9904-5 ¶ 15; AT&T-Consolidated Order, 30 FCC Rcd at 9803 ¶ 15; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5118 ¶ 24

⁴⁵ Here, the increase in low-band spectrum holdings post-transaction is being attributed to both the lessee and the lessor, as described above. *See* n.3 *supra*.

from an increase in below-1-GHz spectrum holdings that would be above the threshold identified in the *Mobile Spectrum Holdings Report and Order*.⁴⁶

- 14. As the spectrum leasing arrangement does not result in the acquisition of wireless business units and customers, we do not apply the initial HHI screen. Neither market triggers the total spectrum screen but in our review of the attributable below-1-GHz spectrum holdings on a county-by-county basis, we find that, with the implementation of the spectrum leasing arrangement, Triangle is attributed with more than one-third, or more than 45 megahertz, of the currently suitable and available below-1-GHz spectrum in all five counties that are the subject of the spectrum manager leasing arrangement. We note that in Blaine, Hill, and Liberty counties in Montana 2 Toole, Triangle is already attributed with 49 megahertz of low-band spectrum, or more than one-third of the below-1-GHz spectrum, and has increased its attributable low-band spectrum holdings to 71 megahertz of such spectrum with the subject spectrum leasing arrangement. We further note that Montana 3 Phillips is subject to enhanced factor review as set forth in paragraph 286 of the *Mobile Spectrum Holdings Report and Order*, and Montana 2 Toole is subject to enhanced factor review as set forth in paragraph 287 of the *Mobile Spectrum Holdings Report and Order*.
- 15. Record. The Leasing Participants assert that the spectrum leasing arrangement would not raise any competitive concerns, and that as a result of this lease agreement, Triangle would be able to expedite the availability of broadband service in a large portion of Triangle's current wireless service area. The Leasing Participants maintain that these new wireless broadband services would be for customers of both Triangle and Verizon Wireless in the rural areas served by Triangle. No petitions to deny or comments were received.
- 16. *Market-Specific Review*. Generally, in undertaking our analysis, we consider various competitive variables that help to predict the likelihood of competitive harm. These competitive variables include, but are not limited to: the total number of rival service providers; the number of rival firms that can offer competitive service plans; the coverage by technology of the firms' respective networks; the rival firms' market shares; the combined entity's post-transaction market share and how that share changes as a result of the transaction; the amount of spectrum suitable for the provision of mobile telephony/broadband services controlled by the combined entity; and the spectrum holdings of each of the rival service providers. In Montana 2 Toole, where Triangle was already attributed with more than one-third, or more than 45 megahertz, of the currently suitable and available below-1-GHz spectrum prior to the implementation of the spectrum leasing arrangement, we evaluate the likely competitive effects of its increased aggregation of spectrum below 1 GHz, irrespective of other factors. In the consideration of the spectrum below 1 GHz, irrespective of other factors.

⁴⁶ See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6233 \P 267, 6240 $\P\P$ 286-88. See also, e.g., AT&T-Club 42 Order, 30 FCC Rcd at 13065-66 \P 23; USCC-McBride Order, 30 FCC Rcd at 9904-5 \P 15; AT&T-KanOkla Order, 30 FCC Rcd at 8561 \P 15; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5118 \P 24.

⁴⁷ See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6240 ¶¶ 286-87. See also AT&T-Club 42 Order, 30 FCC Rcd at 13066 ¶ 24.

⁴⁸ See Public Interest Statement at 1-2.

⁴⁹ See Public Interest Statement at 1.

⁵⁰ We derive market shares and HHIs from our analysis of data compiled in our June 2015 NRUF and LNP database, network coverage from July 2015 Mosaik data and 2010 U.S. Census data, and spectrum holdings from our licensing databases and the Application. We also utilized and analyzed additional data as provided by Triangle through our information request. *See*, *e.g.*, *USCC-McBride Order*, 30 FCC Rcd at 9905 n.51; *AT&T-KanOkla Order*, 30 FCC Rcd at 8562 n.54; *AT&T-Plateau Wireless Order*, 30 FCC Rcd at 5120 ¶ 29, n.98.

In Montana 2 – Toole, the HHI is [REDACTED], while in Montana 3 – Phillips, the HHI is [REDACTED].

⁵¹ See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6240 ¶ 287. See also AT&T-Club 42 Order, 30 FCC Rcd at 13071, 13072-73 ¶ 34, ¶¶ 37-38.

In Phillips County in Montana 3 – Phillips, which is a very rural market⁵² with a 17. population of approximately 13,000 people, and a population density of only one person per square mile, Triangle increased its attributable low-band spectrum holdings from 37 megahertz to 59 megahertz. As noted above. Montana 3 – Phillips is subject therefore to enhanced factor review as set forth in paragraph 286 of the *Mobile Spectrum Holdings Report and Order*. ⁵³ Before the implementation of the spectrum leasing arrangement, Triangle was attributed with spectrum in Phillips County only, covering approximately 33 percent of the population of Montana 3 – Phillips. With this arrangement, it is attributed with 89 megahertz of spectrum in total in this county. Multiple other service providers hold spectrum, including low-band spectrum, in this very rural market. In terms of spectrum holdings above 1 GHz, AT&T holds 50 megahertz, Verizon Wireless holds 45 megahertz, Sprint holds 40 megahertz to 108 megahertz, T-Mobile holds 5 megahertz, Mid-Rivers Telephone Cooperative holds 30 megahertz of spectrum in Garfield County, Sagebrush Cellular holds 20 megahertz of spectrum in Phillips County and 30 megahertz of spectrum in Valley County, while DISH holds 50 megahertz of spectrum across the market. Regarding other service providers' low-band spectrum holdings, Verizon Wireless holds 22 megahertz to 47 megahertz, AT&T holds 6 megahertz to 31 megahertz, Sprint holds 14 megahertz, Charter Communications holds 12 megahertz, Mid-Rivers Telephone Cooperative holds 12 megahertz to 71 megahertz (including leased spectrum). Sagebrush Cellular holds 25 megahertz to 71 megahertz (including leased spectrum), and DISH holds 6 megahertz.⁵⁴ In terms of population and land area coverage, we note that no service provider has significant 3G or LTE coverage. 55 In Phillips County in Montana 3 – Phillips, an extremely rural market, we find that the likelihood of competitive harm is low, after evaluating the particular factors ordinarily considered.⁵⁶ Moreover, as the Commission noted in the

⁵² The population density is measured by the number of people per square mile using Census 2010 data. Rural markets are generally characterized by fewer than 100 people per square mile. *See* Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services, WT Docket Nos. 02-381, 01-14, 03-202, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 19078, 19086-88 ¶ 10-12 (2004).

According to Mosaik, Verizon Wireless covers approximately 72% of the population and approximately 21% of the land area, while Sagebrush Cellular covers approximately 84% of the population and approximately 35% of the land area. In addition, according to our analysis of data submitted by Triangle, Triangle covers approximately [REDACTED]% of the population and the land area, respectively, with its 3G network. *See* Response of Triangle Communication System, Inc. to the General Information Request Dated Oct. 1, 2015, WT Docket No. 15-210, Triangle Information Request Response to Request 3 (Oct. 15, 2015) ("Triangle Information Request Response").

In terms of LTE coverage, Verizon Wireless covers approximately 77% of the population, and approximately 26% of the land area, while Triangle covers approximately **[REDACTED]**%, respectively. *See* Triangle Information Request Response to Request 3.

⁵³ See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6240 ¶ 286.

⁵⁴ Mid-Rivers Telephone Cooperative, Inc. and Sagebrush Cellular, Inc. both have long-term spectrum manager lease agreements as part of their participation in Verizon Wireless's "LTE in Rural America" program. *See* Application of Mid-Rivers Telephone Cooperative, Inc. and Verizon Wireless; long-term spectrum manager lease notification, ULS File No. 0006953480 (filed Oct. 21, 2015); Application of Mid-Rivers Telephone Cooperative, Inc. and Verizon Wireless, long-term spectrum manager lease notification, ULS File No. 0005977860 (filed Oct. 22, 2013); Application of Sagebrush Cellular, Inc. and Verizon Wireless; long-term spectrum manager lease notification, ULS File No. 0005563893 (filed Dec. 20, 2013); Application of Sagebrush Cellular, Inc. and Verizon Wireless; long-term spectrum manager lease notification, ULS File No. 0005269023 (filed June 19, 2012).

⁵⁵ It has previously been found that coverage of 70% or more of the population and 50% or more of the land area is presumptively sufficient for a service provider to have a competitive presence in the market. *See*, *e.g.*, *USCC-McBride Order*, 30 FCC Rcd at 9906 n.54; *AT&T-KanOkla Order*, 30 FCC Rcd at 8562 n.59; *AT&T-Plateau Wireless Order*, 30 FCC Rcd at 5121 n.102; *AT&T-Leap Order*, 29 FCC Rcd at 2770 n.279.

⁵⁶ See ¶ 16 supra. See also, e.g., USCC-McBride Order, 30 FCC Rcd at 9906-7 ¶¶ 19, 21; AT&T-KanOkla Order, 30 FCC Rcd at 8563 ¶ 19; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5123 ¶ 36.

Mobile Spectrum Holdings Report and Order, non-nationwide service providers present a significantly lower risk of effectively denying access to low-band spectrum to competitors because of their relative lack of resources.⁵⁷

- 18. We turn next to our analysis of Montana 2 Toole, which is also a very rural market, with a population of approximately 36,000, and a population density of only two people per square mile. As a result of the lease, in Chouteau County, Triangle has increased its attributable low-band spectrum holdings from 24 megahertz to 46 megahertz. In Blaine, Hill, and Liberty counties, Triangle held, before implementation of this arrangement, 49 megahertz of low-band spectrum. Its attributable below-1-GHz spectrum holdings have now increased to 71 megahertz. As noted above, Montana 2 Toole is subject to enhanced factor review as set forth in paragraph 287 of the *Mobile Spectrum Holdings Report and Order*. In these cases, the required demonstration of the public interest benefits of this arrangement needs to clearly outweigh the potential public interest harms associated with such additional concentration of below-1-GHz spectrum, irrespective of other factors. In considering the leasing of this 22 megahertz of Upper 700 MHz C Block spectrum, irrespective of other factors, we find that it is unlikely that this leasing arrangement has increased or will increase rivals' costs to any significant extent, or foreclosed expansion or entry, notwithstanding the fact that Triangle is attributed with a maximum of 71 megahertz of below-1-GHz spectrum.
- 19. Montana 2 – Toole is an extremely rural market. Three of the four nationwide service providers all hold low-band spectrum in this market: Verizon Wireless holds 47 megahertz (25 megahertz of cellular spectrum and continued attribution of the 22 megahertz of Upper 700 MHz C Block spectrum subject to the spectrum leasing arrangement), AT&T holds 31 megahertz to 43 megahertz on a county-by-county basis, and Sprint holds 14 megahertz of SMR spectrum. These three nationwide service providers therefore each have access in this particular market to low-band spectrum that would allow at least a 5×5 megahertz LTE deployment on below-1-GHz spectrum. In addition, these three nationwide service providers also have access to spectrum above 1 GHz to combine with their low-band spectrum holdings for LTE deployment. Further, non-nationwide licensee Charter Communications holds 12 megahertz of low-band spectrum. We find that the spectrum holdings of other service providers in this market would likely allow them to effectively respond to any anticompetitive behavior on the part of Triangle. 61 Moreover, as the Commission noted in the *Mobile Spectrum Holdings Report and Order*, and as discussed above, non-nationwide service providers such as Triangle present a significantly lower risk of effectively denying access to low-band spectrum to competitors because of their relative lack of resources. 62 In considering the lease of this 22 megahertz of low-band spectrum, we find therefore that

⁵⁹ See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6240 ¶ 287. See also AT&T-Club 42 Order, 30 FCC Rcd at 13071, 13072-73 ¶ 34, ¶¶ 37-38.

 $^{^{57}}$ See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6207 \P 180. See also Triangle Information Request Response at 7.

⁵⁸ See id., 29 FCC Rcd at 6240 ¶ 287.

⁶⁰ AT&T and Verizon Wireless each have a significant market share, and cover at least approximately 70% of the population and at least approximately 55% of the land area with their respective 3G networks. Further, AT&T has significant HSPA+ population and land area coverage, while Verizon Wireless has significant LTE population and land area coverage. We note that the *Mobile Spectrum Holdings Report and Order* requires that we analyze the proposed leasing of low-band spectrum irrespective of other factors if, as is the case in this particular market, the entity's current low-band spectrum holdings are already above the current approximate one-third threshold of 45 megahertz. *See Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6240 ¶ 287.

⁶¹ See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6164-65 ¶¶ 60-61. Total spectrum holdings vary by service provider: AT&T holds 86 megahertz to 108 megahertz of spectrum in total, while Sprint holds 44 megahertz to 54 megahertz, and Verizon Wireless holds 87 megahertz to 97 megahertz. In addition, DISH holds 6 megahertz of low-band spectrum, and 50 megahertz of undeployed spectrum above 1 GHz.

⁶² See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6207 ¶ 180.

the potential public interest harm of such additional concentration of this particular spectrum in this particular market is low.

IV. POTENTIAL PUBLIC INTEREST BENEFITS

- 20. We next consider whether the spectrum leasing arrangement is likely to generate verifiable, transaction-specific public interest benefits.⁶³ The Commission applies several criteria in deciding whether a claimed benefit should be considered and weighed against potential harms,⁶⁴ and applies a "sliding scale approach" to evaluating benefit claims.⁶⁵ Under this sliding scale approach, where potential harms appear "both substantial and likely, a demonstration of claimed benefits also must reveal a higher degree of magnitude and likelihood than we would otherwise demand."⁶⁶ Conversely, where potential harms appear less likely and less substantial, as is the case here, we will accept a lesser showing to approve the proposed transaction.⁶⁷
- 21. Potential Benefits. The Leasing Participants assert that this spectrum leasing arrangement allows Triangle to participate in Verizon Wireless's "LTE in Rural America" program, which they argue would expedite the availability of wireless broadband service in a large portion of Triangle's current wireless service area. Triangle and Verizon Wireless contend that these new wireless broadband services would be for customers of both Triangle and Verizon Wireless in these very rural areas served by Triangle. Triangle asserts in its information request response that it is unable to offer nationwide 4G voice/data services over the cellular and 700 MHz spectrum that it already holds. Triangle says that it explored various mechanisms for offering nationwide 4G voice/data services, and determined that it could best provide these advanced services to its customers by entering into a leasing or similar arrangement with a nationwide service provider. Indeed, absent Triangle's leasing of the subject spectrum, it concludes it would not be able to provide advanced technology 4G voice/data services to the sparsely populated rural areas covered by the subject lease. Triangle indicates in its information request

http://www.verizonwireless.com/news/article/2015/05/verizons-lte-in-rural-america-lra-program-celebrates-five-years-of-delivering-advanced-wireless-services-to-rural-customers.html. Under this program, Verizon Wireless "provides technical support and resources to help a rural wireless company build out its own 4G LTE network," with the result that the footprint of 4G LTE coverage for both the rural provider and Verizon Wireless is extended and customers can take advantage of both networks. *Id*.

⁶³ See, e.g., USCC-McBride Order, 30 FCC Rcd at 9907-8 ¶ 22; AT&T-Consolidated Order, 30 FCC Rcd at 9805 ¶ 20; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5126 ¶ 43; AT&T-Leap Order, 29 FCC Rcd at 2792-93 ¶ 130.

⁶⁴ See, e.g., AT&T-Plateau Wireless Order, 30 FCC Rcd at 5126-27 ¶ 44. See also, e.g., USCC-McBride Order, 30 FCC Rcd at 9907-8 ¶ 22; AT&T-Consolidated Order, 30 FCC Rcd at 9805 ¶ 20; AT&T-Leap Order, 29 FCC Rcd at 2793-94 ¶ 132.

⁶⁵ See id

 $^{^{66}}$ See, e.g., USCC-McBride Order, 30 FCC Rcd at 9907-8 \P 22; AT&T-Consolidated Order, 30 FCC Rcd at 9805 \P 20; AT&T-Plateau Wireless Order, 30 FCC Rcd at 5126-27 \P 44.

⁶⁷ See, e.g., USCC-McBride Order, 30 FCC Rcd at 9907-8 \P 22; AT&T-Consolidated Order, 30 FCC Rcd at 9805 \P 20; AT&T-KanOkla Order, 30 FCC Rcd at 8563 \P 20.

⁶⁸ Verizon Wireless's "LTE in Rural America" program involves the lease of spectrum by Verizon Wireless to rural wireless service providers, with the goal of delivering advanced high-speed wireless technology to small towns and rural counties. *See* "Verizon's LTE in Rural America (LRA) Program Celebrates Five Years of Delivering Advanced Wireless Services to Rural Customers," available at

⁶⁹ See Public Interest Statement at 1.

⁷⁰ See Public Interest Statement at 1.

⁷¹ See Triangle Information Request Response at 4.

⁷² See Triangle Information Request Response at 2.

⁷³ See Triangle Information Request Response at 3.

response that it planned to begin activating customers on its nationwide 700 MHz 4G services using the spectrum leased from Verizon Wireless by December of 2015 or earlier, and that it would then begin providing its customers with advanced technology 4G devices. According to Triangle, no service providers are currently offering 4G voice/data services in these very rural markets involved in the proposed lease, and Triangle contends that it would provide the first such high-speed service to the residents of these rural markets.

22. Evaluation. We have reviewed the Leasing Participants' asserted public interest benefits, as well as Triangle's detailed responses to our request for additional information and documents regarding the potential benefits of Triangle leasing, in particular, the below-1-GHz spectrum at issue in Montana 2 – Toole and Montana 3 – Phillips. The record provides general support for the Leasing Participants' contentions that the spectrum leasing arrangement likely results in some public interest benefits in these very rural markets. Moreover, as the Commission noted in the Mobile Spectrum Holdings Report and Order, non-nationwide providers are important sources of competition in rural areas, where multiple nationwide service providers may have less incentive to offer high quality services. The Commission further noted that non-nationwide service providers enhance competitive choices for consumers in the mobile wireless marketplace, and help promote deployment in rural areas. Specifically, we anticipate that through the leasing of this Upper 700 MHz spectrum from Verizon Wireless, Triangle will be able to expedite the availability of wireless broadband service to the benefit of consumers in a large portion of its current wireless service area. Further, we find that its consumers are likely to benefit from an improved consumer experience as a result of the deployment of LTE in these extremely rural markets.

V. BALANCING THE POTENTIAL BENEFITS AND THE POTENTIAL HARMS

23. In our evaluation of this spectrum leasing arrangement, we have carefully applied enhanced factor review, consistent with what was set out by the Commission in the Mobile Spectrum Holdings Report and Order. ⁷⁹ After carefully assessing the potential competitive effects of Triangle's increased aggregation of below-1-GHz spectrum in Montana 3 – Phillips, we find that the likelihood of competitive harm is low when evaluating the particular factors ordinarily considered, notwithstanding the fact that Triangle now is attributed with more than one-third of the below-1-GHz spectrum in Phillips County subsequent to the implementation of the spectrum leasing arrangement. We further find that in Montana 3 – Toole, the market in which Triangle held more than one-third of the below-1-GHz spectrum before the leasing arrangement with Verizon Wireless, this arrangement is unlikely to raise rivals' costs to any significant extent, or foreclose expansion by rival service providers or new entry into the market, irrespective of other factors, notwithstanding the fact that Triangle now is attributed with 71 megahertz of low-band spectrum in Blaine, Hill, and Liberty counties in that market. Moreover, we find that the record provides general support for the Leasing Participants' claims of potential public interest benefits, including expediting the availability of wireless broadband service to consumers living in these extremely rural areas in Montana. Based on the record before us and our competitive review, we find that the likelihood of harm is low in both markets. In addition, in those counties in which Triangle was attributed with more than one-third of the below-1-GHz spectrum prior to implementation of the spectrum leasing arrangement, the potential public interest benefits clearly outweigh any potential public interest harms. As a result, under our sliding scale approach, we find that acceptance of the notification of this long-term

⁷⁴ See Triangle Information Request Response at 1-3. Triangle states on its website that it has an "all-new 4G LTE nationwide network." See Triangle Mobile website, available at http://www.itstrianglemobile.com.

⁷⁵ See Triangle Information Request Response at 1.

⁷⁶ See Triangle Information Request Response at 2-5.

⁷⁷ See Mobile Spectrum Holdings Report and Order, 29 FCC Rcd at 6206 ¶ 179.

⁷⁸ See id., 29 FCC Rcd at 6207 ¶ 180.

⁷⁹ See id., 29 FCC Rcd at 6240 ¶ 286-87.

spectrum manager lease would serve the public interest, convenience, and necessity.

VI. ORDERING CLAUSES

- 24. ACCORDINGLY, having reviewed the Notification and the record in this proceeding, IT IS ORDERED that, pursuant to sections 4(i) and (j), 303(r), 309, and 310(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 303(r), 309, 310(d), the notification of the long-term spectrum manager leasing arrangement filed by Triangle Communication System, Inc. and Verizon Wireless is ACCEPTED.
- 25. IT IS FURTHER ORDERED that this Order SHALL BE EFFECTIVE upon release. Petitions for reconsideration under section 1.106 of the Commission's rules, 47 C.F.R. § 1.106, may be filed within thirty days of the date of release of this Memorandum Opinion and Order.
- 26. This action is taken under delegated authority pursuant to sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Roger C. Sherman Chief Wireless Telecommunications Bureau