

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

In the Matter of)	
)	
Applications of T-Mobile License LLC, Nextel)	ULS File No. 0010168412
West Corp. and LB License Co, LLC for License)	ULS File No. 0010168420
Assignment)	
)	
Application of T-Mobile License LLC, Nextel)	ULS File No. 0010168439
West Corp. and Channel 51 License Company)	
LLC for License Assignment)	

MEMORANDUM OPINION AND ORDER

Adopted: December 29, 2023

Released: December 29, 2023

By the Chiefs, Wireless Telecommunications Bureau and Office of Economics and Analytics

TABLE OF CONTENTS

Heading	Paragraph #
I. INTRODUCTION.....	1
II. BACKGROUND.....	4
A. Description of the Applicants	4
1. T-Mobile.....	4
2. LB License and Channel 51	5
B. Description of the Transaction.....	7
C. Transaction Review Process	9
III. STANDARD OF REVIEW AND PUBLIC INTEREST FRAMEWORK	10
IV. PRELIMINARY ISSUES	13
V. POTENTIAL PUBLIC INTEREST HARMS.....	20
A. Market Definitions and Market Participants.....	32
B. Competitive Analysis.....	36
1. Initial Screen.....	36
2. Market-by-Market Analysis	38
a. Analysis by Geographical Cluster	39
VI. POTENTIAL PUBLIC INTEREST BENEFITS	89
VII.CONCLUSION	95
VIII.ORDERING CLAUSES	98
APPENDIX A: LIST OF CELLULAR MARKET AREAS IN WHICH T-MOBILE IS ABOVE THE SPECTRUM SCREEN TRIGGER	

I. INTRODUCTION

1. In this Memorandum Opinion and Order, we approve the assignment applications filed by Channel 51 License Company LLC (Channel 51),¹ LB License Co, LLC (LB License),² Nextel West Corp. (Nextel West) and T-Mobile License LLC (T-Mobile License and, with Nextel West, T-Mobile) (collectively, the Applicants)³ seeking Commission consent to assign 600 MHz spectrum licenses from Channel 51 and LB License to T-Mobile.⁴

2. After carefully evaluating the potential competitive effects of the proposed assignments, we find that the likelihood of competitive harm is low. As we have stated previously, we emphasize that the Commission's screen is not a hard cap on a company's holdings, but rather a trigger for further competitive analysis regarding the impact of a proposed transaction on the market for wireless services.⁵ T-Mobile has been leasing this spectrum since 2020, and as we explain below, we do not find that competitive conditions in the markets subject to the instant transaction warrant spectrum divestitures or any other remedies. In addition, we find that some public interest benefits are likely to be realized, such as the continued use of this spectrum for 5G services resulting in enhanced network coverage, capacity, and performance to the benefit of American consumers.

¹ Amended Application of T-Mobile License LLC, Nextel West Corp., and Channel 51 License Company LLC for License Assignment, ULS File No. 0010168439 (filed Apr. 3, 2023) (T-Mobile/Channel 51 Amended Application). On September 2, 2022, Channel 51, LB License, and T-Mobile first filed applications requesting approval for the assignment of 10 to 30 megahertz of Channel 51's and LB License's 600 MHz licenses to T-Mobile. These applications were amended on April 3, 2023.

² Amended Applications of T-Mobile License LLC, Nextel West Corp., and LB License Co, LLC for License Assignment, ULS File Nos. 0010168412 and 0010168420 (filed Apr. 3, 2023) (T-Mobile/LB License Amended Applications).

³ On April 3, 2023, three public interest statements were filed by the Applicants. The two public interest statements filed under the ULS File Nos. 0010168412 and 0010168420 regarding the T-Mobile/LB License Amended Applications are nearly identical and are cited to as "T-Mobile/LB License Public Interest Statement." There are only minor differences between the T-Mobile/LB License Public Interest Statement and what is stated in the public interest statement filed under the ULS File No. 0010168439 regarding the T-Mobile/Channel 51 Amended Application (T-Mobile/Channel 51 Public Interest Statement).

⁴ T-Mobile currently leases from Channel 51 and LB License certain spectrum associated with Channel 51's and LB License's 600 MHz licenses. See *Application of T-Mobile License LLC and Channel 51 License Company LLC for Spectrum Manager Lease Arrangement; Application of T-Mobile License LLC and LB License Co, LLC for Spectrum Manager Lease Arrangement*, ULS File Nos. 0009021213, 0009021220, Order on Reconsideration, 35 FCC Rcd 14059 (WTB 2020) (*T-Mobile-Channel 51-LB License Lease Order*).

⁵ See, e.g., *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14059-60, para. 1; *Applications of T-Mobile US, Inc., and Sprint Corporation for Consent to Transfer Control of Licenses and Authorizations Applications of American H Block Wireless L.L.C., DBSD Corporation, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. for Extension of Time*, WT Docket No. 18-197, Memorandum Opinion and Order, Declaratory Ruling, and Order of Proposed Modification, 34 FCC Rcd 10578, 10614, para. 87 (2019) (*T-Mobile-Sprint Order*); *SprintCom, Inc., Shenandoah Personal Communications, LLC, and NTELOS Holdings Corp. for Consent to Assign Licenses and Spectrum Lease Authorizations and to Transfer Control of Spectrum Lease Authorizations and an International Section 214 Authorization*, WT Docket No. 15-262, Memorandum Opinion and Order, 31 FCC Rcd 3631, 3638-39, para. 17 (WTB/IB 2016) (*Sprint-Shentel-NTELOS Order*); *Applications of Cricket License Company, LLC, et al., Leap Wireless International, Inc., and AT&T Inc. for Consent to Transfer Control of Authorizations; Application of Cricket License Company, LLC and Leap Licenseco Inc. for Consent to Assignment of Authorization*, Memorandum Opinion and Order, 29 FCC Rcd 2735, 2753, para. 41 (WTB/IB 2014) (*AT&T-Leap Order*).

3. Further, we find that DISH's requested conditions are not transaction-specific, and its proposed remedies are beyond the scope of these applications.⁶ Moreover, DISH requests that we hold the applications in abeyance pending the resolution of the Wireless Telecommunications Bureau (WTB)'s and Office of Economics and Analytics (OEA)'s recent public notice on AT&T's petition for rulemaking,⁷ which we decline to do. To the extent DISH asks us to reexamine broader spectrum aggregation and competition issues, we note that we have sought comment on mobile spectrum holding policies more generally in the separate proceeding initiated by WTB's and OEA's aforementioned public notice.⁸ Regarding the proposed transaction before us, we disagree with DISH that the public interest is harmed by these assignment applications; in contrast, and as noted above, we find that the public interest is served by the continued use of the 600 MHz licenses for enhanced 5G and LTE network capacity, coverage, and performance. We therefore consent to the assignment applications.

II. BACKGROUND

A. Description of the Applicants

1. T-Mobile

4. T-Mobile is a wholly-owned subsidiary of T-Mobile USA, Inc. and, indirectly, T-Mobile US, Inc., a publicly-traded Delaware corporation controlled by Deutsche Telecom AG and part of the family of companies that operate under the T-Mobile brand names.⁹ T-Mobile US, Inc. and its subsidiaries offer nationwide wireless voice and data services to consumer and business customers and provide service to approximately 114 million postpaid and prepaid customers, as of December 31, 2022, as well as a wide selection of wireless devices and accessories.¹⁰ Substantially all of T-Mobile US, Inc.'s revenues for the years ended December 31, 2022, 2021, and 2020, were earned in the United States, including Puerto Rico and the U.S. Virgin Islands.¹¹ T-Mobile US, Inc. reported 2022 total revenues of approximately \$80 billion, with an operating income of approximately \$6.5 billion.¹²

⁶ DISH Petition to Condition at 2, 7 (DISH Petition). While DISH styled its filing a "Petition to Condition," the Commission's rules do not provide for such a filing. DISH specifically stated that its filing was not a petition to deny the applications. Letter from Alison Minea, Vice President, Regulatory Affairs, DISH, to Marlene H. Dortch, Secretary, FCC, ULS File Nos. 0010168412, 0010168439 at 7 (filed Oct. 4, 2023) (DISH Oct. 4, 2023 Letter). We will exercise our discretion, however, to treat DISH's submission as an informal objection. See 47 CFR § 1.41.

⁷ *Wireless Telecommunications Bureau and Office of Economics and Analytics Seek Comment on AT&T Petition for Rulemaking and Mobile Spectrum Holdings Policies*, WT Docket No. 23-319, RM-1196, Public Notice, DA 23-891 (WTB/OEA Sept. 22, 2023) (*Mobile Spectrum Holdings Public Notice*).

⁸ See *Mobile Spectrum Holdings Public Notice* at 4-5.

⁹ T-Mobile/Channel 51 Public Interest Statement at 1; T-Mobile/LB License Public Interest at 1; Applications of T-Mobile License LLC, Nextel West Corp. and LB License Co, LLC for License Assignment, *Pro Forma* Changes to Ownership of Assignee, Section 1.65 Notification, ULS File Nos. 0010168412 and 0010168420 (filed Apr. 28, 2023); Application of T-Mobile License LLC, Nextel West Corp. and Channel 51 License Company LLC for License Assignment, *Pro Forma* Changes to Ownership of Assignee, Section 1.65 Notification, ULS File No. 0010168439 (filed Apr. 28, 2023).

¹⁰ T-Mobile US, Inc. SEC Form 10-K, at 5-6 (filed Feb. 14, 2023) (75% postpaid customers, 16% prepaid customers, and 9% wholesale and other services); see also T-Mobile/Channel 51 Public Interest Statement at 1; T-Mobile/LB License Public Interest at 1.

¹¹ T-Mobile US, Inc. SEC Form 10-K, at 6 (filed Feb. 14, 2023).

¹² T-Mobile US, Inc. SEC Form 10-K, at 32 (filed Feb. 14, 2023).

2. LB License and Channel 51

5. LB License is a wholly-owned direct subsidiary of LB Spectrum Holdings, LLC (LB Spectrum Holdings), which is indirectly controlled by LB Spectrum Holdings' board of directors.¹³ The indirect equity and voting rights of LB License are dispersed among a number of entities, including several Columbia entities (Columbia Spectrum Partners II-A, L.P.; Columbia Spectrum Partners II GP, L.P.; and Columbia Spectrum II, LLC) and Future Fund entities (Future Fund Investment Co. No. 5 Pty Ltd; Future Fund Board of Guardians).¹⁴ Ultimate control over the Columbia entities currently rests with two managing members.¹⁵

6. The sole member and U.S. controlling parent of Channel 51 is Channel 51, LLC.¹⁶ Channel 51, LLC's managing member is vested with exclusive and full operational control of Channel 51, LLC.¹⁷ While Channel 51's ultimate voting interests are vested in its managing member, its indirect equity interests are more dispersed, and—like LB License—include a number of Columbia entities (e.g., Columbia Capital VI, LLC; Columbia Spectrum, LLC) and Future Fund entities.¹⁸ Like LB License, the Columbia entities are ultimately controlled by two managing members.¹⁹

B. Description of the Transaction

7. On August 8, 2022, the Applicants entered into two license purchase agreements, pursuant to which 600 MHz licenses held by Channel 51 and LB License would be assigned to T-Mobile.²⁰ In the proposed transaction, T-Mobile is proposing to acquire 10 to 20 megahertz of spectrum in 167 counties in all or parts of 50 cellular market areas (CMAs).²¹ Post-transaction, in markets where there is geographical overlap, T-Mobile would hold 299.5 to 440 megahertz of spectrum²² covering approximately 90 million people, or approximately 27% of the population of the United States, excluding the territories. As noted above, the licenses that are subject to the proposed transaction were previously leased to T-Mobile by Channel 51 and LB License through long-term spectrum manager

¹³ FCC Ownership Disclosure Filing for LB License Co, LLC, FCC Form 602, FCC File No. 0008043391, Exh. A, Narrative Description of Ownership of LB License Co, LLC at A-1 (LB License Ownership Disclosure); *see also* T-Mobile/LB License Public Interest Statement at 2.

¹⁴ LB License Ownership Disclosure at A-1, A-2.

¹⁵ LB License Ownership Disclosure at A-1.

¹⁶ FCC Ownership Disclosure Filing for Channel 51 License Company LLC, FCC Form 602, FCC File No. 0008435075, Exh. A, Narrative Description of Ownership of Channel 51 License Co LLC at 1 (Channel 51 Ownership Disclosure).

¹⁷ Channel 51 Ownership Disclosure at 1.

¹⁸ Channel 51 Ownership Disclosure at 1-3.

¹⁹ Channel 51 Ownership Disclosure at 1.

²⁰ T-Mobile/Channel 51 Public Interest Statement at 1-2; T-Mobile/LB License Public Interest Statement at 1-2.

²¹ *See* T-Mobile/Channel 51 Spectrum Aggregation Exhibit (filed Aug. 25, 2023); T-Mobile/LB License Spectrum Aggregation Exhibit (filed Aug. 25, 2023).

²² *See* T-Mobile/Channel 51 Spectrum Aggregation Exhibit (filed Aug. 25, 2023); T-Mobile/LB License Spectrum Aggregation Exhibit (filed Aug. 25, 2023).

leasing arrangements.²³ As such, T-Mobile is already attributed with the spectrum, and T-Mobile currently provides service using this 600 MHz spectrum.²⁴

8. The Applicants assert that approval of the proposed transaction will further the public interest by supporting enhanced competition and consumer benefits, promoting the rapid buildout of 5G, and enhancing network capacity, coverage, and performance.²⁵ They claim that because T-Mobile is already utilizing the spectrum under the long-term spectrum manager leasing arrangements, approval of the applications will allow T-Mobile to maintain the network performance it has achieved since those leases began.²⁶ Specifically, the low-band 600 MHz spectrum at issue provides a coverage layer and provides network control functions for other bands utilized by T-Mobile's network.²⁷

C. Transaction Review Process

9. On April 3, 2023, LB License and T-Mobile filed two amended applications²⁸ requesting Commission approval for the assignment of 600 MHz licenses from LB License to T-Mobile.²⁹ In addition, concurrently with the filing of these applications, Channel 51 and T-Mobile filed an amended application requesting Commission approval for the assignment of 600 MHz licenses from Channel 51 to T-Mobile.³⁰ On April 19, 2023, these amended applications were put on an accepted for filing public

²³ On March 24, 2020, Channel 51 and LB License each filed a notification disclosing that they had entered into a long-term spectrum manager lease agreement with T-Mobile. *See* Notification of T-Mobile License LLC and Channel 51 License Company LLC of a Long-Term Spectrum Manager Lease Agreement, ULS File No. 0009021213 (filed Mar. 24, 2020); Notification of T-Mobile License LLC and LB License Co, LLC of a Long-Term Spectrum Manager Lease Agreement, ULS File No. 0009021220 (filed Mar. 24, 2020). These notifications were accepted by WTB on July 9, 2020. On December 3, 2020, WTB denied Verizon's Petition for Reconsideration of the acceptance of T-Mobile's spectrum manager lease arrangements with Channel 51 and LB License. *See T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd 14059.

²⁴ T-Mobile/Channel 51 Public Interest Statement at 2-3; T-Mobile/LB License Public Interest Statement at 2-3.

²⁵ T-Mobile/Channel 51 Public Interest Statement at 2-4; T-Mobile/LB License Public Interest Statement at 2-4.

²⁶ T-Mobile/Channel 51 Public Interest Statement at 3; T-Mobile/LB License Public Interest Statement at 3.

²⁷ T-Mobile/Channel 51 Public Interest Statement at 4; T-Mobile/LB License Public Interest Statement at 4.

²⁸ Subsequent to the April 3, 2023 amended applications, the Applicants amended these applications with additional exhibits and other documents. *See* Applications of T-Mobile License LLC, Nextel West Corp. and LB License Co, LLC for License Assignment, *Pro Forma* Changes to Ownership of Assignee, Section 1.65 Notification, ULS File Nos. 0010168412 and 0010168420 (filed Apr. 28, 2023); Application of T-Mobile License LLC, Nextel West Corp. and Channel 51 License Company LLC for License Assignment, *Pro Forma* Changes to Ownership of Assignee, Section 1.65 Notification, ULS File No. 0010168439 (filed Apr. 28, 2023); Applications of T-Mobile License LLC, Nextel West Corp. and LB License Co, LLC for License Assignment, Spectrum Aggregation Exhibit and Table, Competition Exhibit, ULS File Nos. 0010168412 and 0010168420 (filed July 10, 2023); Application of T-Mobile License LLC, Nextel West Corp. and Channel 51 License Company LLC for License Assignment, Spectrum Aggregation Exhibit and Table, Competition Exhibit, ULS File No. 0010168439 (filed July 10, 2023); Applications of T-Mobile License LLC, Nextel West Corp. and LB License Co, LLC for License Assignment, Spectrum Aggregation Exhibit and Table, Competition Exhibit, ULS File Nos. 0010168412 and 0010168420 (filed Aug. 25, 2023); Application of T-Mobile License LLC, Nextel West Corp. and Channel 51 License Company LLC for License Assignment, Spectrum Aggregation Exhibit and Table, Competition Exhibit, ULS File No. 0010168439 (filed Aug. 25, 2023); Applications of T-Mobile License LLC, Nextel West Corp. and LB License Co, LLC for License Assignment and Channel 51 License Company LLC for License Assignment, Spectrum Aggregation Exhibit, ULS File Nos. 0010168412, 0010168420, 0010168439 (filed Nov. 10, 2023).

²⁹ T-Mobile/LB License Public Interest Statement.

³⁰ T-Mobile/Channel 51 Public Interest Statement.

notice.³¹ On May 3, 2023, AT&T filed comments on the applications.³² On May 4, 2023, DISH filed a self-styled “Petition to Condition” regarding the assignment of these 600 MHz licenses.³³ On May 15, 2023, Channel 51 and LB License filed a joint opposition to DISH’s petition.³⁴ Also on May 15, 2023, T-Mobile filed a response to AT&T’s comments and DISH’s petition.³⁵ On June 6, 2023, DISH filed a reply to the oppositions.³⁶ On June 26, 2023, DISH, Channel 51/LB License, and T-Mobile each filed *ex parte* letters.³⁷ On October 4, 2023, DISH filed a letter that responded to T-Mobile’s June 26 *ex parte* letter and Channel 51/LB License’s June 26 *ex parte* letter.³⁸ On October 12, 2023, T-Mobile filed a response to the October 4 letter filed by DISH,³⁹ and on October 20, 2023, DISH replied to T-Mobile’s letter.⁴⁰ On October 24, 2023, Channel 51/LB License filed a letter responding to DISH’s two October letters.⁴¹

III. STANDARD OF REVIEW AND PUBLIC INTEREST FRAMEWORK

10. Pursuant to section 310(d) of the Communications Act of 1934, as amended (Act), we must determine whether the proposed assignment to T-Mobile of licenses held by Channel 51 and LB License will serve the public interest, convenience, and necessity.⁴² In making this determination, we first assess whether the proposed transaction complies with the specific provisions of the Act, other applicable

³¹ *Wireless Telecommunications Bureau, Assignment of License Authorization Applications, Transfer of Control of Licensee Applications, and De Facto Transfer Lease Applications, and Designated Entity Reportable Eligibility Event Applications Accepted for Filing*, ULS File Nos. 0010168412, 0010168420, 0010168439, Public Notice, Report No. 17666 (WTB Apr. 19, 2023). This public notice also announced that the applications were subject to applicable pre-grant notice and petition procedures and provided a 14-day notice period, running until May 3, 2023. See 47 CFR § 1.948(j)(1)(iii).

³² AT&T Comments.

³³ DISH Petition.

³⁴ Channel 51/LB License Joint Opposition.

³⁵ T-Mobile Response.

³⁶ DISH Reply.

³⁷ Letter from Alison Minea, Vice President, Regulatory Affairs, DISH, to Marlene H. Dortch, Secretary, FCC, ULS File Nos. 0010168412, 0010168439 (filed June 26, 2023) (DISH June 26, 2023 *Ex Parte* Letter); Letter from Paul Chisholm, Channel 51, Monish Kundra, LB License, to Marlene H. Dortch, Secretary, FCC, ULS File Nos. 0010168412, 0010168439 (filed June 26, 2023) (Channel 51/LB License June 26, 2023 *Ex Parte* Letter); Letter from Steve Sharkey, Vice President, Government Affairs Engineering and Technology Policy, T-Mobile, to Marlene H. Dortch, Secretary, FCC, ULS File Nos. 0010168412, 0010168439 (filed June 26, 2023) (T-Mobile June 26, 2023 *Ex Parte* Letter).

³⁸ DISH Oct. 4, 2023 Letter.

³⁹ Letter from Steve Sharkey, Vice President, Government Affairs Engineering and Technology Policy, T-Mobile, to Marlene H. Dortch, Secretary, FCC, ULS File Nos. 0010168412, 0010168439 (filed Oct. 12, 2023) (T-Mobile Oct. 12, 2023 Letter).

⁴⁰ Letter from Alison Minea, Vice President, Regulatory Affairs, DISH, to Marlene H. Dortch, Secretary, FCC, ULS File Nos. 0010168412, 0010168439 (filed Oct. 20, 2023) (DISH Oct. 20, 2023 Letter).

⁴¹ Letter from Paul Chisholm, Channel 51, Monish Kundra, LB License, to Marlene H. Dortch, Secretary, FCC, ULS File Nos. 0010168412, 0010168439 (filed Oct. 24, 2023) (Channel 51/LB License Oct. 24, 2023 Letter).

⁴² 47 U.S.C. § 310(d). See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10595, para. 39 & n.121 (stating that section 310(d) of the Act requires that we consider applications for transfer of Title III licenses under the same standard as if the proposed transferee were applying for licenses directly under section 308 of the Act, 47 U.S.C. § 308).

statutes, and the Commission's rules.⁴³ If the proposed transaction does not violate a statute or rule, we then consider whether the transaction could result in public interest harms by substantially frustrating or impairing the objectives or implementation of the Act or related statutes.⁴⁴ We then employ a balancing test weighing any potential public interest harms of the proposed transaction against any potential public interest benefits.⁴⁵ The Applicants bear the burden of proving, by a preponderance of the evidence, that the proposed transaction, on balance, serves the public interest.⁴⁶

11. Our competitive analysis, which forms an important part of the public interest evaluation, is informed by, but not limited to, traditional antitrust principles.⁴⁷ The U.S. Department of Justice (DOJ) has independent authority to examine the competitive impacts of proposed mergers and transactions involving transfers of Commission licenses, but the Commission's competitive analysis under the public standard is somewhat broader.⁴⁸ The Commission has determined it may impose and enforce transaction-specific conditions that address the potential harms of a transaction.⁴⁹ If we are unable to find that a proposed transaction serves the public interest or if the record presents a substantial and material question of fact, then we must designate the application for a hearing.⁵⁰

12. *Qualifications of the Applicants.* Section 310(d) of the Act requires that we make a determination as to whether the Applicants have the requisite qualifications to hold Commission licenses.⁵¹ Among the factors that the Commission considers in its public interest review is whether the applicant for a license has the requisite "citizenship, character, financial, technical, and other qualifications."⁵² Therefore, as a threshold matter, the Commission must determine whether the applicants to a proposed transaction meet the requisite qualification requirements to hold and transfer licenses under section 310(d) of the Act and the Commission's rules.⁵³ We note that no parties have

⁴³ 47 U.S.C. § 310(d); *T-Mobile-Sprint Order*, 34 FCC Rcd at 10595, para. 39; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3634, para. 6; *see also AT&T-Leap Order*, 29 FCC Rcd at 2741-42, para. 13.

⁴⁴ *See, e.g., Application of Verizon Communications Inc. and America Móvil, S.A.B. de C.V. for Consent to Transfer Control of International Section 214 Authorization*, GN Docket No. 21-112, Memorandum Opinion and Order, 36 FCC Rcd 16994, 17001, para. 21 (2021) (*Verizon-TracFone Order*); *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3634, para. 6; *see also AT&T-Leap Order*, 29 FCC Rcd at 2741-42, para. 13.

⁴⁵ *See, e.g., Verizon-TracFone Order*, 36 FCC Rcd at 17001, para. 21; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3634, para. 6; *see also AT&T-Leap Order*, 29 FCC Rcd at 2741-42, para. 13.

⁴⁶ *See, e.g., Verizon-TracFone Order*, 36 FCC Rcd at 17001, para. 21; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3634, para. 6; *see also AT&T-Leap Order*, 29 FCC Rcd at 2741-42, para. 13.

⁴⁷ *See, e.g., Verizon-TracFone Order*, 36 FCC Rcd at 17002, para. 23; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10595-96, para. 40; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3634-35, para. 7; *see also AT&T-Leap Order*, 29 FCC Rcd at 2742-43, para. 15.

⁴⁸ *See, e.g., Verizon-TracFone Order*, 36 FCC Rcd at 17002, para. 23; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10595-96, para. 40; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3634-35, para. 7; *see also AT&T-Leap Order*, 29 FCC Rcd at 2742-43, para. 15.

⁴⁹ *See, e.g., T-Mobile-Sprint Order*, 34 FCC Rcd at 10595-96, para. 40; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3634-35, para. 7; *see also AT&T-Leap Order*, 29 FCC Rcd at 2743-44, para. 16.

⁵⁰ 47 U.S.C. § 309(e); *T-Mobile-Sprint Order*, 34 FCC Rcd at 10596, para. 42; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3634-35, para. 7; *see also AT&T-Leap Order*, 29 FCC Rcd at 2742-43, para. 15.

⁵¹ 47 U.S.C. § 310(d).

⁵² 47 U.S.C. § 310(d); *T-Mobile-Sprint Order*, 34 FCC Rcd at 10596-97, para. 43; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3635, para. 8; *see also AT&T-Leap Order*, 29 FCC Rcd at 2744, para. 17.

⁵³ 47 U.S.C. § 310(d); *T-Mobile-Sprint Order*, 34 FCC Rcd at 10596-97, para. 43; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3635, para. 8; *see also AT&T-Leap Order*, 29 FCC Rcd at 2744, para. 17.

raised issues regarding the basic qualifications of T-Mobile, Channel 51, or LB License. Accordingly, we find that there is no reason to reevaluate the requisite citizenship, character, financial, technical, or other basic qualifications of these Applicants under the Act and our rules, regulations, and policies.

IV. PRELIMINARY ISSUES

13. DISH raises several issues that we find are outside of the scope of these applications and are not transaction-specific. First, DISH requests that the Commission hold the instant applications in abeyance pending the resolution of WTB's and OEA's public notice seeking comment on mobile spectrum holdings policies.⁵⁴ In support of its request, DISH also argues that the Commission should take into consideration the recent announcement of T-Mobile and Comcast to lease spectrum in the 600 MHz band.⁵⁵ Further, DISH argues that T-Mobile should be presumptively barred from acquiring additional 600 MHz licenses in the future absent a strong public interest showing rebutting that presumption.⁵⁶

14. DISH requests that the Commission examine questions of general competition and spectrum aggregation issues for markets that are not subject to the applications before WTB.⁵⁷ Specifically, DISH asserts that T-Mobile's holdings already exceed the spectrum screen in over 100 markets.⁵⁸ Further, DISH argues that T-Mobile's existing low-band spectrum holdings should be examined given that T-Mobile currently exceeds the spectrum screen, arguing that the instant transaction should not be viewed in isolation.⁵⁹

15. Next, DISH requests that the Commission impose conditions or limitations on T-Mobile across all of its 600 MHz spectrum band holdings. DISH asserts that because T-Mobile argued in favor of a 40 megahertz reserve limit during the pendency of the incentive auction in 2014, that the Commission should not grant the assignment of 600 MHz spectrum unless spectrum swaps are imposed to counterbalance spectrum aggregation concerns.⁶⁰ DISH claims that, because T-Mobile's 600 MHz spectrum holdings sit in the center of the band, other providers are left with non-contiguous licenses that are more difficult to combine.⁶¹ DISH argues in its reply that while it previously suggested that T-Mobile hold no more than three blocks of 600 MHz spectrum in any market involved in this transaction, the potential competitive harms could be offset, if the Commission ensures that competitors can recombine their respective 600 MHz assets through spectrum swaps.⁶²

16. DISH requests that the Commission require T-Mobile to commit to spectrum swaps in the 600 MHz band, as needed, to enable more contiguity among other 600 MHz license holders.⁶³ DISH

⁵⁴ DISH Oct. 20, 2023 Letter at 3-4.

⁵⁵ DISH Oct. 4, 2023 Letter at 2 & n.5 (citing T-Mobile USA Inc., Form 8-K, Sept. 12, 2023 announcing that subsidiary T-Mobile USA, Inc. entered into a License Purchase Agreement with Comcast under which T-Mobile will acquire spectrum in the 600 MHz band from Comcast).

⁵⁶ DISH Petition at 2, 7.

⁵⁷ DISH Petition at 6 (contending that T-Mobile's spectrum holdings exceed the screen in 127 CMAs and in many of the top 25 CMAs).

⁵⁸ DISH Petition at 6.

⁵⁹ DISH Reply at 3-4; DISH Oct. 4, 2023 Letter at 2-3.

⁶⁰ DISH Reply at 10-11.

⁶¹ DISH Petition at 7-9 and Exhibit A (arguing that T-Mobile's spectrum holdings across 416 PEAs result in a "wall of magenta" that impacts the 600 MHz band to T-Mobile's advantage and to the harm of 5G competition).

⁶² DISH Reply at 2, 10-11.

⁶³ DISH June 26, 2023 *Ex Parte* Letter at 4 (stating that on a PEA basis, this would require T-Mobile to swap assignments with other licensees to shift T-Mobile to the lower or the upper end of the 600 MHz band).

argues that spectrum swaps of 600 MHz licenses could rely upon voluntary participation by other 600 MHz licensees; further, this remedy would leave T-Mobile with the same spectrum depth in the band for each Partial Economic Area (PEA), while enabling other providers to maximize the utility of the remaining 600 MHz blocks.⁶⁴ In particular, DISH objects to the fact that in St. Louis, Missouri, T-Mobile would hold five blocks of 600 MHz spectrum.⁶⁵

17. In response to DISH's arguments, the Applicants assert that the public interest harm that DISH seeks to correct is entirely speculative,⁶⁶ and should such harm ever materialize, it could be resolved by voluntary market spectrum swaps.⁶⁷ T-Mobile further contends that DISH's proposed remedies are unprecedented and unjustified.⁶⁸ T-Mobile asserts that WTB has never intervened in private transactions without finding market-specific competitive harm.⁶⁹ T-Mobile argues that DISH has not attempted to justify a 600 MHz-specific remedy to the theoretical contiguity problems DISH may or may not face in the future.⁷⁰ T-Mobile contends that the secondary market has efficiently and effectively addressed contiguity issues in the past.⁷¹ In particular, T-Mobile states that providers have cooperatively pursued spectrum contiguity through spectrum swaps, and T-Mobile has actively participated in such spectrum swaps, including swaps with its competitors.⁷² Channel 51 and LB License assert that DISH has not offered an explanation as to why it could not assemble contiguous blocks through spectrum swaps and other secondary market transactions.⁷³

18. The Applicants contend that DISH offers no more than a hypothetical suggestion that it might actually have plans to purchase or lease its neighbors' 600 MHz channels, whether in the near-term or the distant future.⁷⁴ Channel 51 and LB License maintain that DISH has not shown that it: (1) has any real intention to engage in a transaction that the channel placement of T-Mobile, Channel 51, or LB License could ostensibly impede; or (2) has ever pursued and consummated secondary market solutions to any such problem before asking that the Commission modify the 600 MHz band's auction-based channel assignments to be more to DISH's current preferences.⁷⁵ Channel 51 and LB License assert that reconfiguring 600 MHz channel assignments would require the Commission to determine which licensees—DISH, T-Mobile, or third parties—to favor with preferred placement.⁷⁶ However, Channel 51 and LB License argue, the Commission has already developed and implemented a successful method of configuring channel assignments—a well-established process of assignment-phase bidding provides

⁶⁴ DISH June 26, 2023 *Ex Parte* Letter at 4.

⁶⁵ DISH Reply at 11.

⁶⁶ T-Mobile Response at 8-10; T-Mobile June 26, 2023 *Ex Parte* Letter at 3; Channel 51/LB License Joint Opposition at 12.

⁶⁷ Channel 51/LB License Joint Opposition at 12; *see also* T-Mobile Response at 9-10.

⁶⁸ T-Mobile June 26, 2023 *Ex Parte* Letter at 3; *see also* T-Mobile Response at 4-5, 8-10.

⁶⁹ T-Mobile June 26, 2023 *Ex Parte* Letter at 3.

⁷⁰ T-Mobile June 26, 2023 *Ex Parte* Letter at 3; *see also* T-Mobile Response at 8-10.

⁷¹ T-Mobile June 26, 2023 *Ex Parte* Letter at 3.

⁷² T-Mobile Response at 9. T-Mobile states that DISH had previously rejected a spectrum swap proposed by T-Mobile without explanation or proposing an alternative. *Id.*; T-Mobile June 26, 2023 *Ex Parte* Letter at 3.

⁷³ Channel 51/LB License Joint Opposition at 13.

⁷⁴ Channel 51/LB License Joint Opposition at 14; T-Mobile Response at 9-10.

⁷⁵ Channel 51/LB License Oct. 24, 2023 Letter at 3; Channel 51/LB License Joint Opposition at 12-14.

⁷⁶ Channel 51/LB License June 26, 2023 *Ex Parte* Letter at 5.

winning bidders in the clock phase of an auction with an economically efficient opportunity to express their preferences for specific frequencies based on their unique needs and business plans.⁷⁷

19. *Discussion.* DISH advances several arguments that involve issues of general applicability across the 600 MHz band including issues of channel assignments and location across all 416 PEAs identified by DISH as presenting competitive concerns.⁷⁸ We agree with the Applicants that the Incentive Auction channel assignments were subject to an assignment bidding phase and that, if WTB were to order swaps of current 600 MHz band holdings, this would displace licensees from the channel assignment they bid on. In the 2014 *Mobile Spectrum Holdings Report and Order*, the Commission adopted market-based spectrum reserve limits for entities that did not hold a certain amount of below-1-GHz spectrum; T-Mobile qualified as one of those entities.⁷⁹ Further, the Commission noted in the *Mobile Spectrum Holdings Report and Order*, that while the aggregation of 600 MHz Band spectrum by means of secondary market transactions may have the potential to exacerbate concerns about below-1-GHz spectrum concentration, this must be balanced against the Commission's general policy of promoting flexibility in secondary market transactions.⁸⁰ We find that DISH's requested remedy of requiring the licensees within the 600 MHz band to reallocate to different channels is beyond the scope of this transaction review and, in any event, this is not the appropriate proceeding to consider whether to modify or swap the holdings of licenses within the 600 MHz band. We note that no other 600 MHz licensee has filed in support of DISH's arguments. Further, we decline to presumptively bar the consideration of other assignment applications, leases, or license transfers within the context of this proceeding. We likewise decline DISH's request to hold these applications in abeyance pending the resolution of WTB's and OEA's public notice seeking comment on mobile spectrum holdings policies more generally.⁸¹ Rather, we examine the spectrum holdings in the markets implicated in this specific transaction and set forth our competitive analysis below.

V. POTENTIAL PUBLIC INTEREST HARMS

20. Spectrum is an essential input in the provision of mobile wireless services, and ensuring that sufficient spectrum is available for incumbent licensees as well as potential new entrants is critical to promoting effective competition and innovation in the marketplace.⁸² Regarding mobile spectrum holding policies, the Commission's fundamental goal is the preservation and promotion of competition, which in turn, leads to lower prices, improved quality, and increased innovation.⁸³ When considering the potential competitive effects of spectrum aggregation, the Commission has considered whether there would be an increased likelihood that rival service providers or potential entrants would be foreclosed

⁷⁷ Channel 51/LB License June 26, 2023 *Ex Parte* Letter at 5; Channel 51/LB License Joint Opposition at 11; *see also* T-Mobile Response at 9-10.

⁷⁸ DISH Petition and Exhibit A. While the Applicants argue that the Commission should disregard DISH's filing in its entirety and grant the applications, Channel 51/LB License June 26, 2023 *Ex Parte* Letter at 2-7, to the extent that DISH's arguments pertain to potential harms that may result from the assignment of spectrum, we discuss those issues below.

⁷⁹ *Policies Regarding Mobile Spectrum Holdings Expanding the Economic Innovation Opportunities of Spectrum Through Incentive Auctions*, WT Docket No. 12-269, Report and Order, 29 FCC Rcd 6133, 6196, para. 153 (2014) (*Mobile Spectrum Holdings Report and Order*).

⁸⁰ *Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6212, para. 198.

⁸¹ DISH Oct. 20, 2023 Letter at 3-4.

⁸² *See, e.g., T-Mobile-Sprint Order*, 34 FCC Rcd at 10617, para. 94; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd 3635-36, para. 9; *AT&T-Leap Order*, 29 FCC Rcd 2745-46, para. 21; *see also Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6233, 6240, paras. 267, 286-88.

⁸³ *See, e.g., Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6144, para. 17.

from expanding capacity, deploying advanced mobile broadband technologies, or entering the market, and also whether rivals' costs would be increased to the extent that they would be less likely to be able to compete robustly.⁸⁴ In reviewing applications involving a proposed transaction, the Commission evaluates the potential public interest harms, including potential competitive harms that may result from the transaction.⁸⁵

21. *Record.* The Applicants assert that the assignment of 10 to 20 megahertz of spectrum to T-Mobile will not foreclose market entry by a competitor or raise rivals' costs. The Applicants further note that AT&T and Verizon gained substantial amounts of spectrum in the C-band and 3.45 GHz auctions.⁸⁶

22. DISH asserts that T-Mobile should not be allowed to permanently acquire the 600 MHz spectrum licenses it currently leases because the rationale that T-Mobile argued in support of its long-term spectrum manager leasing arrangements—to facilitate 5G deployment—is no longer applicable.⁸⁷ DISH claims that the rationale is no longer valid because T-Mobile itself asserts that it has now reached 5G deployment coverage of 98% of the U.S. population.⁸⁸ Further, DISH argues that the transaction raises spectrum holding concerns, particularly regarding low-band holdings, which the Commission should examine and which could necessitate conditions to ameliorate the harms arising from the transaction.⁸⁹

23. In response, T-Mobile and Channel 51/LB License both assert that DISH fails to provide evidence of public interest harms to any local market.⁹⁰ The Applicants argue that the licenses that are the subject of these applications have been continuously leased in their entirety to T-Mobile for over two years and have been used in T-Mobile's network during that time to support 5G services to consumers.⁹¹ T-Mobile explains that it needs the "spectrum to *continue* to provide high quality, high capacity 5G

⁸⁴ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10617-18, para. 94; *AT&T-Leap Order*, 29 FCC Rcd at 2741-43, paras. 13-15; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3634-36, paras. 6, 9.

⁸⁵ Material set off by double brackets {[]} is confidential and is redacted from the public version of this document.

⁸⁶ T-Mobile/Channel 51 Public Interest Statement at 5; T-Mobile/LB License Public Interest Statement at 5. The Applicants claim that AT&T has gained access to spectrum by virtue of a network services agreement entered into with DISH including over 70 megahertz of mid-band spectrum nationwide. T-Mobile/Channel 51 Public Interest Statement at 5; T-Mobile/LB License Public Interest Statement at 5. AT&T filed comments on May 3, 2023 stating that AT&T does not have access to DISH's spectrum under the AT&T-DISH Network Services Agreement. AT&T Comments at 1-4.

⁸⁷ DISH Petition at 1, 3-4; see also DISH Reply at 2; DISH June 26, 2023 *Ex Parte* Letter at 2-3.

⁸⁸ DISH Petition at 1. DISH notes that T-Mobile was permitted to acquire spectrum in excess of the Commission's spectrum screen when the Commission approved its acquisition of Sprint. DISH asserts that the Commission approved that spectrum concentration on the grounds that it would facilitate T-Mobile's 5G deployment, but, DISH argues, this rationale is no longer applicable. *Id.*; see also DISH Reply at 2; DISH June 26, 2023 *Ex Parte* Letter at 2-3.

⁸⁹ DISH Petition at 2 (asserting that conditions are needed to "ameliorate the harms that would otherwise result from an enhanced low-band spectrum portfolio").

⁹⁰ T-Mobile Response at 1, 4; Channel 51/LB License Joint Opposition at 2. T-Mobile also notes that AT&T's comments do not provide evidence of public interest harms. T-Mobile Response at 1-2, 4. AT&T states that its comments are "limited to a single issue—correcting an inaccurate statement of fact made by the Applicants about AT&T in support of their Application[s]." AT&T Comments at 1. T-Mobile asserts that AT&T's comments are not material to the outcome of the proceeding. T-Mobile Response at 1-2, 4.

⁹¹ T-Mobile Response at 2-3, 5; Channel 51/LB License Joint Opposition at 4.

services because T-Mobile is *already* using that spectrum for those services.”⁹² The Applicants conclude that DISH alleges no grounds for denial.⁹³

24. *Enhanced Factor Review.*⁹⁴ DISH contends that although T-Mobile structured the instant transaction to avoid enhanced factor review, the Commission should nevertheless analyze T-Mobile’s low-band spectrum holdings.⁹⁵ DISH asserts that the Commission should impose conditions to ameliorate harms that would otherwise result from T-Mobile’s low-band spectrum holdings.⁹⁶ Specifically, DISH contends that T-Mobile holds 54.8 megahertz of below-1-GHz spectrum as compared to the holdings of AT&T and Verizon, with 52.1 megahertz and 45.9 megahertz of low-band spectrum, respectively.⁹⁷ DISH argues that it holds just 22.4 megahertz of low-band spectrum holdings, which amount to over 20 to 30 megahertz less of low-band spectrum than the incumbent wireless providers.⁹⁸ DISH alleges that T-Mobile would hold more than one-third of below-1-GHz spectrum in twelve CMAs that DISH does not identify, with the average amount of 72 megahertz of spectrum across the unnamed markets.⁹⁹

25. The Applicants respond that the assignment of these licenses to T-Mobile would not result in T-Mobile holding more than one-third of the total suitable and available below-1-GHz spectrum in any geographic area.¹⁰⁰ Channel 51/LB License argues that DISH already has extensive 5G spectrum holdings, including low-band 600 MHz spectrum, and an option to acquire more from T-Mobile.¹⁰¹ In particular, T-Mobile argues that if DISH were to complete its purchase of the 13.8 megahertz of 800 MHz spectrum from T-Mobile that is described in the Final Judgment adopted in connection with T-Mobile’s acquisition of Sprint, T-Mobile would hold less low-band spectrum than either AT&T or Verizon.¹⁰²

26. *Spectrum Aggregation and Competition.* DISH asserts that granting the instant transaction would harm the public and competition, while obstructing the Commission’s competition goals.¹⁰³ Specifically, DISH argues that T-Mobile characterized its spectrum leases as a temporary

⁹² T-Mobile Response at 5 (emphasis in original); *see also* Channel 51/LB License Joint Opposition at 4 (“The public can only continue to realize the benefits of T-Mobile’s highly competitive 5G network if T-Mobile has access to the spectrum on which that network operates.”).

⁹³ T-Mobile Response at 3-5, 8; Channel 51/LB License Joint Opposition at 1-2, 14.

⁹⁴ In the *Mobile Spectrum Holdings Report and Order*, the Commission determined that any increase in spectrum holdings below 1 GHz would be treated as an “enhanced factor” for case-by-case review if post-transaction the acquiring entity would hold approximately one-third or more of the suitable and available spectrum below 1 GHz. *Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6233, 6238-40, paras. 267, 282-88.

⁹⁵ DISH October 20, 2023 Letter at 1 (arguing that T-Mobile’s exceedance over the spectrum screen undeniably triggers enhanced review); *see also* DISH Petition at 2; DISH Reply at 3-4.

⁹⁶ DISH Petition at 2.

⁹⁷ DISH Reply at 4.

⁹⁸ DISH Reply at 4.

⁹⁹ DISH Petition at 6. DISH also asserts that T-Mobile’s spectrum holdings in McAllen-Edinburg-Mission, Texas, exceed the spectrum screen by 71 megahertz; however, CMA 128: McAllen-Edinburg-Mission, TX is not subject to the instant transaction.

¹⁰⁰ T-Mobile/Channel 51 Public Interest Statement at 4; T-Mobile/LB License Public Interest Statement at 4; T-Mobile October 12, 2023 Letter at 1-2.

¹⁰¹ Channel 51/LB License Joint Opposition at 4, 6, 7.

¹⁰² T-Mobile June 26, 2023 *Ex Parte* Letter at 2-3; *see also* Channel 51/LB License June 26, 2023 *Ex Parte* Letter at 3-4; Channel 51/LB License Oct. 24, 2023 Letter at 5; Channel 51/LB License Joint Opposition at 7.

¹⁰³ DISH October 4, 2023 Letter at 9.

capacity boost to help transition legacy Sprint customers following the T-Mobile/Sprint transaction.¹⁰⁴ DISH contends that the initial rationale T-Mobile argued in support of its previous spectrum leases cannot be used to justify the permanent assignment of the licenses.¹⁰⁵ DISH asserts that ensuring the availability of spectrum, in particular low-band spectrum, is crucial to preserving and promoting competition, investment, and innovation in the mobile wireless marketplace.¹⁰⁶

27. The Applicants argue that the spectrum at issue is already attributed to T-Mobile, and WTB previously examined the competitive impact concerning the spectrum at issue and determined that T-Mobile's utilization of the spectrum did not raise competitive concerns.¹⁰⁷ The Applicants further assert that since the spectrum leases were approved, DISH has launched its operations and is now an operating provider in certain markets.¹⁰⁸ The Applicants state that when the leases were approved, WTB noted that it had the ability to reevaluate the leases and mitigate any potential harms that might arise.¹⁰⁹ WTB has not taken such action since then because, T-Mobile asserts, its use of the spectrum has not raised any competitive concerns.¹¹⁰

28. DISH argues that T-Mobile's spectrum holdings currently exceed the spectrum screen in many markets.¹¹¹ DISH asserts that T-Mobile's spectrum holdings exceed the spectrum screen in 127 CMAs and that in 64 of those CMAs, T-Mobile's spectrum holdings exceed the screen by at least 20 megahertz.¹¹² DISH argues that the proposed transaction increases the harms due to T-Mobile's spectrum holdings.¹¹³ Specifically, DISH claims that T-Mobile's spectrum holdings exceed the spectrum screen in the following CMAs subject to this transaction: Los Angeles, California; Philadelphia, Pennsylvania; Boston, Massachusetts; Houston, Texas; St. Louis, Missouri; Minneapolis-St. Paul, Minnesota and Wisconsin; Seattle, Washington; and Tampa, Florida.¹¹⁴ Further, DISH raises spectrum aggregation concerns in several markets that are not subject to this transaction.¹¹⁵

29. According to the Applicants, there are numerous other service providers with competitive coverage and access to spectrum in certain markets, including robust AT&T and Verizon coverage in every market in which T-Mobile will exceed the spectrum screen.¹¹⁶ Channel 51/LB License reiterates

¹⁰⁴ DISH Petition at 3 & n.5.

¹⁰⁵ DISH Petition at 3.

¹⁰⁶ DISH Petition at 5.

¹⁰⁷ T-Mobile/Channel 51 Public Interest Statement at 6; T-Mobile/LB License Public Interest Statement at 6; *see also* T-Mobile Response at 7-8.

¹⁰⁸ T-Mobile/Channel 51 Public Interest Statement at 5; T-Mobile/LB License Public Interest Statement at 5.

¹⁰⁹ T-Mobile/Channel 51 Public Interest Statement at 6; T-Mobile/LB License Public Interest Statement at 6; *see also* Channel 51/LB License Oct. 24, 2023 Letter at 6.

¹¹⁰ T-Mobile/Channel 51 Public Interest Statement at 6; T-Mobile/LB License Public Interest Statement at 6.

¹¹¹ DISH Petition at 6 (DISH argues that T-Mobile already exceeds the screen in 127 CMAs without taking into consideration pending applications from Auction 108 or the instant transaction; however, DISH does not identify the names of the 127 markets where T-Mobile exceeds the screen or the 64 markets where T-Mobile exceeds the screen by 20 megahertz in its filings).

¹¹² DISH Petition at 6 (contending that T-Mobile's spectrum holdings exceed the screen in many of the top 25 CMAs).

¹¹³ DISH Petition at 4-6 & n.20.

¹¹⁴ DISH Petition at 6 & n.20.

¹¹⁵ DISH Petition at 6 & n.20.

¹¹⁶ T-Mobile/Channel 51 Public Interest Statement at 5; T-Mobile/LB License at 5.

that DISH does not articulate how it would suffer real harm if T-Mobile directly controls the licenses at issue rather than leasing them.¹¹⁷ T-Mobile argues that DISH's unsupported claims, whether regarding exceeding the spectrum screen or holding a certain number of 600 MHz license blocks determined by DISH, are irrelevant because DISH has not pleaded a *prima facie* case that such spectrum aggregation would result in decreased competition.¹¹⁸

30. *Discussion.* We note as a preliminary matter that some markets discussed by DISH are not subject to the instant transaction. Specifically, we reject DISH's claims of competitive harm in the markets of Detroit, Michigan; Dallas, Texas; Miami, Florida; Cleveland, Ohio; San Diego, California; Cincinnati, Ohio; Kansas City, Missouri and Kansas; and Buffalo, New York as unrelated to the instant transaction and therefore beyond the scope of this review. Moreover, while DISH argues that T-Mobile holds more than one-third of below-1-GHz spectrum in twelve unspecified CMAs, we note that T-Mobile's holdings do not trigger enhanced factor review and decline therefore to apply that analysis. In addition, as noted above, DISH argues that the Commission should require T-Mobile to commit to spectrum swaps in the 600 MHz band to enable greater contiguity among licensees, and it objects, in particular, to T-Mobile holding 50 megahertz of 600 MHz spectrum in St. Louis, Missouri. However, the Commission has not adopted enhanced factor review with regard to the 600 MHz spectrum nor adopted a band-specific limit on 600 MHz spectrum or any other band included in the screen, and we decline to do so here.

31. In our examination of the potential competitive effects, following long-standing Commission precedent, we first define the relevant product and geographic markets and the input market for spectrum, and we then identify the current market participants. As part of our competitive analysis, we apply our initial spectrum screen to help identify markets of potential concern.¹¹⁹ We then undertake our market review by geographic cluster.¹²⁰ We note, as an initial matter, that due to the existing spectrum manager leasing arrangements between the Applicants, the spectrum at issue in the instant transaction has already been attributed to T-Mobile. Nonetheless, we undertake our competitive analysis to ensure that the public interest, convenience, and necessity is served. As discussed in detail below, we find that, post-transaction, the likelihood of competitive harm in the particular markets at issue is low.¹²¹

A. Market Definitions and Market Participants

32. *Product Market.* Consistent with Commission precedent, we find that the relevant product market is a combined "mobile telephony/broadband services" product market that comprises

¹¹⁷ Channel 51/LB License June 26, 2023 *Ex Parte* Letter at 3.

¹¹⁸ T-Mobile October 12, 2023 Letter at 1-2; *see also* T-Mobile Response at 6-7; T-Mobile June 26, 2023 *Ex Parte* Letter at 1-2.

¹¹⁹ *See Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6223-24, para. 231. Further, we point out that the screen is the first step in our competitive evaluation, and, as the Commission has previously found, *ex ante* limits on spectrum aggregation may prevent transactions that are in the public interest. *Id.*

¹²⁰ The geographic clusters we use are based on the U.S. Census Bureau, Geographic Levels, Regions and Divisions, <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html> (last visited Dec. 27, 2023). The clusters analyzed are in the Mid-Atlantic, the Midwest, New England, Northern California, the Southern United States, Southern California, the Southwestern United States, and Washington State. U.S. Census Bureau, Census Regions and Divisions of the United States, https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf (last visited Dec. 27, 2023).

¹²¹ A list of markets in which T-Mobile is above the total spectrum screen trigger is provided in Appendix A.

mobile voice and data services, including mobile voice and data services provided over advanced broadband wireless networks (mobile broadband services).¹²²

33. *Geographic Market.* The Commission has previously found that the geographic market for wireless transactions is local.¹²³ The Commission also has found, however, that a proposed transaction's competitive effects should also be evaluated at the national level where a proposed transaction exhibits certain national characteristics that provide cause for concern.¹²⁴ For this proposed transaction, we continue to use CMAs as the appropriate local market for analyzing spectrum aggregation issues.¹²⁵

34. *Input Market for Spectrum.* The Commission has previously determined that the following bands, or portions thereof, meet the definition of suitable and available and should be included in the input market for spectrum: 600 MHz, 700 MHz, cellular, specialized mobile radio service (SMR), broadband personal communications service (PCS), Advanced Wireless Services (AWS) in the 1710-1755 and 2110-2155 MHz band (AWS-1), AWS-3, AWS in the 2000-2020 MHz and 2180-2200 MHz spectrum bands (AWS-4), Broadband Radio Service (BRS), Wireless Communications Service (WCS) spectrum, H Block, Educational Broadband Service (EBS), 3.7 GHz, and 3.45 GHz.¹²⁶ The total amount of spectrum that is currently considered suitable and available for the provision of mobile telephony/broadband services is 1,123 megahertz, with an associated spectrum screen trigger of 385 megahertz.¹²⁷

¹²² See, e.g., *Verizon-TracFone Order*, 36 FCC Rcd at 17004, para. 27; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10601, 10603, paras. 55, 60; *AT&T-Leap Order*, 29 FCC Rcd at 2746, para. 23; see also *Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6224, para. 234 & n.623.

¹²³ See, e.g., *Verizon-TracFone Order*, 36 FCC Rcd at 17005, para. 30; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10605-06, para. 66; *AT&T-Leap Order*, 29 FCC Rcd at 2748, para. 27; *Applications of Deutsche Telekom AG, T-Mobile USA, Inc., and MetroPCS Communications, Inc. for Consent to Transfer of Control of Licenses and Authorizations*, WT Docket No. 12-301, Memorandum Opinion and Order and Declaratory Ruling, 28 FCC Rcd 2322, 2332, para. 29 (WTB/IB 2013) (*T-Mobile-MetroPCS Order*).

¹²⁴ See, e.g., *Verizon-TracFone Order*, 36 FCC Rcd at 17005, para. 30; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10606, para. 66; *AT&T-Leap Order*, 29 FCC Rcd at 2748, para. 27; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2332, para. 29.

¹²⁵ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10605-06, 10607, paras. 66, 69; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3636-37, para. 12; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2332-33, para. 31; see also *United States of America v. AT&T Inc., T-Mobile USA, Inc., and Deutsche Telekom AG*, Complaint, Case No. 1:11-cv-01560, paras. 16-17 (D.D.C.) (Aug. 31, 2011) (U.S. Department of Justice using CMAs as relevant geographic markets in its competitive analysis, in addition to a national-level analysis).

¹²⁶ See, e.g., *Communications Marketplace Report*, GN Docket No. 22-203, 2022 Communications Marketplace Report, FCC 22-103, at 65-66, paras. 84-85, Fig. II.B.9 (Dec. 30, 2022) (*2022 Communications Marketplace Report*); see also *Verizon-TracFone Order*, 36 FCC Rcd at 17005, para. 31 & n.86; *Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6169, 6177-79, 6184-87, paras. 70, 100-102, 118-25.

¹²⁷ *2022 Communications Marketplace Report*, at 65-66, paras. 84-85, Fig. II.B.9. We note that 3.7 GHz and 3.45 GHz spectrum are not available for use in Hawaii, Alaska, and the territories. In these areas, the total amount of suitable and available spectrum is 743 megahertz, and the associated spectrum screen trigger is 250 megahertz. *Id.* at 65-66, para. 84 & n.216.

35. *Market Participants.* Consistent with Commission precedent, we focus on facilities-based entities providing mobile telephony/broadband services using the spectrum bands included in the spectrum screen.¹²⁸

B. Competitive Analysis

1. Initial Screen

36. To help identify those local markets in which competitive concerns are more likely, initially we apply a two-part screen. 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.¹²⁹ The second part of the screen, which is applied on a county-by-county basis, identifies those 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.¹³⁰

37. As the instant transaction does not result in the acquisition of wireless business units and customers, we do not apply the initial HHI screen. In terms of spectrum aggregation, and as noted above, T-Mobile, as a result of the two proposed assignments, would acquire 10 to 20 megahertz of 600 MHz spectrum in 167 counties in all or parts of 50 CMAs, which together cover approximately 27% of the population of the United States. We note that while this spectrum has already been attributed to T-Mobile due to underlying spectrum manager leasing arrangements that were previously approved,¹³¹ we nonetheless undertake our market-by-market analysis to ensure that the public interest, convenience, and necessity is served. Post-transaction, T-Mobile would hold a maximum of 440 megahertz of spectrum, including a maximum of 66 megahertz of below-1-GHz spectrum.¹³²

2. Market-by-Market Analysis

38. Consistent with existing Commission precedent,¹³³ we consider various competitive variables that help to predict the likelihood of competitive harm as a result of the proposed transaction.

¹²⁸ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10609, para. 73; *AT&T-Leap Order*, 29 FCC Rcd at 2752, para. 37; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2334-35, para. 37; see also *Verizon-TracFone Order*, 36 FCC Rcd at 17005-06, para. 32. In addition, we recognize that mobile virtual network operators may provide additional competitive constraints, which we account for in our evaluation of the likely competitive effects. See, e.g., *Verizon-TracFone Order*, 36 FCC Rcd at 17005-06, para. 32; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10609, para. 73; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3638, para. 16 & n.48; *AT&T-Leap Order*, 29 FCC Rcd at 2752, para. 37.

¹²⁹ The initial HHI screen identifies, for further case-by-case market analysis, those markets in which, post-transaction: (1) the HHI would be greater than 2800 and the change in HHI would be 100 or greater; or (2) the change in HHI would be 250 or greater, regardless of the level of the HHI. See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10614, para. 87 & n.277; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3638-39, para. 17 & n.50; *AT&T-Leap Order*, 29 FCC Rcd at 2753, para. 41 & n.140; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2335, para. 38 & n.94.

¹³⁰ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10614, para. 87; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3638-39, para. 17; *AT&T-Leap Order*, 29 FCC Rcd at 2753, para. 41; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2335, para. 38. 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 also apply enhanced factor review. *Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6233, 6240, paras. 267, 286-88.

¹³¹ *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, paras. 2, 4.

¹³² The current trigger for enhanced factor review is 68 megahertz.

¹³³ See, e.g., *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14063-65, paras. 11-13; *T-Mobile-Sprint Order*, 34 FCC Rcd at 10620-23, paras. 101, 106; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3640-41, para. 21; *AT&T-Leap Order*, 29 FCC Rcd at 2767, para. 75.

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;¹³⁴ the rival firms' market shares;¹³⁵ the applicant's market share; the total amount of spectrum available;¹³⁶ the amount of spectrum suitable for the provision of mobile telephony/broadband services controlled by the applicant; and the spectrum holdings of each of the rival service providers and licensees.¹³⁷ Further, we consider whether current service providers can access additional spectrum in the market either through auction or on the secondary market.¹³⁸ In assessing spectrum concentration and its likely competitive effects, we are cognizant of the need to prevent the undue concentration of spectrum and to promote the dissemination of licenses among a wide variety of applicants.¹³⁹

a. Analysis by Geographical Cluster

39. *Mid-Atlantic*: There are eight CMAs in the Mid-Atlantic region of the United States in which T-Mobile would be attributed post-assignment with spectrum such that its holdings are above the spectrum screen trigger.¹⁴⁰ All of these CMAs—Philadelphia, PA, Washington, DC-MD-VA,

¹³⁴ We base the coverage analysis on providers' coverage data they submitted pursuant to the Broadband Data Collection for coverage as of December 31, 2022. Broadband Deployment Accuracy and Technological Availability Act, Pub. L. No. 116-130, 134 Stat. 228 (2020) (codified at 47 U.S.C. §§ 641-646) (Broadband DATA Act); 47 U.S.C. § 642(a)(1)(A) (Broadband Data Collection).

¹³⁵ We base providers' market shares analysis on Numbering Resource Utilization/Forecast (NRUF) data, which indicate the number of phone numbers that a wireless service provider has been assigned in a particular rate center (there are approximately 18,000 rate centers in the country). See 47 CFR § 52.15(e)(5); see also *Applications of T-Mobile License LLC, Nextel West Corp, And LB License Co., LLC For License Assignment; Application of T-Mobile License LLC, Nextel West Corp., And Channel 51 License Company LLC For License Assignment; Numbering Resource Utilization and Forecast (NRUF) Reports And Local Number Portability (LNP) Reports Placed Into the Record, Subject to the Protective Order*, CC Docket 99-200, ULS File Nos. 0010168412, 0010168420, 0010168439, Public Notice, DA-23-1183 (WTB/OEA Dec. 19, 2023). Rate centers are geographic areas used by local exchange carriers for a variety of reasons, including the determination of toll rates. *2022 Communications Marketplace Report* at 56, para. 73 & n.181. We calculate the total number of wireless subscribers from the total number of assigned phone numbers reported by wireless service providers in their required NRUF reports. For purposes of geographical analysis, the rate center data can be associated with a geographic point, and all points that fall within a county boundary can be aggregated together and associated with much larger geographic areas based on counties. We note that the aggregation to larger geographic areas, such as to whole counties or groups of counties, reduces the level of inaccuracy inherent in combining non-coterminous areas, such as rate center areas and counties.

¹³⁶ The total amount of suitable and available spectrum in the total spectrum screen is currently 1,123 megahertz and the associated total spectrum screen trigger is 385 megahertz, while the below-1-GHz trigger for enhanced factor review is 68 megahertz. Regarding high-band millimeter wave (mmW) spectrum, the Commission has made 4,950 megahertz available for licensed use, and adopted a separate threshold for mmW spectrum holdings, with an associated mmW threshold trigger of 1,850 megahertz.

¹³⁷ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10621, para. 102; *Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6238, para. 280.

¹³⁸ See, e.g., *T-Mobile License LLC, Cellco Partnership, Applications for 3.7-3.98 GHz Band Licenses, Auction No. 107*, Memorandum Opinion and Order, 36 FCC Rcd 11486, 11498, para. 28 (WTB 2021); *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14063-64, para. 11.

¹³⁹ *Mobile Spectrum Holdings Report and Order*, 29 FCC Rcd at 6136-37, para. 6.

¹⁴⁰ In numerical order, the eight CMAs are: CMA 4: Philadelphia, PA; CMA 8: Washington, DC-MD-VA; CMA 69: Wilmington, DE-NJ-MD; CMA 105: Lancaster, PA; CMA 118: Reading, PA; CMA 134: Atlantic City, NJ; CMA 228: Vineland-Millville, NJ; and CMA 359: Delaware 1-Kent.

Wilmington, DE-NJ-MD, Lancaster, PA, Reading, PA, Atlantic City, NJ, Vineland-Millville, NJ, and Delaware 1–Kent—are non-rural markets with populations ranging from approximately 154,000 to 5.5 million, and with population densities of 272 to 1,923 people per square mile.¹⁴¹

40. *Record.* DISH argues that T-Mobile exceeds the spectrum screen in Philadelphia, Pennsylvania by holding approximately 395 megahertz of spectrum.¹⁴² The Applicants claim that there is no public interest harm from spectrum aggregation in this cluster, based on the spectrum held by other licensees, and both existing and projected 4G LTE and 5G-NR buildout by the other providers in these markets.¹⁴³ Specifically, the Applicants argue that both Verizon Wireless and AT&T have complete 4G LTE and 5G-NR coverage in this cluster, and that while DISH’s 5G-NR coverage in this cluster is not clear,¹⁴⁴ DISH holds a substantial amount of spectrum for build-out of its network.¹⁴⁵

41. *Analysis.*¹⁴⁶ Considering these eight non-rural markets, T-Mobile held 390 to 430 megahertz of spectrum on a county-by-county basis pre-transaction.¹⁴⁷ Due to the assignment applications, T-Mobile would continue to hold a maximum of 430 megahertz of spectrum on a county-by-county basis post-transaction.¹⁴⁸ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 60 to 80 megahertz and Verizon Wireless won 160 megahertz of 3.7 GHz spectrum in Auction 107 in these markets. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in these markets, while DISH also won 40 megahertz. Currently, AT&T holds 255 to 291 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 277 to 297 megahertz of spectrum. In addition, DISH holds 125 to 141 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 20 megahertz of spectrum on a county-by-county basis across these markets.

42. Regarding coverage in these eight non-rural markets,¹⁴⁹ AT&T, T-Mobile, and Verizon Wireless each have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in these

¹⁴¹ The population density is measured by the number of people per square mile using 2020 Census data. Rural markets are 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*, Report and Order, 19 FCC Rcd 19078, 19087-88, paras. 11-12 (2004).

¹⁴² DISH Petition at 6 & n.20.

¹⁴³ See the Applicants’ Updated Spectrum Aggregation Exhibit at 10-14 (filed Nov. 10, 2023), in which the Applicants discuss the markets by region.

¹⁴⁴ Applicants’ Updated Spectrum Aggregation Exhibit at 10-11 (filed Nov. 10, 2023).

¹⁴⁵ Applicants’ Updated Spectrum Aggregation Exhibit at 11-12 (filed Nov. 10, 2023).

¹⁴⁶ As a threshold matter, we again note that T-Mobile is already attributed with the spectrum that it is acquiring in these markets, as a result of the previously approved underlying spectrum manager leasing arrangements. *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

¹⁴⁷ We derive spectrum holdings from the Applicants’ submissions and our licensing databases as of August 25, 2023. See, e.g., *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3640-41, para. 21 & n.66; *AT&T-Leap Order*, 29 FCC Rcd at 2767, para. 75 & n.261.

¹⁴⁸ T-Mobile also holds 1,300 to 1,625 megahertz of mmW spectrum, while AT&T holds 1,000 to 1,100 megahertz, and Verizon Wireless holds 1,650 to 1,850 megahertz. Other licensees, including DISH, hold 200 to 600 megahertz.

¹⁴⁹ As noted above, we derive mobile broadband coverage from the December 2022 Broadband Data Collection data. For 4G LTE, these data are based on speed thresholds of 5/1 Mbps with a minimum cell edge probability of 90% and minimum cell loading of 50%. For 5G-NR, these data are based on speed thresholds of 7/1 Mbps and 35/3 Mbps with a minimum cell edge probability of 90% and minimum cell loading of 50%. 47 U.S.C. § 642(b)(2)(B)(ii); see also *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477*

(continued....)

markets.¹⁵⁰ Further, T-Mobile has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in seven of the eight markets, along with significant population and close-to-significant land area coverage in Vineland-Millville, NJ, while both AT&T and Verizon Wireless have significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in all but two of the eight non-rural markets—Atlantic City, NJ and Vineland-Millville, NJ. In these two markets, AT&T has significant 5G-NR population coverage at speeds of 7/1 Mbps in Atlantic City, NJ and Vineland-Millville, NJ, while Verizon Wireless has significant 5G-NR population coverage at speeds of 7/1 Mbps in Atlantic City, NJ and has deployed its 5G-NR network at speeds of 7/1 Mbps to some extent in Vineland-Millville, NJ.¹⁵¹ In addition, DISH has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in Lancaster, PA and Reading, PA, and has deployed its 5G-NR network at speeds of 7/1 Mbps to some extent in Philadelphia, PA, Wilmington, DE-NJ-MD, and Delaware 1-Kent.¹⁵²

43. As noted above, T-Mobile has already been using this spectrum as a result of the underlying spectrum manager leasing arrangements,¹⁵³ and we find no evidence in the record that this has led to anticompetitive effects in this geographic cluster. Based on our evaluation of the factors ordinarily considered, including the fact that multiple licensees have access to considerable amounts of spectrum, we find that the likelihood of competitive harm is low in these markets post-transaction. We find it highly unlikely that the assignment of 10 megahertz of spectrum to T-Mobile in this cluster would allow it to foreclose entry, raise rivals' costs, or otherwise harm the public interest.

44. *Midwest*: There are five CMAs in the Midwest United States in which T-Mobile would be attributed post-assignment with spectrum such that its holdings are above the spectrum screen trigger.¹⁵⁴ Four of these CMAs—St. Louis, MO-IL, Minneapolis-St. Paul, MN-WI, Columbus, OH, and

Data Program, WC Docket Nos. 19-195 and 11-10, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460, 7479-80, paras. 44-45 (2020) (*BDC Second Report and Order*). For 4G LTE and 5G-NR, providers must submit two types of propagation maps: one that models outdoor stationary usage and one that models in-vehicle mobile usage. See *BDC Second Report and Order*, 35 FCC Rcd at 7481-82, para. 48. We report the various speed thresholds based on the outdoor stationary propagation maps.

¹⁵⁰ 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., *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3642-44, para. 25 & n.77; *AT&T-Leap Order*, 29 FCC Rcd at 2769-70, para. 81 & n.279.

¹⁵¹ In terms of 5G-NR coverage at speeds of 35/3 Mbps, T-Mobile has significant population and land area coverage in five of the eight markets, as well as significant population coverage in Atlantic City, NJ and Vineland-Millville, NJ, and has deployed its network to some extent in Delaware 1-Kent. Further, AT&T has close-to-significant 5G-NR land area coverage at speeds of 35/3 Mbps in Lancaster, PA and has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in the other seven markets while Verizon Wireless has significant 5G-NR population and land area coverage at speeds of 35/3 Mbps in three of the eight markets, as well as significant 5G-NR population coverage and close-to-significant land area coverage in Wilmington, DE-NJ-MD and Reading, PA, significant 5G-NR population coverage in Atlantic City, NJ and Delaware 1-Kent, and has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in Vineland-Millville, NJ. In addition, DISH has significant 5G-NR population and land area coverage at speeds of 35/3 Mbps in Reading, PA, significant 5G-NR land area coverage at speeds of 35/3 Mbps in Lancaster, PA, and has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in Philadelphia, PA, Wilmington, DE-NJ-MD, and Delaware 1-Kent.

¹⁵² According to the December 2022 NRUF data, in terms of significant market share, T-Mobile holds { [redacted] } % in these non-rural Mid-Atlantic markets, while AT&T holds { [redacted] } %, and Verizon Wireless holds { [redacted] } %. No other service providers have a significant market share in this cluster.

¹⁵³ *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

¹⁵⁴ In numerical order, the five CMAs are: CMA 11: St. Louis, MO-IL; CMA 15: Minneapolis-St. Paul, MN-WI; CMA 31: Columbus, OH; CMA 198: St. Cloud, MN; and CMA 399: Illinois 6-Montgomery.

St. Cloud, MN—are non-rural markets with populations ranging from approximately 297,000 to 3.5 million, and with population densities of 134 to 732 people per square mile. The other CMA—Illinois 6–Montgomery—is a rural market with a population of approximately 194,000, and a population density of 45 people per square mile.

45. *Record.* DISH argues that T-Mobile exceeds the spectrum screen in St. Louis, Missouri by holding approximately 388 megahertz of spectrum and in Minneapolis-St. Paul, Minnesota and Wisconsin by holding approximately 404 megahertz of spectrum.¹⁵⁵ Further, DISH objects that T-Mobile would hold five blocks of 600 MHz spectrum in St. Louis, Missouri as a result of this transaction.¹⁵⁶ The Applicants claim that there is no harm from spectrum aggregation in this cluster, based on the spectrum held by other licensees, and both existing and projected 4G LTE and 5G-NR buildout by the other providers in these markets.¹⁵⁷ Specifically, the Applicants argue that both Verizon Wireless and AT&T have nearly complete 4G LTE and 5G-NR coverage in this cluster, and that while DISH's 5G-NR coverage in this cluster is not clear,¹⁵⁸ DISH holds a substantial amount of spectrum for build-out of its network.¹⁵⁹

46. *Analysis.*¹⁶⁰ Considering first the four non-rural markets, T-Mobile held 348 to 440 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 440 megahertz of spectrum on a county-by-county basis post-transaction.¹⁶¹ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 160 megahertz of 3.7 GHz spectrum in Auction 107 in these markets. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in these markets, while DISH won 20 to 40 megahertz. Currently, AT&T holds 255 to 300 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 267 to 297 megahertz of spectrum. In addition, DISH holds 111 to 141 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 42 megahertz of spectrum on a county-by-county basis across these markets.

47. Regarding coverage in these four non-rural markets, AT&T, T-Mobile, and Verizon Wireless each have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in these markets. Further, AT&T, T-Mobile, and Verizon Wireless also have significant 5G-NR population and

¹⁵⁵ DISH Petition at 6 & n.20.

¹⁵⁶ DISH Reply at 11.

¹⁵⁷ Applicants' Updated Spectrum Aggregation Exhibit at 18-23, 26-30 (filed Nov. 10, 2023).

¹⁵⁸ Applicants' Updated Spectrum Aggregation Exhibit at 19-20, 27-28 (filed Nov. 10, 2023). According to the Applicants, DISH does not appear to have availability in Minneapolis-St. Paul, MN-WI and St. Cloud, MN. *Id.*

¹⁵⁹ Applicants' Updated Spectrum Aggregation Exhibit at 20-21, 28 (filed Nov. 10, 2023).

¹⁶⁰ As a threshold matter, we again note that T-Mobile is already attributed with the spectrum that it is acquiring in these markets, as a result of the previously approved underlying spectrum manager leasing arrangements. *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

¹⁶¹ T-Mobile also holds 850 to 1,425 megahertz of mmW spectrum, while AT&T holds 1,000 to 1,100 megahertz, and Verizon Wireless holds 1,425 to 1,850 megahertz. Other licensees, including DISH, hold 200 to 1,000 megahertz.

land area coverage at speeds of 7/1 Mbps in these markets.¹⁶² In addition, DISH has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in St. Louis, MO-IL and Columbus, OH.¹⁶³

48. In the rural market—Illinois 6–Montgomery—T-Mobile held 258.5 to 418 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 418 megahertz of spectrum post-transaction.¹⁶⁴ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 160 to 200 megahertz of 3.7 GHz spectrum in Auction 107 in this market. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in this market, while DISH won 20 to 40 megahertz. Currently, AT&T holds 275 to 295 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 257 to 317 megahertz of spectrum. In addition, DISH holds 101 to 131 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 52 megahertz of spectrum in this market.

49. Regarding coverage in this rural market, AT&T, T-Mobile, and Verizon Wireless each have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in this market. Further, AT&T has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps while T-Mobile and Verizon Wireless each have deployed their 5G-NR networks at speeds of 7/1 Mbps to some extent in this rural market.¹⁶⁵ In addition, DISH has deployed its 5G-NR network at speeds of 7/1 Mbps to some extent in this rural market.¹⁶⁶

50. As noted above, T-Mobile has already been using this spectrum as a result of the underlying spectrum manager leasing arrangements,¹⁶⁷ and we find no evidence in the record that this has led to anticompetitive effects in this geographic cluster. Based on our evaluation of the factors ordinarily considered, as noted above, including the fact that multiple licensees have access to considerable amounts of spectrum, we find that the likelihood of competitive harm is low in these markets post-transaction. We find it highly unlikely that the assignment of 10 to 20 megahertz of spectrum to T-Mobile in this cluster would allow it to foreclose entry, raise rivals' costs, or otherwise harm the public interest.

¹⁶² In terms of 5G-NR coverage at speeds of 35/3 Mbps, T-Mobile has significant population and land area coverage in Minneapolis-St. Paul, MN-WI and Columbus, OH, as well as significant population coverage and close-to-significant land area coverage in St. Louis, MO-IL and significant population coverage in St. Cloud, MN. Further, AT&T has significant 5G-NR population and land area coverage at speeds of 35/3 Mbps in St. Louis, MO-IL, close-to-significant 5G-NR land area coverage at speeds of 35/3 Mbps in Minneapolis-St. Paul, MN-WI, and has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in the other two markets, while Verizon Wireless has significant 5G-NR population and land area coverage at speeds of 35/3 Mbps in all four markets. In addition, DISH has significant 5G-NR population and land area coverage at speeds of 35/3 Mbps in St. Louis, MO-IL and significant 5G-NR population coverage and close-to-significant land area coverage at speeds of 35/3 Mbps in Columbus, OH.

¹⁶³ According to the December 2022 NRUF data, in terms of significant market share, T-Mobile holds {{ }} % in these non-rural Midwestern markets, while AT&T holds {{ }} %, and Verizon Wireless holds {{ }} %. No other service providers have a significant market share in these non-rural markets.

¹⁶⁴ T-Mobile also holds 700 to 1,000 megahertz of mmW spectrum, while AT&T holds 1,000 to 1,100 megahertz, and Verizon Wireless holds 1,000 to 1,850 megahertz. Other licensees, including DISH, hold 200 to 850 megahertz.

¹⁶⁵ In terms of 5G-NR coverage at speeds of 35/3 Mbps, AT&T, T-Mobile, and Verizon Wireless each have deployed their 5G-NR networks to some extent in this rural market.

¹⁶⁶ According to the December 2022 NRUF data, in terms of significant market share, AT&T holds {{ }} % while Verizon Wireless holds {{ }} % in Illinois 6–Montgomery. No other service providers have a significant market share in this rural Midwestern market. T-Mobile has some market presence in Illinois 6–Montgomery with a market share of {{ }} %.

¹⁶⁷ *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

51. *New England*: There are six CMAs in the New England region of the United States in which T-Mobile would be attributed post-assignment with spectrum such that its holdings are above the spectrum screen trigger.¹⁶⁸ All six of these CMAs—Boston-Brockton-Lowell, MA-NH, Providence-Warwick, RI, Worcester-Leominster, MA, New Bedford-Fall River, MA, Massachusetts 2–Barnstable, and Rhode Island 1–Newport—are non-rural markets with populations ranging from approximately 85,600 to 4.8 million, and with population densities of 453 to 1,502 people per square mile.

52. *Record*. DISH argues that T-Mobile exceeds the spectrum screen in Boston, Massachusetts by holding approximately 381 megahertz of spectrum.¹⁶⁹ The Applicants claim that there is no harm from spectrum aggregation in this cluster, based on the spectrum held by other licensees, and both existing and projected 4G LTE and 5G-NR buildout by the other providers in these markets.¹⁷⁰ Specifically, the Applicants argue that both Verizon Wireless and AT&T have complete 4G LTE and 5G-NR coverage in this cluster, and that while DISH's 5G-NR coverage in this cluster is not clear,¹⁷¹ DISH holds a substantial amount of spectrum for build-out of its network.¹⁷²

53. *Analysis*.¹⁷³ Considering the six non-rural markets, T-Mobile held 360 to 440 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 440 megahertz of spectrum on a county-by-county basis post-transaction.¹⁷⁴ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 160-200 megahertz of 3.7 GHz spectrum in Auction 107 in these markets. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in these markets, while DISH won 20 to 40 megahertz. Currently, AT&T holds 251 to 261 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 267 to 317 megahertz of spectrum. In addition, DISH holds 120 to 140 megahertz of spectrum. Finally, multiple other licensees hold between 5 and 20 megahertz of spectrum on a county-by-county basis across these markets.

54. Regarding coverage in these six non-rural markets, AT&T, T-Mobile, and Verizon Wireless each have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in four of the six markets, as well as significant 4G LTE population coverage at speeds of 5/1 Mbps in Massachusetts 2–Barnstable and Rhode Island 1–Newport. Further, AT&T and T-Mobile have significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in four of the six markets and significant 5G-NR population coverage at speeds of 7/1 Mbps in Massachusetts 2–Barnstable and Rhode Island 1–Newport,¹⁷⁵ while Verizon Wireless has significant 5G-NR population and land area coverage at speeds

¹⁶⁸ In numerical order, the six CMAs are: CMA 6: Boston-Brockton-Lowell, MA-NH; CMA 38: Providence-Warwick, RI; CMA 55: Worcester-Leominster, MA; CMA 76: New Bedford-Fall River, MA; CMA 471: Massachusetts 2–Barnstable; and CMA 624: Rhode Island 1–Newport.

¹⁶⁹ DISH Petition at 6 & n.20.

¹⁷⁰ Applicants' Updated Spectrum Aggregation Exhibit at 10-14 (filed Nov. 10, 2023).

¹⁷¹ Applicants' Updated Spectrum Aggregation Exhibit at 10-11 (filed Nov. 10, 2023).

¹⁷² Applicants' Updated Spectrum Aggregation Exhibit at 11-12 (filed Nov. 10, 2023).

¹⁷³ As a threshold matter, we again note that T-Mobile is already attributed with the spectrum that it is acquiring in these markets, as a result of the previously approved underlying spectrum manager leasing arrangements. *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

¹⁷⁴ T-Mobile also holds 1,200 to 1,625 megahertz of mmW spectrum, while AT&T holds 1,000 to 1,100 megahertz, and Verizon Wireless holds 1,100 to 1,750 megahertz. Other licensees, including DISH, hold 200 to 600 megahertz.

¹⁷⁵ In terms of 5G-NR coverage at speeds of 35/3 Mbps, T-Mobile has significant population and land area coverage in New Bedford-Fall River, MA, significant population coverage and close-to-significant land area coverage in Boston-Brockton-Lowell, MA-NH and Worcester-Leominster, MA, significant population coverage in Providence-

(continued....)

of 7/1 Mbps in two of the six markets, as well as significant 5G-NR population coverage and close-to-significant land area coverage at speeds of 7/1 Mbps in Providence-Warwick, RI and significant 5G-NR population coverage at speeds of 7/1 Mbps in Worcester-Leominster, MA, Massachusetts 2–Barnstable, and Rhode Island 1-Newport.¹⁷⁶

55. As noted above, T-Mobile has already been using this spectrum as a result of the underlying spectrum manager leasing arrangements,¹⁷⁷ and we find no evidence in the record that this has led to anticompetitive effects in this geographic cluster. Based on our evaluation of the factors ordinarily considered, as noted above, including the fact that multiple licensees have access to considerable amounts of spectrum, we find that the likelihood of competitive harm is low in these markets post-transaction. We find it highly unlikely that the assignment of 20 megahertz of spectrum to T-Mobile in this cluster would allow it to foreclose entry, raise rivals' costs, or otherwise harm the public interest.

56. *California–North*: There are seven CMAs in Northern California in which T-Mobile would be attributed post-assignment with spectrum such that its holdings are above the spectrum screen trigger.¹⁷⁸ All of these CMAs—San Francisco-Oakland, San Jose, Stockton, Vallejo-Fairfield-Napa, Santa Rosa-Petaluma, Modesto, and Santa Cruz—are non-rural markets with populations ranging from approximately 271,000 to 4.7 million, and with population densities of 309 to 1,892 people per square mile.

57. *Record*. The Applicants claim that there is no harm from spectrum aggregation in this cluster, based on the spectrum held by other licensees, and both existing and projected 4G LTE and 5G-NR buildout by the other providers in these markets.¹⁷⁹ Specifically, the Applicants argue that both Verizon Wireless and AT&T have substantial 4G LTE and 5G-NR coverage and mature network deployments in this cluster, and that while DISH's 5G-NR coverage in this cluster is not clear,¹⁸⁰ DISH holds a substantial amount spectrum for build-out of its network.¹⁸¹

Warwick, RI and Rhode Island 1–Newport, and has deployed its 5G-NR network to some extent in Massachusetts 2–Barnstable. Further, AT&T has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in all six markets, while Verizon Wireless has significant 5G-NR population coverage and close-to-significant land area coverage at speeds of 35/3 Mbps in New Bedford-Fall River, MA, significant 5G-NR population coverage at speeds of 35/3 Mbps in Boston-Brockton-Lowell, MA-NH and Providence-Warwick, RI, and has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in the remaining three markets.

¹⁷⁶ According to the December 2022 NRUF data, in terms of significant market share in five of the six markets, T-Mobile holds { } % in these non-rural New England markets, while AT&T holds { } %, and Verizon Wireless holds { } %. No other service providers have a significant market share in this cluster. We note that Rhode Island 1-Newport is a single-county market; for this reason we believe that the market shares for AT&T, T-Mobile, and Verizon Wireless in this market of { } %, respectively, are unreliable and inaccurate so we do not report them here.

¹⁷⁷ *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

¹⁷⁸ In numerical order, the seven CMAs are: CMA 7: San Francisco-Oakland, CA; CMA 27: San Jose, CA; CMA 107: Stockton, CA; CMA 111: Vallejo-Fairfield-Napa, CA; CMA 123: Santa Rosa-Petaluma, CA; CMA 142: Modesto, CA; and CMA 175: Santa Cruz, CA.

¹⁷⁹ Applicants' Updated Spectrum Aggregation Exhibit at 4-9 (filed Nov. 10, 2023).

¹⁸⁰ Applicants' Updated Spectrum Aggregation Exhibit at 4-6 (filed Nov. 10, 2023).

¹⁸¹ Applicants' Updated Spectrum Aggregation Exhibit at 6-7 (filed Nov. 10, 2023).

58. *Analysis.*¹⁸² Considering these seven markets, T-Mobile held 386.8 to 420 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 420 megahertz of spectrum on a county-by-county basis post-transaction.¹⁸³ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 140 megahertz of 3.7 GHz spectrum in Auction 107 in these markets. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in these markets, while DISH won 30 megahertz. Currently, AT&T holds 261 to 316 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 237 to 267 megahertz of spectrum. In addition, DISH holds 125 to 135 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 30 megahertz of spectrum on a county-by-county basis across these markets.

59. Regarding coverage in these markets, AT&T and Verizon Wireless have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in all seven markets while T-Mobile has significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in five of the seven markets, as well as significant 4G LTE population coverage at speeds of 5/1 Mbps in Santa Rosa-Petaluma and Santa Cruz. Further, AT&T and Verizon Wireless have significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in five of the seven markets, significant 5G-NR population coverage and close-to-significant land area coverage at speeds of 7/1 Mbps in Santa Rosa-Petaluma, and significant 5G-NR population coverage at speeds of 7/1 Mbps in Santa Cruz while T-Mobile has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in two of the seven markets, significant 5G-NR population coverage at speeds of 7/1 Mbps in San Francisco-Oakland, San Jose, Vallejo-Fairfield-Napa, and Santa Rosa-Petaluma, CA, and has deployed its 5G-NR network at speeds of 7/1 Mbps to some extent in Santa Cruz.¹⁸⁴ In addition, DISH has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in Stockton, significant 5G-NR population coverage at speeds of 7/1 Mbps in Modesto, and has deployed its 5G-NR network at speeds of 7/1 Mbps to some extent in San Francisco-Oakland.¹⁸⁵

60. As noted above, T-Mobile has already been using this spectrum as a result of the underlying spectrum manager leasing arrangements,¹⁸⁶ and we find no evidence in the record that this has led to anticompetitive effects in this geographic cluster. Based on our evaluation of the factors ordinarily

¹⁸² As a threshold matter, we again note that T-Mobile is already attributed with the spectrum that it is acquiring in these markets, as a result of the previously approved underlying spectrum manager leasing arrangements. *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

¹⁸³ T-Mobile also holds 1,300 to 1,400 megahertz of mmW spectrum, while AT&T holds 1,100 megahertz, and Verizon Wireless holds 1,000 to 1,850 megahertz. Other licensees, including DISH, hold 200 to 850 megahertz.

¹⁸⁴ In terms of 5G-NR coverage at speeds of 35/3 Mbps, T-Mobile has significant population coverage in five of the seven markets, and has deployed its 5G-NR network to some extent in Santa Rosa-Petaluma and Santa Cruz. Further, AT&T has significant 5G-NR population and land area coverage at speeds of 35/3 Mbps in two of the seven markets, significant 5G-NR population coverage at speeds of 35/3 Mbps in San Francisco-Oakland, San Jose, and Vallejo-Fairfield-Napa, and has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in Santa Rosa-Petaluma and Santa Cruz while Verizon Wireless has significant 5G-NR population coverage and land area coverage at speeds of 35/3 Mbps in three of the seven markets, significant 5G-NR population coverage and close-to-significant land area coverage at speeds of 35/3 Mbps in San Jose, and significant 5G-NR population coverage at speeds of 35/3 Mbps in San Francisco-Oakland, Santa Rosa-Petaluma, and Santa Cruz. In addition, DISH has significant 5G-NR population coverage and close-to-significant land area coverage at speeds of 35/3 Mbps in Stockton and significant 5G-NR population coverage at speeds of 35/3 Mbps in Modesto.

¹⁸⁵ According to the December 2022 NRUF data, in terms of significant market share, T-Mobile holds {{ }} % in these Northern California markets, while AT&T holds {{ }} %, and Verizon Wireless holds {{ }} %. No other service providers have a significant market share in this cluster.

¹⁸⁶ *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

considered, as noted above, including the fact that multiple licensees have access to considerable amounts of spectrum, we find that the likelihood of competitive harm is low in these markets post-transaction. We find it highly unlikely that the assignment of 10 megahertz of spectrum to T-Mobile in this cluster would allow it to foreclose entry, raise rivals' costs, or otherwise harm the public interest.

61. *South*: There are six CMAs in the Southern United States in which T-Mobile would be attributed post-assignment with spectrum such that its holdings are above the spectrum screen trigger.¹⁸⁷ Five of these CMAs—Atlanta, GA, Tampa-St. Petersburg, FL, Athens, GA, Florida 4—Citrus, and Georgia 2—Dawson—are non-rural markets with populations ranging from approximately 276,500 to 5.4 million, and with population densities of 191 to 1,404 people per square mile. The other CMA—Georgia 4—Jasper—is a rural market with a population of approximately 155,000, and a population density of 45 people per square mile.

62. *Record*. DISH argues that T-Mobile exceeds the spectrum screen in Tampa, Florida by holding approximately 383 megahertz of spectrum.¹⁸⁸ The Applicants claim that there is no harm from spectrum aggregation in this cluster, based on the spectrum held by other licensees, and both existing and projected 4G LTE and 5G-NR buildout by the other providers in these markets.¹⁸⁹ Specifically, the Applicants argue that both Verizon Wireless and AT&T have complete 4G LTE and 5G-NR coverage in this cluster, except for a few areas of wilderness, and that while DISH's 5G-NR coverage in this cluster is not clear,¹⁹⁰ DISH holds a substantial amount of spectrum for build-out of its network.¹⁹¹

63. *Analysis*.¹⁹² Considering first the five non-rural markets, T-Mobile held 370 to 420 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 420 megahertz of spectrum on a county-by-county basis post-transaction.¹⁹³ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 140 to 160 megahertz of 3.7 GHz spectrum in Auction 107 in these markets. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in these markets, while DISH won 40 megahertz. Currently, AT&T holds 255 to 280 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 252 to 297 megahertz of spectrum. In addition, DISH holds 131 to 141 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 40 megahertz of spectrum on a county-by-county basis across these markets.

64. Regarding coverage in these five non-rural markets, AT&T, T-Mobile, and Verizon Wireless each have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in these markets.¹⁹⁴ Further, T-Mobile has significant 5G-NR population and land area coverage at speeds of 7/1

¹⁸⁷ In numerical order, the six CMAs are: CMA 17: Atlanta, GA; CMA 22: Tampa-St. Petersburg, FL; CMA 234: Athens, GA; CMA 363: Florida 4—Citrus; CMA 372: Georgia 2—Dawson; and CMA 374: Georgia 4—Jasper.

¹⁸⁸ DISH Petition at 6 & n.20.

¹⁸⁹ Applicants' Updated Spectrum Aggregation Exhibit at 14-18, 23-26 (filed Nov. 10, 2023).

¹⁹⁰ Applicants' Updated Spectrum Aggregation Exhibit at 15-16, 24-25 (filed Nov. 10, 2023).

¹⁹¹ Applicants' Updated Spectrum Aggregation Exhibit at 16, 25 (filed Nov. 10, 2023).

¹⁹² As a threshold matter, we again note that T-Mobile is already attributed with the spectrum that it is acquiring in these markets, as a result of the previously approved underlying spectrum manager leasing arrangements. *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

¹⁹³ T-Mobile also holds 1,200 to 1,625 megahertz of mmW spectrum, while AT&T holds 1,100 megahertz, and Verizon Wireless holds 1,200 to 1,850 megahertz. Other licensees, including DISH, hold 425 to 850 megahertz.

¹⁹⁴ We note that Southern Linc holds 7.5 megahertz of below-1-GHz spectrum in Atlanta, GA, where it has close-to-significant 4G LTE land area coverage, Athens, GA, where it has significant 4G LTE land area coverage, and Georgia 2—Dawson.

Mbps in these markets, and AT&T has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in every non-rural market except for Georgia 2–Dawson, where it has significant 5G-NR population coverage at speeds of 7/1 Mbps. Verizon Wireless has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in Atlanta, GA, significant 5G-NR population coverage and close-to-significant land area coverage at speeds of 7/1 Mbps in Tampa-St. Petersburg, FL, significant 5G-NR population coverage at speeds of 7/1 Mbps in Athens, GA and Florida 4–Citrus, and close-to-significant 5G-NR population coverage at speeds of 7/1 Mbps in Georgia 2–Dawson.¹⁹⁵ In addition, DISH has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in Florida 4–Citrus and has deployed its 5G-NR network at speeds of 7/1 Mbps to some extent in Atlanta, GA, Athens, GA, and Georgia 2–Dawson.¹⁹⁶

65. In the rural market—Georgia 4–Jasper—T-Mobile held 356.7 to 389.2 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 389.2 megahertz of spectrum post-transaction.¹⁹⁷ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 160 to 200 megahertz of 3.7 GHz spectrum in Auction 107 in this market. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in this market, while DISH won 20-40 megahertz. Currently, AT&T holds 255 to 285 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 277 to 327 megahertz of spectrum. In addition, DISH holds 101 to 131 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 40 megahertz of spectrum in this market.

66. Regarding coverage in this rural market, AT&T and Verizon Wireless each have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in this market, while T-Mobile has significant 4G LTE population coverage at speeds of 5/1 Mbps.¹⁹⁸ Further, AT&T has significant 5G-NR population coverage at speeds of 7/1 Mbps,¹⁹⁹ while T-Mobile and Verizon Wireless each have deployed their 5G-NR networks at speeds of 7/1 Mbps to some extent.²⁰⁰

¹⁹⁵ In terms of 5G-NR coverage at speeds of 35/3 Mbps, T-Mobile has significant population and land area coverage in Atlanta, GA and Athens, GA, significant population and close-to-significant land area coverage in Tampa-St. Petersburg, FL, significant population coverage in Florida 4–Citrus, and close-to-significant population coverage in Georgia 2–Dawson. AT&T has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in these markets. Verizon Wireless has significant 5G-NR population and land area coverage at speeds of 35/3 Mbps in Atlanta, GA, as well as significant 5G-NR population coverage at speeds of 35/3 Mbps in Tampa-St. Petersburg, FL, and has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in the remaining markets. In addition, DISH has significant 5G-NR population and close-to-significant 5G-NR land area coverage at speeds of 35/3 Mbps in Florida 4–Citrus and has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in Atlanta, GA, Athens, GA, and Georgia 2–Dawson.

¹⁹⁶ According to the December 2022 NRUF data, in terms of significant market share, T-Mobile holds {{ }} % in these non-rural Southern markets, while AT&T holds {{ }} %, and Verizon Wireless holds {{ }} %. No other service providers have a significant market share in these non-rural markets.

¹⁹⁷ T-Mobile also holds 600 to 1400 megahertz of mmW spectrum, while AT&T holds 1,000 to 1,100 megahertz, and Verizon Wireless holds 1,200 to 2,450 megahertz. Other licensees, including DISH, hold 300 to 850 megahertz.

¹⁹⁸ We note that Southern Linc holds 7.5 megahertz of below-1-GHz spectrum in Georgia 4–Jasper, but it does not have any significant 4G LTE coverage.

¹⁹⁹ In terms of 5G-NR coverage at speeds of 35/3 Mbps, AT&T, T-Mobile, and Verizon Wireless each have deployed their 5G-NR networks to some extent in this rural market.

²⁰⁰ According to the December 2022 NRUF data, in terms of significant market share, AT&T holds {{ }} % while Verizon Wireless holds {{ }} % in Georgia 4–Jasper. No other service providers have a significant market

(continued....)

67. As noted above, T-Mobile has already been using this spectrum as a result of the underlying spectrum manager leasing arrangements,²⁰¹ and we find no evidence in the record that this has led to anticompetitive effects in this geographic cluster. Based on our evaluation of the factors ordinarily considered, as noted above, including the fact that multiple licensees have access to considerable amounts of spectrum, we find that the likelihood of competitive harm is low in these markets post-transaction. We find it highly unlikely that the assignment of 10 megahertz of spectrum to T-Mobile in this cluster would allow it to foreclose entry, raise rivals' costs, or otherwise harm the public interest.

68. *California–South*: There are six CMAs in Southern California in which T-Mobile would be attributed post-assignment with spectrum such that its holdings are above the spectrum screen trigger.²⁰² Five of these CMAs—Los Angeles-Anaheim, Oxnard-Simi Valley-Ventura, Bakersfield, Santa Barbara, and Salinas-Seaside-Monterey—are non-rural markets with populations ranging from approximately 439,000 to 17.8 million, and with population densities of 112 to 553 people per square mile. The other CMA—California 5–San Luis Obispo—is a rural market with a population of approximately 282,400, and a population density of 85 people per square mile.

69. *Record*. DISH argues that T-Mobile exceeds the spectrum screen in Los Angeles, California by holding approximately 402 megahertz of spectrum.²⁰³ The Applicants claim that there is no harm from spectrum aggregation in this cluster, based on the spectrum held by other licensees, and both existing and projected 4G LTE and 5G-NR buildout by the other providers in these markets.²⁰⁴ Specifically, the Applicants argue that both Verizon Wireless and AT&T have substantial 4G LTE and 5G-NR coverage and mature network deployments in this cluster, and that while DISH's 5G-NR coverage in this cluster is not clear,²⁰⁵ DISH holds a substantial amount of spectrum for build-out of its network.²⁰⁶

70. *Analysis*.²⁰⁷ Considering first the five non-rural markets, T-Mobile held 410 to 430 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 430 megahertz of spectrum on a county-by-county basis post-transaction.²⁰⁸ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 140 megahertz of 3.7 GHz spectrum in Auction 107 in these markets. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in these markets, while DISH won 30 megahertz. Currently, AT&T holds 261 to 286 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 247 to 297 megahertz of spectrum. In addition,

share in this rural Southern market. T-Mobile has some market presence in Georgia 4–Jasper with a market share of {{ }} %.

²⁰¹ *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

²⁰² In numerical order, the six CMAs are: CMA 2: Los Angeles-Anaheim, CA; CMA 73: Oxnard-Simi Valley-Ventura, CA; CMA 97: Bakersfield, CA; CMA 124: Santa Barbara, CA; CMA 126: Salinas-Seaside-Monterey, CA; and CMA 340: California 5–San Luis Obispo.

²⁰³ DISH Petition at 6 & n.20.

²⁰⁴ Applicants' Updated Spectrum Aggregation Exhibit at 4-9 (filed Nov. 10, 2023).

²⁰⁵ Applicants' Updated Spectrum Aggregation Exhibit at 4-6 (filed Nov. 10, 2023).

²⁰⁶ Applicants' Updated Spectrum Aggregation Exhibit at 6-7 (filed Nov. 10, 2023).

²⁰⁷ As a threshold matter, we again note that T-Mobile is already attributed with the spectrum that it is acquiring in these markets, as a result of the previously approved underlying spectrum manager leasing arrangements. *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

²⁰⁸ T-Mobile also holds 1,100 to 1,380 megahertz of mmW spectrum, while AT&T holds 1,100 megahertz, and Verizon Wireless holds 1,000 to 1,950 megahertz. Other licensees, including DISH, hold 100 to 850 megahertz.

DISH holds 115 to 135 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 30 megahertz of spectrum on a county-by-county basis across these markets.

71. Regarding coverage in these five non-rural markets, Verizon Wireless has significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in three of the five markets and significant 4G LTE population coverage at speeds of 5/1 Mbps in Oxnard-Simi Valley-Ventura and Santa Barbara, and AT&T has significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in two of the five markets, significant 4G LTE population and close-to-significant land area coverage at speeds of 5/1 Mbps in Salinas-Seaside-Monterey, and significant 4G LTE population coverage at speeds of 5/1 Mbps in Oxnard-Simi Valley-Ventura and Santa Barbara, while T-Mobile has significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in two of the five markets and significant 4G LTE population coverage at speeds of 5/1 Mbps in Oxnard-Simi Valley-Ventura, Santa Barbara, and Salinas-Seaside-Monterey. Further, T-Mobile and Verizon Wireless have significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in Bakersfield and significant 5G-NR population coverage at speeds of 7/1 Mbps in the remaining four markets,²⁰⁹ while AT&T has significant 5G-NR population and land area coverage at speeds of 7/1 Mbps in Los Angeles-Anaheim, significant 5G-NR population coverage at speeds of 7/1 Mbps in Oxnard-Simi Valley-Ventura, Santa Barbara, and Salinas-Seaside-Monterey, and close-to-significant population coverage at speeds of 7/1 Mbps in Bakersfield.²¹⁰

72. In the rural market—California 5—San Luis Obispo—T-Mobile held 400 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 400 megahertz of spectrum post-transaction.²¹¹ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 140 megahertz of 3.7 GHz spectrum in Auction 107 in this market. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in this market, while DISH won 30 megahertz. Currently, AT&T holds 276 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 282 megahertz of spectrum. In addition, DISH holds 115 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 20 megahertz of spectrum in this market.

73. Regarding coverage in this rural market, AT&T and Verizon Wireless have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps while T-Mobile has significant 4G LTE population coverage at speeds of 5/1 Mbps in this rural market. Further, T-Mobile and Verizon Wireless

²⁰⁹ In terms of 5G-NR coverage at speeds of 35/3 Mbps, Verizon Wireless has significant population coverage in all five markets. Further, T-Mobile has significant 5G-NR population coverage at speeds of 35/3 Mbps in three of the five markets, close-to-significant 5G-NR population coverage at speeds of 35/3 Mbps in Santa Barbara, and has deployed its 5G-NR network to some extent at speeds of 35/3 Mbps in Salinas-Seaside-Monterey while AT&T has significant 5G-NR population coverage at speeds of 35/3 Mbps in two of the five markets, close-to-significant 5G-NR population coverage at speeds of 35/3 Mbps in Oxnard-Simi Valley-Ventura and has deployed its 5G-NR network to some extent at speeds of 35/3 Mbps in Bakersfield and Santa Barbara.

²¹⁰ According to the December 2022 NRUF data, in terms of significant market share, T-Mobile holds {{ }} % in these non-rural Southern California markets, while AT&T holds {{ }} %, and Verizon Wireless holds {{ }} %. No other service providers have a significant market share in these non-rural markets.

²¹¹ T-Mobile also holds 1,100 megahertz of mmW spectrum, while AT&T holds 1,100 megahertz, and Verizon Wireless holds 1,950 megahertz. Other licensees, including DISH, hold 100 to 700 megahertz.

have significant 5G-NR population coverage at speeds of 7/1 Mbps,²¹² while AT&T has close-to-significant 5G-NR population coverage at speeds of 7/1 Mbps in this rural market.²¹³

74. As noted above, T-Mobile has already been using this spectrum as a result of the underlying spectrum manager leasing arrangements,²¹⁴ and we find no evidence in the record that this has led to anticompetitive effects in this geographic cluster. Based on our evaluation of the factors ordinarily considered, as noted above, including the fact that multiple licensees have access to considerable amounts of spectrum, we find that the likelihood of competitive harm is low in these markets post-transaction. We find it highly unlikely that the assignment of 10 megahertz of spectrum to T-Mobile in this cluster would allow it to foreclose entry, raise rivals' costs, or otherwise harm the public interest.

75. *Southwest*: There are six CMAs in the Southwestern United States in which T-Mobile would be attributed post-assignment with spectrum such that its holdings are above the spectrum screen trigger.²¹⁵ Five of these CMAs—Houston, TX, Phoenix, AZ, Salt Lake City-Ogden, UT, Provo-Orem, UT, and Galveston-Texas City, TX—are non-rural markets with populations ranging from approximately 350,700 to 6.7 million, and with population densities of 201 to 986 people per square mile. The other CMA—Texas 21–Chambers—is a rural market with a population of approximately 46,600, and a population density of 76 people per square mile.

76. *Record*. DISH argues that T-Mobile exceeds the spectrum screen in Houston, Texas by holding approximately 394 megahertz of spectrum.²¹⁶ The Applicants claim that there is no harm from spectrum aggregation in this cluster, based on the spectrum held by other licensees, and both existing and projected 4G LTE and 5G-NR buildout by the other providers in these markets.²¹⁷ Specifically, the Applicants argue that both Verizon Wireless and AT&T have substantial 4G LTE and 5G-NR coverage and mature network deployments in this cluster, and that while DISH's 5G-NR coverage in this cluster is not clear,²¹⁸ DISH holds a substantial amount of spectrum for build-out of its network.²¹⁹

77. *Analysis*.²²⁰ Considering first the five non-rural markets, T-Mobile held 410 to 430 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 430 megahertz of spectrum on a county-by-county basis

²¹² In terms of 5G-NR coverage at speeds of 35/3 Mbps, T-Mobile and Verizon Wireless each have significant population coverage, while AT&T has deployed its 5G-NR network to some extent in this rural market.

²¹³ According to the December 2022 NRUF data, in terms of significant market share, T-Mobile holds {{ }} % in California 5–San Luis Obispo, while AT&T holds {{ }} % and Verizon Wireless holds {{ }} %. No other service providers have a significant market share in this rural Southern California market.

²¹⁴ *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

²¹⁵ In numerical order, the six CMAs are: CMA 10: Houston, TX; CMA 26: Phoenix, AZ; CMA 39: Salt Lake City-Ogden, UT; CMA 159: Provo-Orem, UT; CMA 170: Galveston-Texas City, TX; and CMA 672: Texas 21–Chambers.

²¹⁶ DISH Petition at 6 & n.20.

²¹⁷ Applicants' Updated Spectrum Aggregation Exhibit at 4-9, 14-18 (filed Nov. 10, 2023).

²¹⁸ Applicants' Updated Spectrum Aggregation Exhibit at 4-6, 15-16 (filed Nov. 10, 2023).

²¹⁹ Applicants' Updated Spectrum Aggregation Exhibit at 6-7, 16 (filed Nov. 10, 2023).

²²⁰ As a threshold matter, we again note that T-Mobile is already attributed with the spectrum that it is acquiring in these markets, as a result of the previously approved underlying spectrum manager leasing arrangements. *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

post-transaction.²²¹ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 160 megahertz of 3.7 GHz spectrum in Auction 107 in these markets. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in these markets, while DISH won 30 to 40 megahertz. Currently, AT&T holds 265 to 295 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 267 to 292 megahertz of spectrum. In addition, DISH holds 121 to 131 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 45 megahertz of spectrum on a county-by-county basis across these markets.

78. Regarding coverage in these five non-rural markets, AT&T, T-Mobile, and Verizon Wireless each have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in Houston, TX, Phoenix, AZ, and Provo-Orem, UT. In Salt Lake City-Ogden, UT, AT&T and Verizon Wireless have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps, while T-Mobile has significant population coverage. In Galveston-Texas City, TX, all three providers have significant 4G LTE population and close-to-significant 4G LTE land area coverage at speeds of 5/1 Mbps. Further, AT&T, T-Mobile, and Verizon Wireless have significant 5G-NR population coverage at speeds of 7/1 Mbps in these markets. T-Mobile and AT&T have significant 5G-NR land area coverage at speeds of 7/1 Mbps in Houston, TX and Provo-Orem, UT, as well as close-to-significant land area coverage in Galveston-Texas City, TX. AT&T also has significant 5G-NR land area coverage at speeds of 7/1 Mbps in Salt Lake City-Ogden, UT. Verizon Wireless has significant 5G-NR land area coverage at speeds of 7/1 Mbps in Houston, TX, Phoenix, AZ, and Provo-Orem, UT, as well as close-to-significant land area coverage in Galveston-Texas City, TX.²²² In addition, DISH has significant 5G-NR population coverage at speeds of 7/1 Mbps in all CMAs except Phoenix, AZ, as well as significant 5G-NR land area coverage at speeds of 7/1 Mbps in Houston, TX.²²³

79. In the rural market—Texas 21—Chambers—T-Mobile held 410 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 410 megahertz of spectrum post-transaction.²²⁴ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 160 megahertz of 3.7 GHz spectrum in Auction 107 in this market. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in this market, while DISH won 30 megahertz. Currently, AT&T holds 285 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 287 megahertz of spectrum. In addition, DISH holds 111 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 20 megahertz of spectrum in this market.

²²¹ T-Mobile also holds 1,000 to 1,400 megahertz of mmW spectrum, while AT&T holds 900 to 1,100 megahertz, and Verizon Wireless holds 1,600 to 1,850 megahertz. Other licensees, including DISH, hold 200 to 1,450 megahertz.

²²² In terms of 5G-NR coverage at speeds of 35/3 Mbps, T-Mobile and Verizon Wireless each have significant population coverage in all five CMAs as well as significant land area coverage in Houston, TX. In addition, T-Mobile has significant 5G-NR land area coverage at speeds of 35/3 Mbps in Provo-Orem, UT, and Verizon Wireless has significant 5G-NR land area coverage at speeds of 35/3 Mbps in Phoenix, AZ and close-to-significant coverage at speeds of 35/3 Mbps in Provo-Orem, UT. AT&T has close-to-significant population coverage at speeds of 35/3 Mbps in Phoenix, AZ, and has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in the remaining markets. In addition, DISH has significant 5G-NR population coverage at speeds of 35/3 Mbps in all CMAs except Phoenix, AZ as well as significant 5G-NR land area coverage at speeds of 35/3 Mbps in Houston, TX.

²²³ According to the December 2022 NRUF data, in terms of significant market share, T-Mobile holds {{ }} % in these non-rural Southwestern markets, while AT&T holds {{ }} %, and Verizon Wireless holds {{ }} %. No other service providers have a significant market share in these non-rural markets.

²²⁴ T-Mobile also holds 1,400 megahertz of mmW spectrum, while AT&T holds 1,000 megahertz, and Verizon Wireless holds 1,850 megahertz. Other licensees, including DISH, hold 200 to 500 megahertz.

80. Regarding coverage in this rural market, AT&T, T-Mobile, and Verizon Wireless each have significant 4G LTE population and land area coverage at speeds of 5/1 Mbps in this market. Further, AT&T, T-Mobile, and Verizon Wireless also have significant 5G-NR population and land area coverage at speeds of 7/1 Mbps.²²⁵ In addition, DISH has significant 5G-NR population coverage at speeds of 7/1 Mbps.²²⁶

81. As noted above, T-Mobile has already been using this spectrum as a result of the underlying spectrum manager leasing arrangements,²²⁷ and we find no evidence in the record that this has led to anticompetitive effects in this geographic cluster. Based on our evaluation of the factors ordinarily considered, as noted above, including the fact that multiple licensees have access to considerable amounts of spectrum, we find that the likelihood of competitive harm is low in these markets post-transaction. We find it highly unlikely that the assignment of 10 to 20 megahertz of spectrum to T-Mobile in this cluster would allow it to foreclose entry, raise rivals' costs, or otherwise harm the public interest.

82. *Washington*: There are four CMAs in the state of Washington in which T-Mobile would be attributed post-assignment with spectrum such that its holdings are above the spectrum screen trigger. Three of these CMAs—Seattle-Everett, Tacoma, and Bremerton—are non-rural markets with populations ranging from approximately 276,000 to 3.1 million, and with population densities of 546 to 733 people per square mile. The other CMA—Washington 1—Clallam—is a rural market with a population of approximately 344,000, and a population density of 60 people per square mile.

83. *Record*. DISH argues that T-Mobile exceeds the spectrum screen in Seattle, Washington by holding approximately 392 megahertz of spectrum.²²⁸ The Applicants claim that there is no harm from spectrum aggregation in this cluster, based on the spectrum held by other licensees, and both existing and projected 4G LTE and 5G-NR buildout by the other providers in these markets.²²⁹ Specifically, the Applicants argue that both Verizon Wireless and AT&T have substantial 4G LTE and 5G-NR coverage and mature network deployments in this cluster, and that while DISH's 5G-NR coverage in this cluster is not clear,²³⁰ DISH holds a substantial amount of spectrum for build-out of its network.²³¹

84. *Analysis*.²³² Considering first the three non-rural markets, T-Mobile held 400 to 410 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 410 megahertz of spectrum on a county-by-county basis post-transaction.²³³ Since the underlying spectrum manager leasing arrangements were approved, AT&T

²²⁵ In terms of 5G-NR coverage at speeds of 35/3 Mbps, Verizon Wireless has significant population coverage and T-Mobile has close-to-significant population coverage, while AT&T has deployed its 5G-NR network to some extent in this rural market. In addition, DISH has significant 5G-NR population coverage at speeds of 35/3 Mbps.

²²⁶ We note that Texas 21—Chambers is a single-county market; for this reason, we believe that the market shares according to the December 2022 NRUF data for AT&T, T-Mobile, and Verizon Wireless in this market of { } % , respectively, are unreliable and inaccurate so we do not report them here.

²²⁷ *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

²²⁸ DISH Petition at 6 & n.20.

²²⁹ Applicants' Updated Spectrum Aggregation Exhibit at 4-9 (filed Nov. 10, 2023).

²³⁰ Applicants' Updated Spectrum Aggregation Exhibit at 4-6 (filed Nov. 10, 2023).

²³¹ Applicants' Updated Spectrum Aggregation Exhibit at 6-7 (filed Nov. 10, 2023).

²³² As a threshold matter, we again note that T-Mobile is already attributed with the spectrum that it is acquiring in these markets, as a result of the previously approved underlying spectrum manager leasing arrangements. *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

²³³ T-Mobile also holds 1,100 megahertz of mmW spectrum, while AT&T holds 1,000 megahertz, and Verizon Wireless holds 1,850 megahertz. Other licensees, including DISH, hold 400 to 600 megahertz.

won 80 megahertz and Verizon Wireless won 160 megahertz of 3.7 GHz spectrum in Auction 107 in these markets. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in these markets, while DISH won 30 megahertz. Currently, AT&T holds 255 to 285 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 267 to 287 megahertz of spectrum. In addition, DISH holds 131 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 20 megahertz of spectrum on a county-by-county basis across these markets.

85. Regarding coverage in these three non-rural markets, AT&T, T-Mobile, and Verizon Wireless each have significant 4G LTE population coverage at speeds of 5/1 Mbps in these markets. Verizon Wireless has significant 4G LTE land area coverage at speeds of 5/1 Mbps in these markets, while AT&T has significant 4G LTE land area coverage at speeds of 5/1 Mbps in two of the markets, excluding Seattle-Everett, WA, where it has close-to-significant coverage. T-Mobile has significant 4G LTE land area coverage at speeds of 5/1 Mbps in Bremerton and close-to-significant land area coverage in Tacoma. Further, AT&T, T-Mobile, and Verizon Wireless have significant 5G-NR population coverage at speeds of 7/1 Mbps in these markets,²³⁴ as well as close-to-significant 5G-NR land area coverage at speeds of 7/1 Mbps in Bremerton.²³⁵

86. In the rural market—Washington 1—Clallam—T-Mobile held 367.5 to 440 megahertz of spectrum on a county-by-county basis pre-transaction. Due to the assignment applications, T-Mobile would continue to hold a maximum of 440 megahertz of spectrum post-transaction.²³⁶ Since the underlying spectrum manager leasing arrangements were approved, AT&T won 80 megahertz and Verizon Wireless won 160 megahertz of 3.7 GHz spectrum in Auction 107 in this market. In addition, in Auction 110, AT&T won 40 megahertz of 3.45 GHz spectrum in this market, while DISH won 30 to 40 megahertz. Currently, AT&T holds 255 megahertz of spectrum on a county-by-county basis, while Verizon Wireless holds 287 megahertz of spectrum. In addition, DISH holds 121 megahertz of spectrum. Finally, multiple other licensees hold between 10 and 20 megahertz of spectrum in this market.

87. Regarding coverage in this rural market, AT&T, T-Mobile, and Verizon Wireless have significant 4G LTE population coverage at speeds of 5/1 Mbps. Further, AT&T and T-Mobile have significant 5G-NR population coverage at speeds of 7/1 Mbps,²³⁷ while Verizon Wireless has deployed its 5G-NR network at speeds of 7/1 Mbps to some extent in this rural market.²³⁸

88. As noted above, T-Mobile has already been using this spectrum as a result of the underlying spectrum manager leasing arrangements,²³⁹ and we find no evidence in the record that this has

²³⁴ In terms of 5G-NR coverage at speeds of 35/3 Mbps, T-Mobile and Verizon Wireless each have significant population coverage in Seattle-Everett and Tacoma. In Bremerton, Verizon Wireless has significant 5G-NR population coverage at speeds of 35/3 Mbps, and T-Mobile has close-to-significant 5G-NR population coverage at speeds of 35/3 Mbps. AT&T has deployed its 5G-NR network at speeds of 35/3 Mbps to some extent in these markets.

²³⁵ According to the December 2022 NRUF data, in terms of significant market share, T-Mobile holds {{ }} % in these non-rural Washington markets, while AT&T holds {{ }} %, and Verizon Wireless holds {{ }} %. No other service providers have a significant market share in these non-rural markets.

²³⁶ T-Mobile also holds 1,500 to 1,525 megahertz of mmW spectrum, while AT&T holds 1,000 megahertz, and Verizon Wireless holds 1,425 to 1,850 megahertz. Other licensees, including DISH, hold 400 to 600 megahertz.

²³⁷ In terms of 5G-NR coverage at speeds of 35/3 Mbps, AT&T, T-Mobile, and Verizon Wireless each have deployed their 5G-NR networks to some extent in this rural market.

²³⁸ According to the December 2022 NRUF data, in terms of significant market share, T-Mobile holds {{ }} % in this rural Washington market, while AT&T holds {{ }} %, and Verizon Wireless holds {{ }} %. No other service providers have a significant market share in this rural market.

²³⁹ *T-Mobile-Channel 51-LB License Lease Order*, 35 FCC Rcd at 14060, para. 2.

led to anticompetitive effects in this geographic cluster. Based on our evaluation of the factors ordinarily considered, as noted above, including the fact that multiple licensees have access to considerable amounts of spectrum, we find that the likelihood of competitive harm is low in these markets post-transaction. We find it highly unlikely that the assignment of 10 megahertz of spectrum to T-Mobile in this cluster would allow it to foreclose entry, raise rivals' costs, or otherwise harm the public interest.

VI. POTENTIAL PUBLIC INTEREST BENEFITS

89. We next consider whether the proposed transaction is likely to generate verifiable, transaction-specific public interest benefits. The Commission has recognized that efficiencies generated through a transaction can mitigate competitive harms “if such efficiencies enhance the merged firm’s ability and incentive to compete and therefore result in lower prices, improved quality, enhanced service or new products.”²⁴⁰ Moreover, the Commission will find a claimed benefit to be cognizable only if it is transaction-specific—meaning it naturally arises as a result of the transaction and likely could not be accomplished in the absence of the transaction²⁴¹—and verifiable.²⁴² Because much of the information relating to the potential benefits of a transaction is in the sole possession of the applicants, they are required to provide sufficient evidence supporting each claimed benefit so that the Commission can verify its likelihood and magnitude.²⁴³ Further, the Commission is “more likely to find marginal cost reductions to be cognizable than reductions in fixed cost”²⁴⁴ as, in general, reductions in marginal cost are more likely to result in lower prices for consumers. In addition, benefits expected to occur only in the distant future may be discounted or dismissed because, among other things, predictions about the distant future are inherently more speculative than predictions that are expected to occur closer to the present.²⁴⁵ The Commission applies a “sliding scale approach” to evaluating benefit claims.²⁴⁶ Under this 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.”²⁴⁷ Conversely,

²⁴⁰ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *AT&T-Leap Order*, 29 FCC Rcd at 2793, para. 131; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 57.

²⁴¹ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *2010 DOJ/FTC Horizontal Merger Guidelines*, § 10 at 29-31; see also *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3647-48, para. 34; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 58.

²⁴² See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3647-48, para. 34; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 58.

²⁴³ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3647-48, para. 34; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 58.

²⁴⁴ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3647-48, para. 34; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 58.

²⁴⁵ See, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10671-72, para. 214; *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3647-48, para. 34; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342, para. 58.

²⁴⁶ See, e.g., *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3648, para. 35; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342-43, para. 59.

²⁴⁷ See, e.g., *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3648, para. 35; *AT&T-Leap Order*, 29 FCC Rcd at 2793-94, para. 132; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342-43, para. 59.

where potential harms appear less likely and less substantial, we will accept a lesser showing to approve the proposed transaction.²⁴⁸

90. *Record.* The Applicants assert that T-Mobile is already utilizing the spectrum under the long-term spectrum manager leasing arrangements and that grant of the applications will allow T-Mobile to maintain its network performance.²⁴⁹ Specifically, the low-band 600 MHz spectrum at issue provides a coverage layer and provides network control functions for other bands utilized by T-Mobile's network.²⁵⁰ The Applicants further assert that, since T-Mobile began utilizing the spectrum as part of the previously approved spectrum leases, T-Mobile has deployed the spectrum at issue to support the rapid and robust deployment of its 5G network in the license areas covered by the licenses.²⁵¹ The Applicants claim that this led directly to T-Mobile providing significantly faster speeds, enhanced capacity, and a far better user experience with more advanced use cases in those areas.²⁵² The Applicants maintain that continued access to the 600 MHz spectrum at issue allows T-Mobile to continue to enhance and bolster its 5G service offerings in all or parts of the license areas, including four of the top ten markets (PEAs), and meet consumers' increasing demand for mobile broadband data in those areas.²⁵³ Specifically, the Applicants contend that the spectrum has enabled additional capacity and improved data throughputs, network reliability, and coverage in the license areas.²⁵⁴ The Applicants assert that the 600 MHz spectrum covered by the licenses is particularly well-suited to support T-Mobile's network; its characteristics enhance the T-Mobile user experience by significantly improving in-building coverage in urban areas and enhancing coverage and performance in suburban and rural areas.²⁵⁵ The Applicants use the example of its in-home broadband offering, asserting that the spectrum supports this offering, enhancing competition in the in-home broadband market, with a focus on targeting unserved and underserved areas.²⁵⁶

91. *Increased Network Capacity and 5G Deployment.* According to the Applicants, the 600 MHz licenses, which have already been deployed by T-Mobile pursuant to the 2020 spectrum leasing arrangements, meaningfully augment the capacity of T-Mobile's low-band network.²⁵⁷ The Applicants

²⁴⁸ See, e.g., *Sprint-Shentel-NTELOS Order*, 31 FCC Rcd at 3648, para. 35; *T-Mobile-MetroPCS Order*, 28 FCC Rcd at 2342-43, para. 59.

²⁴⁹ T-Mobile/Channel 51 Public Interest Statement at 3; T-Mobile/LB License Public Interest Statement at 3.

²⁵⁰ T-Mobile/Channel 51 Public Interest Statement at 4; T-Mobile/LB License Public Interest Statement at 4.

²⁵¹ T-Mobile/Channel 51 Public Interest Statement at 2-3; T-Mobile/LB License Public Interest Statement at 2; T-Mobile Response at 2; Channel 51/LB License Joint Opposition at 4; Applicants' Updated Spectrum Aggregation Exhibit at 1, 9, 13-14, 18, 22-23, 26, 30 (filed Nov. 10, 2023).

²⁵² T-Mobile/Channel 51 Public Interest Statement at 2-3; T-Mobile/LB License Public Interest Statement at 2-3; T-Mobile Response at 2-3; Applicants' Updated Spectrum Aggregation Exhibit at 8, 13, 17, 22, 26, 29 (filed Nov. 10, 2023).

²⁵³ T-Mobile/Channel 51 Public Interest Statement at 3; T-Mobile/LB License Public Interest Statement at 3; T-Mobile Response at 2, 5; Applicants' Updated Spectrum Aggregation Exhibit at 2 (filed Nov. 10, 2023).

²⁵⁴ T-Mobile/Channel 51 Public Interest Statement at 3; T-Mobile/LB License Public Interest Statement at 3; T-Mobile Response at 2; Applicants' Updated Spectrum Aggregation Exhibit at 1, 3, 9, 13-14, 18, 22-23, 26, 30 (filed Nov. 10, 2023).

²⁵⁵ T-Mobile/Channel 51 Public Interest Statement at 4; T-Mobile/LB License Public Interest Statement at 4; Applicants' Updated Spectrum Aggregation Exhibit at 1, 8, 13, 17, 22, 26, 29 (filed Nov. 10, 2023).

²⁵⁶ T-Mobile/Channel 51 Public Interest Statement at 4; T-Mobile/LB License Public Interest Statement at 3-4; T-Mobile Response at 3; Applicants' Updated Spectrum Aggregation Exhibit at 1-3, 7-8, 12, 17, 21, 25, 29 (filed Nov. 10, 2023).

²⁵⁷ Applicants' Updated Spectrum Aggregation Exhibit at 1 (filed Nov. 10, 2023).

claim that access to the spectrum at issue allows T-Mobile to allocate more continuous spectrum to their 5G NR channels in certain of the affected markets, offering substantial capacity benefits,²⁵⁸ and that this low-band network provides foundational geographic coverage for customers and is therefore an important component of the 5G network.²⁵⁹ Thus, T-Mobile asserts that it is able to maintain enhanced 5G and LTE network capacity in these markets at a low marginal cost.²⁶⁰ The Applicants further maintain that consumers benefit considerably from the availability of 5G services that are provided as a result of T-Mobile's use of this spectrum, with benefits including access to in-home broadband service and increased competition.²⁶¹ The Applicants also describe tangible differences in customer experience, such as an increased ability to complete 911 emergency calls, and higher data speeds, that are a result of this increased capacity.²⁶²

92. *Fixed Wireless Access.* The Applicants assert that the increase in spectrum capacity enables T-Mobile to increase the extent of its Fixed Wireless Access services, thereby increasing competition in the market for in-home broadband.²⁶³ They also argue that this is a market where limited competition exists, and where the existing providers are traditional cable providers that are typically dominant in their footprints.²⁶⁴ The Applicants claim that loss of access to the spectrum in question would result in loss of access to this competitive service for approximately 200,000 households.²⁶⁵

93. *Provision of Service to Underserved Groups and Areas.* The Applicants describe the low-band network as critical to providing both the extended cell reach to serve low population density rural areas and the building penetration to serve metropolitan customers in offices and apartments.²⁶⁶ They argue that having sufficient low-band capacity is crucial to ensure that remote rural customers and inner-city populations have access to more optimal high-speed broadband data.²⁶⁷ The Applicants assert that losing access to this spectrum would have a disproportionate impact on rural and low-income consumers, leading to the potential for a gap in service to consumers that need it the most.²⁶⁸ The Applicants further contend that although it is difficult to fully quantify the impact of the low-band network capacity for inner cities, the impact on rural areas can be quantified.²⁶⁹ Specifically, the Applicants assert that losing access to the spectrum in question would have a significant negative effect on services in rural census tracts covering a rural population of almost two million, including nearly 500,000 members of racial and ethnic minority groups; over 480,000 school age children; and over 200,000 people below the poverty line.²⁷⁰ The Applicants maintain that for these reasons, and the disproportionate importance of low-band spectrum to lower income residents in high density urban

²⁵⁸ Applicants' Updated Spectrum Aggregation Exhibit at 9, 13-14, 18, 22-23, 26, 30 (filed Nov. 10, 2023).

²⁵⁹ Applicants' Updated Spectrum Aggregation Exhibit at 1 (filed Nov. 10, 2023).

²⁶⁰ Applicants' Updated Spectrum Aggregation Exhibit at 3 (filed Nov. 10, 2023).

²⁶¹ Applicants' Updated Spectrum Aggregation Exhibit at 1-2, 3, 7-8, 12, 17, 21, 25, 29 (filed Nov. 10, 2023).

²⁶² Applicants' Updated Spectrum Aggregation Exhibit at 8, 13, 17, 22, 26, 29 (filed Nov. 10, 2023).

²⁶³ Applicants' Updated Spectrum Aggregation Exhibit at 1-2 (filed Nov. 10, 2023).

²⁶⁴ Applicants' Updated Spectrum Aggregation Exhibit at 3 (filed Nov. 10, 2023).

²⁶⁵ Applicants' Updated Spectrum Aggregation Exhibit at 1-2, 7-8, 12, 17, 21, 25, 29 (filed Nov. 10, 2023).

²⁶⁶ Applicants' Updated Spectrum Aggregation Exhibit at 1, 8, 13, 17, 22, 26, 29 (filed Nov. 10, 2023).

²⁶⁷ Applicants' Updated Spectrum Aggregation Exhibit at 1 (filed Nov. 10, 2023).

²⁶⁸ Applicants' Updated Spectrum Aggregation Exhibit at 1, 2, 8, 13, 18, 22, 26, 29-30 (filed Nov. 10, 2023).

²⁶⁹ Applicants' Updated Spectrum Aggregation Exhibit at 8, 13, 17, 22, 26, 29 (filed Nov. 10, 2023).

²⁷⁰ Applicants' Updated Spectrum Aggregation Exhibit at 1 (filed Nov. 10, 2023).

dwellings, T-Mobile's access to this low-band spectrum is directly related to the provision of mobile broadband to underserved groups and areas.²⁷¹

94. *Discussion.* We have reviewed the Applicants' asserted benefits in the Public Interest Statement, as well as their supplemental filings. We note that the spectrum at issue provides additional capacity and extended cell reach to serve low population density rural areas and provides building penetration to serve metropolitan customers in more urban areas. We credit as a public interest benefit that consumers are receiving greater capacity benefits and expanded competition from this deployment, and that T-Mobile, through this spectrum acquisition, will continue to deploy and enhance its 5G network. We further find that the proposed transaction would allow T-Mobile to provide a better user experience to its customers. Further, T-Mobile has set forth a detailed public interest showing explaining how its spectrum deployment benefits consumers in each of the regions it identifies, including how the acquisition and use of this spectrum impacts rural and minority groups. We therefore find that the record provides support for the Applicants' assertions that the proposed transaction would result in certain verifiable, transaction-specific public interest benefits.

VII. CONCLUSION

95. After carefully evaluating the potential competitive effects of the proposed assignments, we find that the likelihood of competitive harm is low. We find it highly unlikely that rival service providers or potential entrants will be foreclosed from expanding capacity, deploying mobile broadband technologies, or entering the market, as a result of the permanent assignment of this spectrum. We disagree with DISH's characterization that T-Mobile has not satisfied its burden that the asserted public interest benefits set forth in the record exceed the potential public interest harms in the instant case. We agree with T-Mobile that discontinued access to this spectrum would have a significant negative effect on services in rural census tracts and inner-city populations that have benefitted from the increased capacity. We therefore find that the grant of these applications is in the public interest.

96. In addition, we find that DISH's requested conditions are not transaction-specific, and that DISH is requesting remedies beyond the scope of these assignment applications. Further, the remedy DISH seeks is a novel remedy not previously granted by the Commission, and as such, would be better raised in the context of a rulemaking. To the extent DISH's petition asks us to address spectrum aggregation and competition issues beyond the scope of this transaction, we note that WTB and OEA recently initiated a separate proceeding seeking comment on the Commission's mobile spectrum holdings policies and competition issues more generally.²⁷²

97. On balance, given we find that the likelihood of competitive harm is low, and that there are some cognizable public interest benefits associated with the proposed transaction, we conclude that the public interest, convenience, and necessity would be served by this transaction. We therefore grant the applications filed by Channel 51, LB License, and T-Mobile seeking consent to assign 600 MHz spectrum licenses from Channel 51 and LB License to T-Mobile.

VIII. ORDERING CLAUSES

98. **ACCORDINGLY**, having reviewed the applications and record in this matter, **IT IS ORDERED** that, pursuant to sections 4(i-j), 303(r), 309, and 310(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i-j), 303(r), 309, 310(d), the applications for consent to assignments filed by Channel 51, LB License, and T-Mobile **ARE GRANTED**.

99. **IT IS FURTHER ORDERED** that this Memorandum Opinion and Order **SHALL BE EFFECTIVE** upon adoption. Petitions for Reconsideration under section 1.106 of the Commission's

²⁷¹ Applicants' Updated Spectrum Aggregation Exhibit at 1, 8, 13, 18, 22, 26, 29 (filed Nov. 10, 2023).

²⁷² See *Mobile Spectrum Holdings Public Notice* at 4-5.

Rules, 47 CFR § 1.106, may be filed within thirty days of the date of adoption of this Memorandum Opinion and Order.

100. This action is taken under delegated authority pursuant to sections 0.131 and 0.331 of the Commission's rules, 47 CFR §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Joel Taubenblatt
Chief, Wireless Telecommunications Bureau

Giulia McHenry
Chief, Office of Economics and Analytics

**APPENDIX A: LIST OF CELLULAR MARKET AREAS IN WHICH T-MOBILE IS ABOVE
THE SPECTRUM SCREEN TRIGGER**

CMA	Name	2020 Population	2020 Population Density
2	Los Angeles-Anaheim, CA	17,800,837	554.34
4	Philadelphia, PA	5,505,770	1,574.14
6	Boston-Brockton-Lowell, MA-NH	4,810,743	1,542.68
7	San Francisco-Oakland, CA	4,749,008	1,922.25
8	Washington, DC-MD-VA	6,561,964	2,345.80
10	Houston, TX	6,694,820	1,008.83
11	St. Louis, MO-IL	2,637,506	533.70
15	Minneapolis-St. Paul, MN-WI	3,454,598	753.50
17	Atlanta, GA	5,370,765	1,251.29
20	Seattle-Everett, WA	3,097,632	737.03
22	Tampa-St. Petersburg, FL	2,980,760	1,460.51
26	Phoenix, AZ	4,420,568	480.49
27	San Jose, CA	1,936,259	1,500.86
31	Columbus, OH	1,799,215	735.31
38	Providence-Warwick, RI	1,011,736	1,086.22
39	Salt Lake City-Ogden, UT	1,882,838	220.00
55	Worcester-Leominster, MA	862,111	570.64
69	Wilmington, DE-NJ-MD	739,281	669.36
73	Oxnard-Simi Valley-Ventura, CA	843,843	457.83
76	New Bedford-Fall River, MA	579,200	1,047.20
82	Tacoma, WA	921,130	551.74
97	Bakersfield, CA	909,235	111.81
105	Lancaster, PA	552,984	585.91
107	Stockton, CA	779,233	560.07
111	Vallejo-Fairfield-Napa, CA	591,510	376.73
118	Reading, PA	428,849	500.70
123	Santa Rosa-Petaluma, CA	488,863	310.22
124	Santa Barbara, CA	448,229	163.88
126	Salinas-Seaside-Monterey, CA	439,035	133.83
134	Atlantic City, NJ	369,797	458.16
142	Modesto, CA	552,878	369.86
159	Provo-Orem, UT	659,399	329.13
170	Galveston-Texas City, TX	350,682	926.85
175	Santa Cruz, CA	270,861	608.44
198	St. Cloud, MN	296,854	135.90
212	Bremerton, WA	275,611	697.85
228	Vineland-Millville, NJ	154,152	318.69
234	Athens, GA	276,497	298.77
340	California 5-San Luis Obispo	282,424	85.62
359	Delaware 1-Kent	419,229	275.40
363	Florida 4-Citrus	862,066	339.46

CMA	Name	2020 Population	2020 Population Density
372	Georgia 2-Dawson	506,087	194.13
374	Georgia 4-Jasper	154,751	46.27
399	Illinois 6-Montgomery	193,920	44.89
471	Massachusetts 2-Barnstable	263,851	486.87
624	Rhode Island 1-Newport	85,643	836.47
672	Texas 21-Chambers	46,571	77.99
693	Washington 1-Clallam	344,300	60.88

Note: 2020 U.S. Census population data.