



March 26, 2020

By Electronic Filing

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th St., SW
Washington, D.C. 20554

Re: *Written Ex Parte Presentation*
HNS Licensee Sub, LLC
IBFS File Nos. SES-LIC-20170807-00877, SES-LIC-20170807-00882, SES-LIC-20170807-00888, SES-LIC-20170807-00891, SES-LIC-20170807-00893, SES-LIC-20170807-00894, SES-AMD-20190221-00283, SES-AMD-20190221-00299, SES-AMD-20190221-00302, SES-AMD-20190221-00305, SES-AMD-20190221-00307 & SES-AMD-20190221-00309
Call Signs E170152, E170157, E170163, E170166, E170168 & E170169

Dear Ms. Dortch:

Pursuant to Section 1.1206(b) of the Commission's rules,¹ HNS License Sub, LLC ("Hughes") responds to the Verizon March 16 Letter² regarding the above-referenced applications ("Applications") for Jupiter 3 gateway earth stations in Missoula, MT; Bismarck, ND; Santa Clara, CA; Rapid City, SD; Rifle, CO; and Simi Valley, CA. In its latest filing, Verizon continues to mischaracterize both the law and the record developed in support of the Applications. The record demonstrates good cause exists to grant a limited waiver of Section 25.136(a)(4)'s earth station siting requirements for sharing with Upper Microwave Flexible Use ("UMFU") operations. Accordingly, the Commission should reject Verizon's unsubstantiated informal objection and promptly grant the Applications.

I. Granting the Requested Waiver Is Consistent with Commission Precedent and Serves the Public Interest Without Depriving Any 5G Benefits

Contrary to Verizon's mischaracterization of the record,³ Hughes has demonstrated that grant of the requested waiver is consistent with the Commission's established waiver precedent and policy. As Hughes has noted, the Commission may waive its rules for "good cause" if: (1) special circumstances warrant a deviation from the general rule; and (2) such deviation will not

¹ See 47 C.F.R. § 1.1206(b); see also *Satellite Communications Services Information re: Actions Taken*, Public Notice, Report No. SES-02245, at 64-67 (Feb. 26, 2020) (designating above-referenced applications as "permit-but-disclose").

² See Letter from Gregory M. Romano, Verizon, to Marlene H. Dortch, Secretary, FCC, IBFS File Nos. SES-LIC-20170807-00877 *et al.* (Mar. 16, 2020) ("Verizon March 16 Letter").

³ See *id.* at 2-3.



undermine the policy objective of the rule and will otherwise serve the public interest.⁴ Accordingly, in support of its waiver request, Hughes demonstrated that special circumstances, including collocated gateway operations at grandfathered sites and *de minimis* impact on UMFU operations, warrant a waiver for its proposed Jupiter 3 gateway operations at six sites.⁵ Hughes further demonstrated that a waiver is consistent with the underlying policy objective of Section 25.136(a)(4) and otherwise serves the public interest.⁶

Moreover, contrary to Verizon's baseless claim,⁷ the requested waiver of Section 25.136(a)(4) serves the public interest without depriving any benefits of fifth generation mobile ("5G") service using 28 GHz UMFU spectrum. Indeed, Verizon offers no evidence of any existing or even planned UMFU facilities that could be impacted, despite its obligation to disclose such details and coordinate in good faith under the Commission's rules.⁸ Rather, Verizon merely states a vague intent "to deploy 5G services in each of these areas to satisfy its buildout requirements,"⁹ but neglects to mention that buildout compliance does not require deployment of any UMFU facilities near the proposed gateway sites.¹⁰ Absent any UMFU facilities near the proposed sites, any interference risks to non-existent UMFU operations in potentially affected areas are theoretical at best. Accordingly, Verizon's claim that consumers will be deprived of 5G service benefits should be rejected as pure speculation.

Notably, Verizon does not dispute the public interest benefits resulting from the proposed gateway operations, which are integral to Hughes' planned launch of its next-generation Jupiter 3 satellite in 2021 and commencement of expanded broadband service. As Hughes consistently

⁴ See Hughes, Application Amendment, IBFS File Nos. SES-AMD-20190221-00283 *et al.*, Attachment B (UMFUS Compatibility Showing) at 3 n.6 (Feb. 21, 2019) (citing 47 C.F.R. § 1.3; *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164 (D.C. Cir. 1990); *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969)).

⁵ See Letter from Jennifer A. Manner & Kimberly M. Baum, Hughes, to Marlene H. Dortch, FCC, IBFS File Nos. SES-LIC- 20170807-00877 *et al.*, at 3 (Mar. 5, 2020) ("Hughes March 5 Letter"); Letter from Jennifer A. Manner & Kimberly M. Baum, Hughes, to Marlene H. Dortch, FCC, IBFS File Nos. SES-LIC- 20170807-00876 *et al.*, at 1-2 (Jan. 31, 2020) ("Hughes January 31 Supplemental Letter").

⁶ See Hughes March 5 Letter at 3; Hughes January 31 Supplemental Letter at 1-2.

⁷ See Verizon March 16 Letter at 1.

⁸ See 47 C.F.R. § 101.103(d)(2)(iv) ("Any response to notification indicating potential interference *must specify the technical details* If no response to notification is received within 30 days, the applicant will be deemed to have made reasonable efforts to coordinate and may file its application without a response.") (emphasis added); see also *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014, ¶ 54 (2016) ("We expect that UMFUS licensees *will cooperate in good faith* in the coordination process and only raise objections if there is a legitimate concern") (emphasis added) ("*Spectrum Frontiers Order*").

⁹ See Verizon March 16 Letter at 1.

¹⁰ See 47 C.F.R. § 30.104(a) (requiring mobile UMFU service to at least 40 percent of the population within the license area).



has stated, these benefits include the consumer and economic benefits of advanced, high-capacity broadband service to rural, remote, and other underserved areas of the United States.¹¹

The value of these benefits, along with the ever-growing consumer demand for additional broadband, is even more apparent as the United States and the world grapple with the novel COVID-19 pandemic. As the nation continues to transition in response to the pandemic, Americans increasingly will rely on broadband for telework, telehealth, and tele-education in their daily lives. Indeed, in the weeks and months following the spread of COVID-19 to the United States and the Americas, Hughes has experienced significant increases in subscriber use of its broadband service. Certainly, as the ongoing response to the COVID-19 pandemic demonstrates, broadband provided by satellite, as well as terrestrial, infrastructure remains key to supporting the evolving daily needs of individual Americans as well as the larger U.S. economy. The need for broadband access, particularly in rural and remote areas served by Hughes, will only continue to increase. Consequently, the public interest benefits from the planned gateway operations outweigh any speculative 5G benefits from prohibiting such operations, and thus grant of the requested waiver is warranted because there is “a stronger public interest benefit in granting the waiver than in applying the rule.”¹²

II. A Waiver for the Proposed Collocated Gateways at Grandfathered Sites Is Consistent with Commission Precedent

Despite Verizon’s continued mischaracterizations of the law,¹³ grant of the requested waiver for the proposed collocated gateways at grandfathered sites (*i.e.*, Missoula, Bismarck, and Santa Clara) is consistent with Commission precedent. As Hughes noted, the Commission contemplated allowing additional, collocated earth stations at grandfathered sites, and further did not preclude such collocation pursuant to grant of a waiver for good cause.¹⁴

Contrary to Verizon’s contention,¹⁵ the International Bureau (the “Bureau”) did not find that O3b Limited’s (“O3b”) proposed additional gateway operations at 27.5-27.6 GHz “complied

¹¹ See, e.g., Hughes March 5 Letter at 3; Hughes January 31 Supplemental Letter at 1.

¹² *Unlicensed Operation in the TV Broadcast Bands*, 27 FCC Rcd 5816, ¶ 7 n.11 (OET 2012) (citing *WAIT Radio*, 418 F.2d at 1157 (stating that even though the overall objectives of a general rule have been adjudged to be in the public interest, application of the rule to a specific case may not serve the public interest if an applicant's proposal does not undermine the public interest policy served by the rule); *Northeast Cellular*, 897 F.2d at 1166 (stating that in granting a waiver, an agency must explain why deviation from the general rule better serves the public interest than would strict adherence to the rule)).

¹³ See Letter from Gregory M. Romano, Verizon, to Marlene H. Dortch, Secretary, FCC, IBFS File Nos. SES-LIC-20170807-00877 *et al.* at 4-5 (Feb. 21, 2020).

¹⁴ See Hughes March 5 Letter at 4 (citing *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services*, Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, Memorandum Opinion and Order, 32 FCC Rcd 10988, ¶¶ 139-41 (2017) (“*Spectrum Frontiers Reconsideration Order*”)).

¹⁵ See Verizon March 16 Letter at 2.



fully” with Section 25.136(a)(4)’s earth station siting requirements. Rather, the Bureau authorized O3b’s additional gateway operations at 27.5-27.6 GHz as “a permissible modification of this grandfathered FSS earth station licensed *under section 47 CFR § 25.136(a)(2)*” without any mention of compliance with Section 25.136(a)(4).¹⁶ Although O3b submitted supplemental analysis purportedly showing compliance with Section 25.136(a)(4), the Bureau did not determine that O3b provided a sufficient showing of compliance. Indeed, O3b’s supplemental analysis seems deficient in material respects.¹⁷ Thus, absent an affirmative finding of compliance with Section 25.136(a)(4)’s earth station siting requirements, the Bureau’s approval of O3b’s additional gateway operations at 27.5-27.6 GHz presumptively required a waiver of Section 25.136(a)(2), as indicated by the license terms referencing modification under the grandfathering provisions of Section 25.136(a)(2), rather than the earth station siting requirements of Section 25.136(a)(4).¹⁸

Furthermore, as demonstrated in the record,¹⁹ the proposed collocated gateway operations will have no significant impact on existing interference risks to any UMFU facilities that may be located nearby.²⁰ Specifically, Hughes submitted maps showing that the PFD contours for the the proposed Jupiter 3 gateways are substantially smaller than, and largely encompassed within, the PFD contours for the grandfathered Jupiter 2 gateways, thus overlapping nearly the same protected road segments.²¹ Likewise, as shown in the attached additional maps, the Jupiter 2 gateway contour is substantially similar to the aggregate PFD contour for both Jupiter 2 and Jupiter 3 gateways at each grandfathered site, with the aggregate PFD contour overlapping slightly larger portions of the same protected roads encompassed within the Jupiter 2 gateway contour.²² Thus, these maps provide dispositive evidence of no significant increase in interference risks to any nearby UMFU operations. Consequently, grant of the requested waiver is consistent with the underlying purpose of Section 25.136(a)(4) to provide “substantial

¹⁶ See O3b, Radio Station Authorization, IBFS File No. SES-MOD-20190207-00084, at 5 (Nov. 26, 2019) (emphasis added).

¹⁷ For example, O3b’s supplemental analysis does not show the aggregate PFD contour for both its proposed gateway operations at 27.5-27.6 GHz and Hawaii Pacific Teleport’s grandfathered gateway operations nearby. See O3b, IBFS File No. SES-MOD-20190207-00084, Supplemental Showing (June 20, 2019). O3b’s analysis also does not clearly show the PFD contour for its proposed gateway operations and any roads in the area to allow an assessment of any contour overlap of a protected road. See *id.* at 4.

¹⁸ See *supra* n.16.

¹⁹ See Hughes March 5 Letter at 3.

²⁰ As noted in Section I above, Verizon fails to identify any existing nearby UMFU facilities that could be impacted by the proposed gateway operations, and thus any interference risks to non-existent UMFU facilities are theoretical at best.

²¹ See Hughes March 5 Letter, Attachment A (PFD Contour Maps for Grandfathered Sites).

²² See Attachment A (Additional PFD Contour Maps for Grandfathered Sites) (attached hereto).



opportunities to expand ... [earth station] use of the 28 GHz band ... while minimizing the impact on terrestrial operations.”²³

III. A Waiver for the Proposed Non-collocated Gateways Is Warranted in View of the De Minimis Potential Impact on UMFU Operations

Despite Hughes’ demonstration that any potential impact on UMFU operations at the non-collocated sites (*i.e.*, Rapid City, Rifle, and Simi Valley) is *de minimis*,²⁴ Verizon continues to insist, without basis, that 5G consumers will be harmed by losing service while in transit. As noted in Section I above, however, Verizon’s claims of interference risks to non-existent UMFU facilities and resulting harms to 5G consumers should be rejected as theoretical at best, absent any identified nearby UMFU facilities that could be impacted by the proposed gateway operations.

IV. The Bureau’s Delegated Authority to Grant the Requested Waiver Is Consistent with Commission Precedent

Verizon reiterates the baseless claim that the Bureau lacks delegated authority to grant the requested waiver,²⁵ but fails to differentiate the numerous instances in which the Bureau exercised its delegated authority to grant waivers. Contrary to Verizon’s claim, Hughes consistently has cited to the Commission’s established waiver precedent and policies for guidance and support of any Bureau grant of the requested waiver.²⁶ Additionally, Hughes cited several Bureau decisions as examples of the Bureau’s exercise of delegated authority to grant waivers of various Part 25 rules without requiring any prior full Commission grant of similar waivers.²⁷

Verizon suggests that the Commission’s waiver precedent would not allow an interfering use, but fails to identify any potentially affected UMFU facilities or otherwise substantiate its interference claims.²⁸ Verizon also fails to explain how the Commission’s waiver precedent would preclude a waiver that would allow an interfering use, when the rule itself, such as Section 25.136(a)(4) at issue here, expressly allows an interfering use.²⁹ In any event, Verizon fails to cite any Commission precedent to support the novel proposition that the Commission or any of

²³ See *Spectrum Frontiers Order* ¶ 55.

²⁴ See Hughes January 31 Supplemental Letter, Attachment.

²⁵ See Verizon March 16 Letter at 3.

²⁶ See, *e.g.*, Hughes March 5 Letter at 3 n.13 (citing 47 C.F.R. § 1.3; *Northeast Cellular*, 897 F.2d 1164; *WAIT Radio*, 418 F.2d 1153).

²⁷ See *id.* at 5-6.

²⁸ See Verizon March 16 Letter at 3.

²⁹ See 47 C.F.R. § 25.136(a) (“an applicant ... that meets one of the following criteria may be authorized to operate *without providing interference protection* to [UMFU] stations”) (emphasis added).



its bureaus lacks authority to grant a waiver that would allow an interfering use.³⁰ Accordingly, grant of the requested waiver is consistent with Commission’s established waiver precedent and the Bureau’s delegated authority.

V. Conclusion

Based upon the foregoing, Hughes urges the Commission to reject Verizon’s unsubstantiated informal objection and grant a limited waiver of Section 25.136(a)(4)(iii) to allow prompt deployment of its proposed Jupiter 3 gateways.

Please contact the undersigned with any further questions.

Sincerely,

/s/ Jennifer A. Manner

Jennifer A. Manner

Senior Vice President, Regulatory Affairs

Kimberly M. Baum

Vice President, Regulatory Affairs

Attachment

cc: Jose Albuquerque (FCC) Karl Kensinger (FCC)
Kerry Murray (FCC) Kal Krautkramer (FCC)
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³⁰ Indeed, the Wireless Telecommunications Bureau, for example, has granted waivers to 700 MHz licensees, despite interference concerns. See *Access Spectrum, LLC Request for Waiver of Section 27.60*, 19 FCC Rcd 15545, ¶¶ 14-16 (WTB 2004) (granting a waiver based on licensee’s demonstration that its operations would limit potential interference to a small area); *Aloha Partners, LP. Request for Waiver of Section 27.60*, 20 FCC Rcd 3744, ¶ 4 (WTB 2005) (citing *Access Spectrum* as precedent).

Attachment A

Additional PFD Contour Maps for Grandfathered Sites

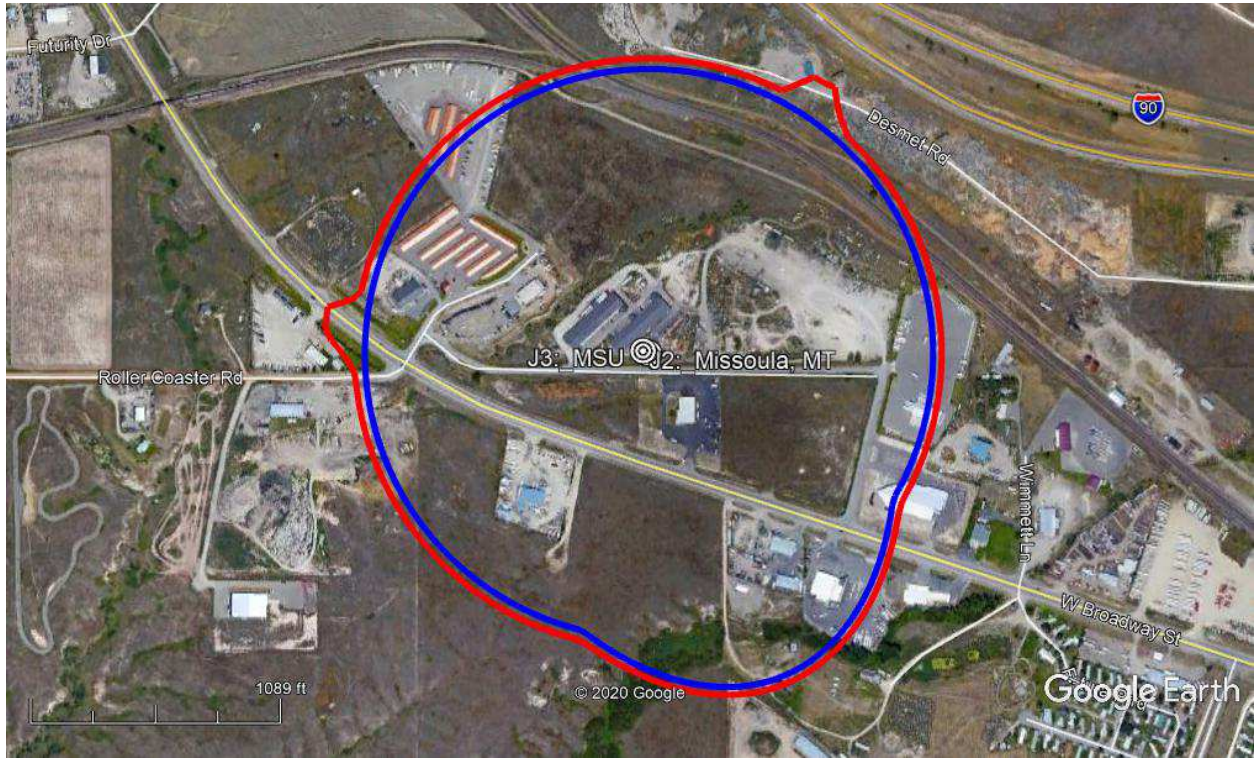
1. Missoula, MT—28 GHz (File No. SES-LIC-20170807-00893; Call Sign E170168)

The blue pfd contour is for the Jupiter 2 gateway, using Rec. P.2108 and p = 85% for clutter and a minimum 250 m. The red pfd contour is the aggregate contour for Jupiter 2 and Jupiter 3 gateways, using Rec. P.2108 and p = 85% for clutter and a minimum 250 m. The below table summarizes the population covered by the aggregate contour of Jupiter 2 and Jupiter 3 but not included in the grandfathered Jupiter 2 contour. The pfd contour covers approximately 73 m more of W Broadway Street as compared to the Jupiter 2 contour which covers approximately 740 m. W Broadway Street is a highway classified by the U.S. Department of Transportation under the categories Interstate, Other Freeways and Expressways, or Other Principal Arterial according to information contained on the U.S. Department of Transportation Federal Highway Administration website (<https://hepgis.fhwa.dot.gov/fhwagis/#>).

Missoula County population: 111,011

Permitted population within contour: 450

County	State	Census Tract	Census Block	Block Pop	Area Percent	Pop Weighted
Missoula	MT	001600	1100	0	1.23%	0.00
Missoula	MT	001600	1099	8	1.84%	0.15
Missoula	MT	001600	1104	0	3.08%	0.00
Missoula	MT	001600	1128	152	0.04%	0.06
Missoula	MT	001600	1129	12	0.84%	0.10
Missoula	MT	001600	3046	0	0.42%	0.00
Missoula	MT	001600	1085	8	0.21%	0.02
Missoula	MT	001600	1131	0	0.16%	0.00
Total						0



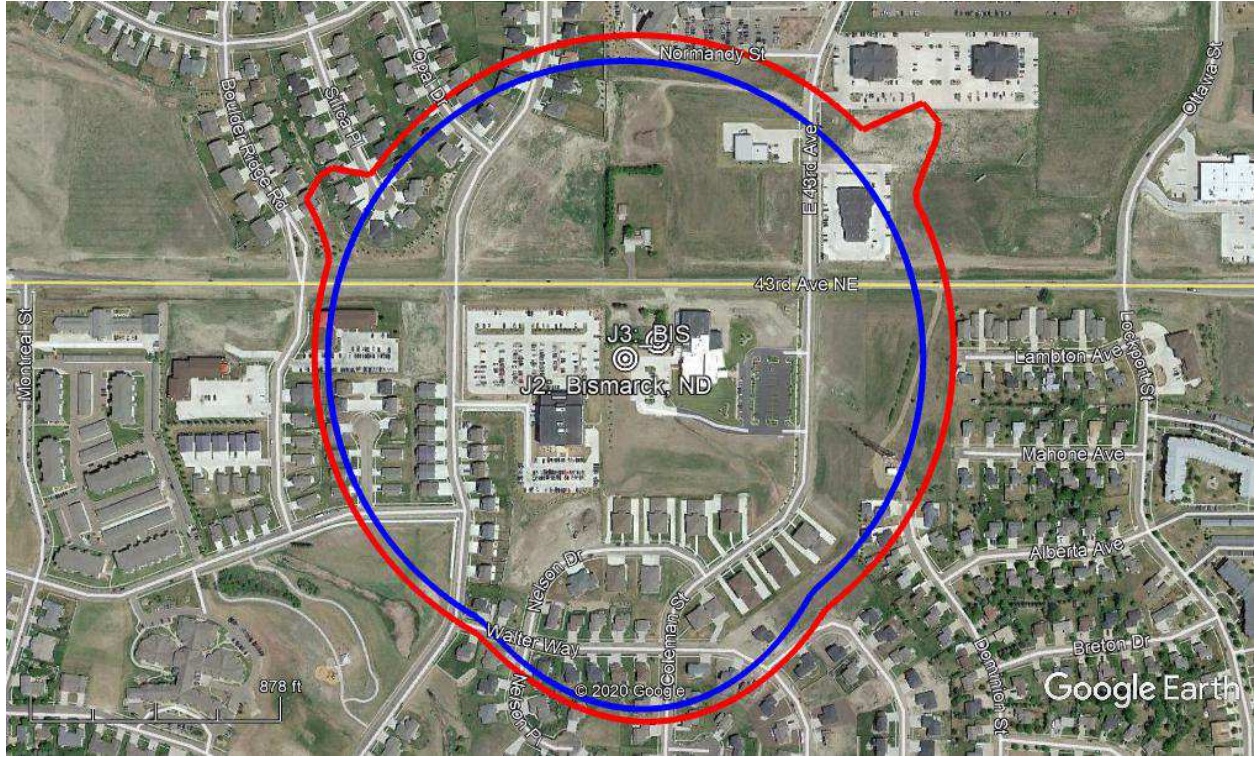
2. Bismarck, ND—28 GHz (File No. SES-LIC-20170807-00894; Call Sign E170169)

The blue pfd contour is for the Jupiter 2 gateway, using Rec. P.2108 and $p = 85\%$ for clutter and a minimum 250 m. The red pfd contour is the aggregate contour for Jupiter 2 and Jupiter 3 gateways, using Rec. P.2108 and $p = 85\%$ for clutter and a minimum 250 m. The below table summarizes the population covered by the aggregate contour of Jupiter 2 and Jupiter 3 but not included in the grandfathered Jupiter 2 contour. The pfd contour covers approximately 53 m more of 43rd Avenue as compared to the Jupiter 2 contour which covers approximately 616 m. 43rd Avenue is a highway classified by the U.S. Department of Transportation under the categories Interstate, Other Freeways and Expressways, or Other Principal Arterial according to information contained on the U.S. Department of Transportation Federal Highway Administration website (<https://hepgis.fhwa.dot.gov/fhwagis/#>).

Burleigh County population: 86,111

Permitted population within contour: 450

County	State	Census Tract	Census Block	Block Pop	Shaded Area Percent	Pop Weighted
Burleigh	ND	011105	1146	0	4.86%	0.00
Burleigh	ND	011105	1161	6	6.71%	0.40
Burleigh	ND	011101	3005	0	32.41%	0.00
Burleigh	ND	011101	3006	127	2.25%	2.85
Burleigh	ND	011101	3008	0	4.82%	0.00
Burleigh	ND	011101	3010	0	5.37%	0.00
Burleigh	ND	011101	3016	7	2.37%	0.17
Burleigh	ND	011105	1138	23	0.47%	0.11
Burleigh	ND	011105	1146	0	4.86%	0.00
					Total	4



3. Santa Clara, CA—28 GHz (File No. SES-LIC-20170807-00877; Call Sign E170152)

The blue pfd contour is for the Jupiter 2 gateway, using Rec. P.2108 and p = 85% for clutter and a minimum 250 m. The red pfd contour is the aggregate contour for Jupiter 2 and Jupiter 3 gateways, using Rec. P.2108 and p = 85% for clutter and a minimum 250 m. The below table summarizes the population covered by the aggregate contour of Jupiter 2 and Jupiter 3 but not included in the grandfathered Jupiter 2 contour. The pfd contour covers approximately 46 m more of Scott Blvd, 113 m of San Thomas Parkway and 95 m of Monroe Street as compared to the Jupiter 2 contour which covers approximately 710 m, 214 m and 86 m of each of those highways, respectively. Scott Blvd, San Thomas Parkway and Monroe Street are highways classified by the U.S. Department of Transportation under the categories Interstate, Other Freeways and Expressways, or Other Principal Arterial according to information contained on the U.S. Department of Transportation Federal Highway Administration website (<https://hepgis.fhwa.dot.gov/fhwagis/#>).

Santa Clara County population: 1,841,569

Permitted population within contour: 1841

County	State	Census Tract	Census Block	Block Pop	Shaded Area Percent	Pop Weighted
Santa Clara	CA	505302	1016	19	7.53%	1.43
Santa Clara	CA	505202	3133	0	3.80%	0.00
Santa Clara	CA	505202	3132	0	6.90%	0.00
Santa Clara	CA	505202	3135	1	7.41%	0.07
Santa Clara	CA	505202	3140	0	3.36%	0.00
Santa Clara	CA	505202	3147	0	1.65%	0.00
Santa Clara	CA	505202	3154	109	1.75%	1.91
Santa Clara	CA	505202	3158	0	9.58%	0.00
Santa Clara	CA	505202	3186	978	2.23%	21.77
Santa Clara	CA	505303	4001	991	5.07%	50.28
Santa Clara	CA	505303	4002	49	27.54%	13.49
Santa Clara	CA	505303	4005	368	3.17%	11.67
Santa Clara	CA	505303	4007	4	6.59%	0.26
Santa Clara	CA	505303	1005	0	43.45%	0.00
Santa Clara	CA	505202	3141	0	7.92%	0.00
Santa Clara	CA	505202	3142	0	2.10%	0.00
					Total	101

