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Filed Electronically

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

**Re: Google Inc. 70/80 GHz Experimental Application
FCC File No. 0747-EX-PL-2015**

Dear Ms. Dortch:

Pursuant to Section 1.41 of the Commission's rules,¹ the Fixed Wireless Communications Coalition, Inc. ("FWCC")² submits this letter in response to Google Inc.'s ("Google") above-referenced request for a two-year experimental license ("Application").³ The Application seeks blanket authority to operate in the 70/80 GHz band at locations throughout the United States.

The FWCC urges the Commission to require Google to disclose additional technical information regarding the company's interference mitigation strategy to protect site-based incumbent licensees operating in the 70/80 GHz bands.

The existing rules governing non-Federal use of the 70/80 GHz bands were adopted in 2003.⁴ These rules require licensees to secure a nationwide license from the Commission and

¹ 47 C.F.R. §1.41 (2015).

² The FWCC is a coalition of companies, associations, and individuals actively involved in the fixed services—*i.e.*, terrestrial fixed microwave communications. Our membership includes manufacturers of microwave equipment, fixed microwave engineering firms, licensees of terrestrial fixed microwave systems and their associations, and communications service providers and their associations. The membership also includes railroads, public utilities, petroleum and pipeline entities, public safety agencies, cable TV providers, backhaul providers, and/or their respective associations, communications carriers, and telecommunications attorneys and engineers. Our members build, install, and use both licensed and unlicensed point-to-point, point-to-multipoint, and other fixed wireless systems, in frequency bands from 900 MHz to 95 GHz. For more information, see www.fwcc.us.

³ See, FCC File No. 0747-EX-PL-2015 ("Application").

⁴ Allocations of Service Rules for the 71-76 GHz, 81-86 GHz, and 92-95 GHz Bands, WT Docket No. 02-146, Report and Order, 18 FCC Rcd 23318 (rel. Nov. 4, 2003) ("*Millimeter Wave R&O*"); 47 C.F.R. §101.1523.

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then register individual sites with a third-party database manager.⁵ As of September 22, 2015, there were 408 active licenses and more than 12,500 fixed links registered in the 70/80 GHz bands.⁶ Several FWCC members rely on these bands to support fixed, point-to-point operations.

The extent to which Google's proposed operations would impact incumbent licensees in these bands is unknown because the Application was heavily redacted. In its Application, Google notes that it, "does not seek to withhold from public inspection information necessary for interference mitigation."⁷ However, the extent to which the Application is redacted makes it impossible for incumbent licensees to evaluate whether Google's interference mitigation strategy will protect existing systems.

For example, the Application claims Google will protect commercial millimeter wave band users "as follows: Using data gathered by the GPS receiver [REDACTED], each [REDACTED] transmitter will continually communicate its location and velocity to [REDACTED]. This information, [REDACTED], allows Google [REDACTED]. This predictive analysis is repeated periodically so that [REDACTED]."⁸ The application also includes as Exhibit D the company's interference mitigation strategy. Unfortunately, Exhibit D is redacted in its entirety.⁹

The Commission recently recognized the importance of the 70/80 GHz bands to site-based incumbents and elected not to allow mobile users to access the 70/80 GHz bands after it determined "the coordination process between fixed and mobile operations would be considerably more complicated in these bands because there are multiple fixed licensees in a given area."¹⁰ In reaching this conclusion, the agency added that, "there was nothing in the record to indicate how mobile units would be controlled to avoid interference with fixed links."¹¹

Google's proposed operations present a similar concern. Without more information from Google, it is impossible for incumbent licensees to determine how Google's operations would be controlled to avoid interference with fixed links that have been operating for years. Accordingly, FWCC urges the Commission to make additional information available so site-based incumbents

⁵ Millimeter Wave R&O at ¶50.

⁶ In re Use of Spectrum Bands above 24 GHz for Mobile Radio Services, Notice of Proposed Rulemaking, FCC 15-138 at ¶82 (*rel.* Oct. 23, 2015) ("NPRM").

⁷ Application at p. 1.

⁸ *Id.* at pp. 2-3.

⁹ *Id.* at p. 12.

¹⁰ NPRM at ¶86.

¹¹ *Id.* at ¶87.

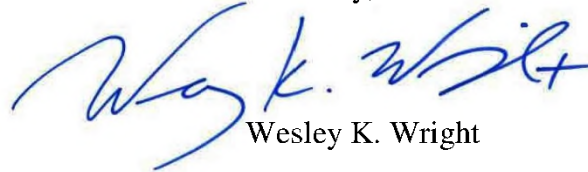
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can ensure Google's proposed operations would adequately protect their existing systems.¹² The FWCC is unable to meaningfully comment on the merits of Google's Application until such additional information is provided.

Should the Commission have additional questions on this matter, it is requested to contact the undersigned.

Sincerely,

A handwritten signature in blue ink that reads "Wesley K. Wright". The signature is fluid and cursive, with the first name being the most prominent.

Wesley K. Wright

¹² To limit access to any proprietary or confidential information, the Commission could adopt a Protective Order as it has done in other proceedings. *See, e.g., In re Petitions for Designation as an Eligible Telecommunications Carrier for Purposes of Participation in Mobility Fund Auctions*, Protective Order, DA 13-81 (rel. Jan. 22, 2013).