

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

In the Matter of)
)
Updating the Commission’s Rule for Over-the-Air) WT Docket No. 19-71
Reception Devices)

NOTICE OF PROPOSED RULEMAKING

Adopted: April 12, 2019

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Comment Date: [30 days after publication in the Federal Register]

Reply Comment Date: [45 days after publication in the Federal Register]

By the Commission: Chairman Pai and Commissioners O’Rielly, Carr, Rosenworcel and Starks issuing separate statements.

I. INTRODUCTION

1. The deployment of 5G wireless networks and other advanced wireless technologies holds the potential to bring enormous benefits to American consumers by delivering faster speeds and lower latency and by supporting the development of advanced applications like the Internet of Things, smart cities, and telehealth. The Commission is committed to doing its part to facilitate the deployment of the infrastructure needed to support these modern wireless networks. This Notice of Proposed Rulemaking (Notice) is another step in our efforts to update existing regulatory requirements to better account for technological developments. We seek comment on a fresh approach for facilitating the deployment of modern fixed wireless infrastructure by modernizing the Commission’s rule for over-the-air reception devices (OTARD).

II. BACKGROUND

2. The Commission’s OTARD rule prohibits laws, regulations, or restrictions imposed by State or local governments or private entities that impair the ability of antenna users to install, maintain, or use over-the-air reception devices.¹ The Commission adopted the rule to implement Section 207 of the Telecommunications Act of 1996.² The rule prohibits restrictions that unreasonably delay or prevent installation, maintenance, or use of an antenna; unreasonably increase the cost of installation, maintenance, or use of an antenna; or preclude reception of an acceptable quality signal.³ For the OTARD rule to apply, the antenna must be installed “on property within the exclusive use or control of

¹ 47 CFR § 1.4000. Specifically, the OTARD rule applies to “any restriction, including but not limited to any State or local law or regulation, including zoning, land-use, or building regulations, or any private covenant, contract provision, lease provision, homeowners’ association rule, or similar restriction . . .” 47 CFR § 1.4000(a)(1).

² Telecommunications Act of 1996, Pub.L. No. 104-104, § 207, 110 Stat. 56 (1996). Section 207 of the 1996 Act states that “[w]ithin 180 days after the date of enactment of this Act, the Commission shall, pursuant to Section 303 of the Communications Act of 1934, promulgate regulations to prohibit restrictions that impair a viewer’s ability to receive video programming services through devices designed for over-the-air reception of television broadcast signals, multichannel multipoint distribution service, or direct broadcast satellite services.” Multichannel multipoint distribution service is now known as Broadband Radio Service in the 2.5 GHz band.

³ 47 CFR § 1.4000(a)(3).

the antenna user where the user has a direct or indirect ownership or leasehold interest in the property” upon which the antenna is located.⁴

3. The original OTARD rule applied only to antennas used to receive video programming signals, but in the *2000 Competitive Networks Order*, the Commission expanded the rule to apply to “customer-end antennas used for transmitting or receiving fixed wireless signals.”⁵ Fixed wireless signals were defined as “any commercial non-broadcast communications signals transmitted via wireless technology to and/or from a fixed customer location.”⁶ The Commission indicated that the extension of the OTARD rule would apply “only to antennas at the customer end of the wireless transmission, i.e., to antennas placed at a customer location for the purpose of providing fixed wireless service . . . to one or more customers at that location.”⁷ In the order, the Commission stated that it did “not intend the rules to cover hub or relay antennas used to transmit signals to and/or receive signals from multiple customer locations.”⁸

4. The Commission later determined that customer-end equipment possessing “the additional functionality of routing service to additional users” (such as a node in a mesh network) would not be treated as a hub or relay antenna, and would not lose OTARD protection, so long as the equipment was “installed in order to serve the customer on [its] premises” and otherwise complied with all of the limitations in the OTARD rule (e.g., antenna size).⁹

5. The Wireless Internet Service Providers Association (WISPA) has asked the Commission to update the OTARD rule to apply to “all fixed wireless transmitters and receivers, regardless of whether the equipment is used for reception, transmission, or both, so long as the equipment meets the existing size restrictions for customer-end equipment.”¹⁰ WISPA’s request would extend the OTARD rule to cover the hub and relay antennas that previously were excluded from the OTARD framework. WISPA argues that extending the OTARD rule to all fixed wireless equipment “would be consistent with the original intent of OTARD, will accelerate the deployment of competitive broadband services in markets across the country, and will empower consumers to help bring competitive wireless broadband to their communities by hosting hub sites.”¹¹

6. Asserting that updating the OTARD rule is necessary to accommodate changes in fixed wireless architecture, WISPA argues that, while fixed wireless systems historically relied on relatively large coverage areas with fewer hub sites per customer, “over time, as both the cost of technology fell and

⁴ 47 CFR § 1.4000(a)(1). The rules provide an exception for State, local, or private restrictions that are necessary to accomplish a clearly defined, legitimate safety objective or to preserve prehistoric or historic places that are eligible for inclusion on the National Register of Historic Places, provided such restrictions impose as little burden as necessary to achieve the foregoing objectives, and apply in a nondiscriminatory manner throughout the regulated area. 47 CFR § 1.4000(b).

⁵ *Promotion of Competitive Networks in Local Telecommunications Markets*, First Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 22983, 23027–28, paras. 97–100 (2000) (*Competitive Networks First Report and Order*).

⁶ *Competitive Networks First Report and Order*, 15 FCC Rcd at 23027, para. 97 (footnotes omitted); 47 CFR § 1.4000(a)(2).

⁷ *Competitive Networks First Report and Order*, 15 FCC Rcd at 23028, para. 99.

⁸ *Competitive Networks First Report and Order*, 15 FCC Rcd at 23028, para. 99.

⁹ *Promotion of Competitive Networks in Local Telecommunications Markets*, Order on Reconsideration, 19 FCC Rcd 5637, 5643–44, para.16–17 (2004).

¹⁰ Letter from Claude Aiken, President and CEO, WISPA, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 17-79 at 1 (filed Aug. 27, 2018) (WISPA Aug. 27, 2018 *Ex Parte* Letter).

¹¹ WISPA Aug. 27, 2018 *Ex Parte* Letter at 1.

subscriber data increased, fixed wireless providers began to reduce the size of the area covered per base station.”¹² WISPA states that with advances in fixed wireless technology that use millimeter wave technology, going forward, “the areas covered by base stations will continue to shrink to overcome significant propagation losses in these higher bands.”¹³ Because of these changes in technology and network design, WISPA contends, “fixed wireless providers have much less choice in where they can locate hub sites.”¹⁴ WISPA further contends that, “in the absence of Commission action to modernize the OTARD rules, fixed wireless operators will continue to face significant hurdles to siting, perpetuating barriers to new investment and employment.”¹⁵ WISPA further argues that the Commission originally declined to extend OTARD to hub sites based on “its opinion at the time that fixed wireless hubs were covered under Section 332” of the Communications Act—an opinion that WISPA says does not apply to modern networks because hub sites used for fixed wireless broadband do not necessarily include an offering of telecommunications services.¹⁶

III. DISCUSSION

7. We agree with WISPA that the Commission should seek comment on modernizing and updating the OTARD regulatory framework to reflect the current technological landscape. Accordingly, we propose to eliminate the restriction that currently excludes hub and relay antennas from the scope of the OTARD provisions. The Commission’s decision in the *2000 Competitive Networks Order* to limit the applicability of the OTARD rule reflected the infrastructure needs of a previous generation of wireless technologies that relied on larger antennas spread over greater distances to provide service to consumers.¹⁷ The wireless infrastructure landscape has since shifted toward the development of 5G networks and technologies that require dense deployment of smaller antennas across provider networks in locations closer to customers.¹⁸ We anticipate that revising the OTARD framework would allow fixed wireless providers to deploy hub and relay antennas more quickly and efficiently and would help spur investment in and deployment of needed infrastructure in a manner that is consistent with the public interest. We seek comment on our proposal.

8. We seek comment on the extent to which extending the OTARD rule to fixed wireless hub and relay antennas would spur infrastructure deployment, including the deployment of mesh networks in urban, suburban, and rural areas. To what extent would extending the rule create more siting opportunities for fixed wireless service providers? What effect would adoption of the proposed rule have on infrastructure deployment in rural, Tribal, and other underserved areas?¹⁹ What effect would it have

¹² WISPA Aug. 27, 2018 *Ex Parte* Letter at 3.

¹³ WISPA Aug. 27, 2018 *Ex Parte* Letter at 3.

¹⁴ WISPA Aug. 27, 2018 *Ex Parte* Letter at 3.

¹⁵ WISPA Aug. 27, 2018 *Ex Parte* Letter at 4.

¹⁶ See Letter from Claude Aiken, President and CEO, WISPA to Marlene H. Dortch, Secretary, FCC, WT Docket No. 17-79, at 5 (filed Mar. 14, 2019) (WISPA Mar. 14, 2019 *Ex Parte* Letter).

¹⁷ See, e.g., *Competitive Networks First Report and Order*, 15 FCC Rcd at 23034, para. 114 (noting that “[t]o a much greater degree than is the case with the carrier hub site, there is little flexibility to place the [customer end] antenna at another location. Thus, the inability of a customer to place an antenna at the customer’s fixed site will result ... in the denial of fixed service to that customer, whereas the inability of a carrier to place a hub site at a specific site will often not result in a denial of wireless service to customers in that area.”).

¹⁸ See WISPA Aug. 27, 2018 *Ex Parte* Letter at 2 (arguing that extending OTARD to apply to hub and relay antennas would “lower barriers to siting fixed wireless base stations closer to consumers’ homes, which is critical for modern fixed wireless networks.”).

¹⁹ WISPA asserts that “extension of OTARD protections to ‘hub sites’ is critically important for rural areas where heavy foliage and undulating terrain can make deployment more difficult.” See WISPA Mar. 14, 2019 *Ex Parte* Letter at 5–6.

on infrastructure deployment by small providers? With respect to the hub and relay antennas, what types of services are these antennas typically used to supply, and what types of services might they supply in the future? Where do providers expect to deploy these facilities? To what extent are these facilities typically used to provide service both to the owner of the property on which they are located as well as to other customers? To what extent do State, local, or private restrictions delay or impede the installation of fixed wireless hub or relay antennas currently? If there are delays or impediments, commenters should provide information and data on the length of delays and associated costs imposed by the restrictions. In addition, we seek comment on whether updating the OTARD rule could help facilitate the deployment of other 5G infrastructure, such as small wireless facilities.

9. Do fixed wireless service providers face a competitive disadvantage with respect to the deployment of these network facilities compared with other types of providers, such as carriers whose deployments are subject to the provisions of Section 253 of the Act or mobile operators whose deployments are subject to the provisions of Section 332? What are these competitive disadvantages? To what extent would extending OTARD protections as described here effectively address any competitive disparity? Specifically, would extending OTARD protections increase competition or provide an incentive for entry? Commenters opposing the proposal should explain their reasons for doing so, including providing any relevant data, and should discuss other steps the Commission could take to facilitate the deployment of the infrastructure necessary for modern fixed wireless networks.

10. The OTARD rule preempts restrictions on antennas that are located on property within the antenna user's exclusive use or control, and where the user has an ownership or leasehold interest in the property, and it does not apply to restrictions on antennas located in common areas.²⁰ How should the rule apply in the case of hub or relay antennas? Should the Commission clarify that it will interpret "antenna user" to include fixed wireless service providers? For example, if a fixed wireless service provider leases space for a hub antenna on private property, should the Commission clarify that the service provider becomes the "antenna user" with respect to that property? Would doing so be necessary to ensure that fixed wireless providers are able to take advantage of an expanded OTARD rule? "Fixed wireless signals" are defined under the rule to mean "any commercial non-broadcast communications signals transmitted via wireless technology to and/or from a fixed customer location." Should the Commission revise this provision to delete the word "customer"? Is doing so necessary to ensure that the rule applies to hub and relay antennas? Should the Commission further define the term "hub or relay antenna"? If so, what definition should it adopt? Is it necessary to make any other changes to the text of the rule to ensure that it extends to hub and relay antennas or would other rule revisions or interpretations better effectuate the proposal?

11. Currently, the OTARD provisions applicable to fixed wireless antennas apply only to those antennas measuring one meter or less in diameter or diagonal measurement.²¹ In addition, the current rule is subject to an exception for State, local, or private restrictions that are necessary to accomplish a clearly defined, legitimate safety objective, or to preserve prehistoric or historic places that are eligible for inclusion on the National Register of Historic Places, provided such restrictions impose as little burden as necessary to achieve the foregoing objectives, and apply in a nondiscriminatory manner throughout the regulated area.²² We propose not to change these aspects of the rule at this time. We seek comment on this approach. Is there any reason to approach the size-limitation differently in rural or underserved areas?

12. We propose to rely on the legal authority the Commission relied on originally in the *2000 Competitive Networks Order* in extending the OTARD rule to apply to antennas used in connection with

²⁰ 47 CFR § 1.4000(a)(1).

²¹ 47 CFR § 1.4000(a)(1)(i)(B) and (a)(1)(ii)(B).

²² 47 CFR § 1.4000(b).

fixed wireless services.²³ We note that the Commission in 2000 assumed all hub sites were “personal wireless service facilities” covered by section 332(c)(7) of the Act—defined by the Act to include only facilities that provide “telecommunications services”²⁴—and therefore beyond the scope of our OTARD provisions.²⁵ However, this assumption does not currently appear to be accurate. We therefore seek comment on extending relief to those relay antennas and hub sites that are not “personal wireless service facilities”—i.e., those that fall into the gap between our current OTARD provisions and the protections of section 332(c)(7) of the Act, and those that WISPA claims are needed for modern high-speed broadband wireless networks.²⁶ Commenters are invited to identify any other legal authorities that may be relevant.

IV. PROCEDURAL MATTERS

13. *Comment Filing Procedures.* Pursuant to Sections 1.415 and 1.419 of the Commission’s rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document in Docket No. 19-71. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS).²⁷

14. *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>

15. *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

16. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.

17. All hand-delivered or messenger-delivered paper filings for the Commission’s Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.

18. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.

19. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

20. *People with Disabilities:* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

21. *Ex Parte Presentations.* This proceeding shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.²⁸ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period

²³ *Competitive Networks First Report and Order*, 15 FCC Rcd at 23028–23035, paras. 101–16.

²⁴ See 47 U.S.C. § 332(c)(7)(C) (defining “personal wireless services” to include only “commercial mobile services,” “common carrier wireless exchange access services” and “unlicensed wireless services,” with the last term in turn defined to include only “offering[s] of telecommunications services”).

²⁵ *Competitive Networks First Report and Order*, 15 FCC Rcd at 23032–23033, paras. 109–10.

²⁶ WISPA Mar. 14, 2019 *Ex Parte* Letter at 5.

²⁷ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998).

²⁸ 47 CFR §§ 1.1200 *et seq.*

applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by Rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

22. *Regulatory Flexibility Analysis.* Pursuant to the Regulatory Flexibility Act (RFA),²⁹ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and actions considered in this Notice. The text of the IRFA is set forth in Appendix B. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comment on the Notice. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).³⁰

23. *Paperwork Reduction Act.* This document contains proposed new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements in this document, subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

²⁹ See 5 U.S.C. § 603.

³⁰ See *id.* § 603(a).

V. ORDERING CLAUSES

24. Accordingly, IT IS ORDERED, pursuant to Sections 1, 4(i), 201(b), 202(a), 205, 303(r), and 1302 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201(b), 202(a), 205(a), 303(r), and 1302 and Section 207 of the Telecommunications Act of 1996, Pub. L. No. 104-104, § 207, 110 Stat. 56, 114 that this Notice of Proposed Rulemaking IS ADOPTED.

25. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A**Proposed Rules**

The Federal Communications Commission proposes to amend Section 1.4000 of Title 47 of the Code of Federal Regulations as follows:

1. Amend Section 1.4000(a)(1)(i)(A) to read as follows:

(a)(1)(i)(A) An antenna that is used to receive direct broadcast satellite service, including direct-to-home satellite service, or to receive or transmit fixed wireless signals via satellite, including a hub or relay antenna, and

2. Amend Section 1.4000(a)(1)(ii)(A) to read as follows:

(a)(1)(ii)(A) An antenna that is used to receive video programming services via multipoint distribution services, including multichannel multipoint distribution services, instructional television fixed services, and local multipoint distribution services, or to receive or transmit fixed wireless signals other than via satellite, including a hub or relay antenna, and

APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Notice of Proposed Rulemaking (Notice). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided on the first page of the Notice. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the Notice and IRFA (or summaries thereof) will be published in the *Federal Register*.³

A. Need for, and Objectives of, the Proposed Rules

2. In the Notice, the Commission seeks comment on proposals to facilitate the deployment of 5G wireless networks and technologies by removing outdated regulatory requirements. Specifically, we propose to eliminate the restriction that currently excludes certain hub and relay antennas from the scope of the over-the-air reception devices (OTARD) provisions. The Commission's decision in the *2000 Competitive Networks Order* to limit the applicability of the OTARD rule reflected the infrastructure needs of a previous generation of wireless technologies that relied on larger antennas spread over greater distances to provide service to consumers.⁴ The wireless infrastructure landscape has since shifted to the development of 5G networks and technologies that require dense deployment of smaller antennas across provider networks in locations closer to customers.⁵ We anticipate that revising the OTARD framework to allow fixed wireless providers to deploy hub and relay antennas more quickly and efficiently in areas within their exclusive use or control will help spur investment in and deployment of needed infrastructure in a manner that is consistent with the public interest.

3. Currently, the OTARD provisions applicable to fixed wireless antennas apply only to those antennas measuring one meter or less in diameter or diagonal measurement.⁶ The current rule is also subject to an exception for state, local, or private restrictions that are necessary to accomplish a clearly defined, legitimate safety objective or to preserve an eligible category of prehistoric or historic preservation place, provided such restrictions impose as little burden as necessary to achieve the foregoing objectives, and apply in a nondiscriminatory manner throughout the regulated area.⁷

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996, Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ See *id.*

⁴ See, e.g., *Competitive Networks First Report and Order*, 15 FCC Rcd at 23034, para. 114 (noting that providers had greater flexibility in placing hub and relay antennas as compared to customer-end antennas, “[t]o a much greater degree than is the case with the carrier hub site, there is little flexibility to place the antenna at another location. Thus, the inability of a customer to place an antenna at the customer’s fixed site will result . . . in the denial of fixed service to that customer, whereas the inability of a carrier to place a hub site at a specific site will often not result in a denial of wireless service to customers in that area.”).

⁵ See WISPA Aug. 27, 2018 *Ex Parte* Letter at 2 (stating that extending OTARD to apply to hub and relay antennas would “lower barriers to siting fixed wireless base stations closer to consumers’ homes, which is critical for modern fixed wireless networks.”).

⁶ 47 CFR § 1.4000(a)(1)(ii)(B).

⁷ 47 CFR § 1.4000(b).

4. In the Notice we ask detailed questions about our proposals to update the OTARD rule, and request comments to help us evaluate the impact of the proposed rule changes and facilitate the deployment of modern fixed wireless infrastructure by modernizing the OTARD rule.

B. Legal Basis

5. The proposed actions are authorized under Sections 1, 4(i), 201(b), 202(a), 205(a), 303(r), and 1302 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201(b), 202(a), 205(a), 303(r), and 1302 and Section 207 of the Telecommunications Act of 1996, Pub. L. No. 104-104, § 207, 110 Stat. 56, 114.

C. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply

6. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules and policies, if adopted.⁸ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁹ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁰ A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.¹¹ Below, we provide a description of such small entities, as well as an estimate of the number of such small entities, where feasible.

7. *Small Businesses, Small Organizations, and Small Governmental Jurisdictions.* Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein.¹² First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA’s Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.¹³ These types of small businesses represent 99.9% of all businesses in the United States, which translates to 28.8 million businesses.¹⁴

8. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹⁵

⁸ 5 U.S.C. § 603(b)(3).

⁹ 5 U.S.C. § 601(6).

¹⁰ 5 U.S.C. § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

¹¹ 15 U.S.C. § 632.

¹² See 5 U.S.C. § 601(3)–(6).

¹³ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 1 – What is a small business?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016)

¹⁴ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 2- How many small businesses are there in the U.S.?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016).

¹⁵ 5 U.S.C. § 601(4).

Nationwide, as of August 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS).¹⁶

9. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”¹⁷ U.S. Census Bureau data from the 2012 Census of Governments¹⁸ indicates that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.¹⁹ Of this number there were 37,132 General purpose governments (county²⁰, municipal and town or township²¹) with populations of less than 50,000 and 12,184 Special purpose governments (independent school districts²² and special districts²³) with populations of less than 50,000. The 2012 U.S. Census Bureau data for most types of governments in the local government category shows that the majority of these governments have populations of less than 50,000.²⁴ Based on this data we estimate that at least 49,316 local government jurisdictions fall in the category of “small governmental jurisdictions.”²⁵

10. *Local Exchange Carriers.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers.²⁶ Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees.²⁷ U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated for the entire year.²⁸ Of that total, 3,083 operated with fewer than 1,000 employees.²⁹ Thus, under this category and the associated size standard, the Commission estimates that the majority of local exchange carriers are small entities.

11. *Wireless Telecommunications Carriers (except Satellite).* This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless Internet access, and wireless video services.³⁰ The appropriate size standard under SBA rules is that such a business is small

¹⁶ Data from the Urban Institute, National Center for Charitable Statistics (NCCS) reporting on nonprofit organizations registered with the IRS was used to estimate the number of small organizations. Reports generated using the NCCS online database indicated that as of August 2016 there were 356,494 registered nonprofits with total revenues of less than \$100,000. Of this number 326,897 entities filed tax returns with 65,113 registered nonprofits reporting total revenues of \$50,000 or less on the IRS Form 990-N for Small Exempt Organizations and 261,784 nonprofits reporting total revenues of \$100,000 or less on some other version of the IRS Form 990 within 24 months of the August 2016 data release date. See <http://nccs.urban.org/sites/all/nccs-archive/html/tablewiz/tw.php> where the report showing this data can be generated by selecting the following data fields: Report: “The Number and Finances of All Registered 501(c) Nonprofits”; Show: “Registered Nonprofits”; By: “Total Revenue Level (years 1995, Aug to 2016, Aug)”; and For: “2016, Aug” then selecting “Show Results”.

¹⁷ 5 U.S.C. § 601(5).

¹⁸ See 13 U.S.C. § 161. The Census of Government is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Program Description Census of Government <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadate.xhtml?lang=en&type=program&id=program.en.CO G#>.

¹⁹ See U.S. Census Bureau, 2012 Census of Governments, Local Governments by Type and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG02.US01>. Local governmental jurisdictions are classified in two categories - General purpose governments (county, municipal and town or township) and Special purpose governments (special districts and independent school districts).

²⁰ See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01>. There were 2,114 county governments with populations less than 50,000.

²¹ See U.S. Census Bureau, 2012 Census of Governments, Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States – States.

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if it has 1,500 or fewer employees.³¹ For this industry, U.S. Census data for 2012 show that there were 967 firms that operated for the entire year.³² Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.³³ Thus, under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

12. The Commission's own data—available in its Universal Licensing System—indicate that, as of May 17, 2018, there are 264 Cellular licensees that will be affected by our actions today.³⁴ The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio Telephony (SMR) services.³⁵ Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees.³⁶ Thus, using available data, we estimate that the majority of wireless firms can be considered small.

13. *Non-Licensee Owners of Towers and Other Infrastructure.* Although at one time most communications towers were owned by the licensee using the tower to provide communications service, many towers are now owned by third-party businesses that do not provide communications services themselves but lease space on their towers to other companies that provide communications services. The Commission's rules require that any entity, including a non-licensee, proposing to construct a tower over 200 feet in height or within the glide slope of an airport must register the tower with the Commission's Antenna Structure Registration (ASR) system and comply with applicable rules regarding review for impact on the environment and historic properties.

14. As of March 1, 2017, the ASR database includes approximately 122,157 registration records reflecting a "Constructed" status and 13,987 registration records reflecting a "Granted, Not

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<https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01>. There were 18,811 municipal and 16,207 town and township governments with populations less than 50,000.

²² See U.S. Census Bureau, 2012 Census of Governments, Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States.

<https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01>. There were 12,184 independent school districts with enrollment populations less than 50,000.

²³ See U.S. Census Bureau, 2012 Census of Governments, Special District Governments by Function and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG09.US01>. [The U.S. Census Bureau data did not provide a population breakout for special district governments.](#)

²⁴ See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States - <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01>; Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States-States - <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01>; and Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01>. [While U.S. Census Bureau data did not provide a population breakout for special district governments, if the population of less than 50,000 for this category of local government is consistent with the other types of local governments the majority of the 38, 266 special district governments have populations of less than 50,000.](#)

²⁵ *Id.*

²⁶ See 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

²⁷ *Id.*

Constructed” status. These figures include both towers registered to licensees and towers registered to non-licensee tower owners. The Commission does not keep information from which we can easily determine how many of these towers are registered to non-licensees or how many non-licensees have registered towers.³⁷ Regarding towers that do not require ASR registration, we do not collect information as to the number of such towers in use and therefore cannot estimate the number of tower owners that would be subject to the rules on which we seek comment. Moreover, the SBA has not developed a size standard for small businesses in the category “Tower Owners.” Therefore, we are unable to determine the number of non-licensee tower owners that are small entities. We believe, however, that when all entities owning 10 or fewer towers and leasing space for collocation are included, non-licensee tower owners number in the thousands. In addition, there may be other non-licensee owners of other wireless infrastructure, including Distributed Antenna Systems (DAS) and small cells that might be affected by the measures on which we seek comment. We do not have any basis for estimating the number of such non-licensee owners that are small entities.

15. The closest applicable SBA category is All Other Telecommunications, and the appropriate size standard consists of all such firms with gross annual receipts of \$32.5 million or less.³⁸ For this category, U.S. Census data for 2012 show that there were 1,442 firms that operated for the entire year.³⁹ Of these firms, a total of 1,400 had gross annual receipts of less than \$25 million and 15 firms had annual receipts of \$25 million to \$49,999,999.⁴⁰ Thus, under this SBA size standard a majority of the firms potentially affected by our action can be considered small.

16. *Lessors of Residential Buildings and Dwellings.*⁴¹ This industry comprises establishments primarily engaged in acting as lessors of buildings used as residences or dwellings, such as single-family homes, apartment buildings, and town homes. Included in this industry are owner-lessors and establishments renting real estate and then acting as lessors in subleasing it to others.⁴² The establishments in this industry may manage the property themselves or have another establishment manage it for them. The appropriate SBA size standard for this industry classifies a business as small if it

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²⁸ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

²⁹ *Id.*

³⁰ U.S. Census Bureau, 2012 NAICS Definitions, “517210 Wireless Telecommunications Carriers (Except Satellite),” See <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.517210>.

³¹ 13 CFR § 121.201, NAICS Code 517312 Wireless Telecommunications Carriers (except satellite).

³² U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ5, *Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012* NAICS Code 517210, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517210.

³³ *Id.* Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

³⁴ See Federal Communications Commission, *Universal Licensing System*, <http://wireless.fcc.gov/uls>. For the purposes of this IRFA, consistent with Commission practice for wireless services, the Commission estimates the number of licensees based on the number of unique FCC Registration Numbers.

³⁵ See Federal Communications Commission, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

³⁶ See *id.*

³⁷ We note, however, that approximately 13,000 towers are registered to 10 cellular carriers with 1,000 or more employees.

has \$27.5 million or less in annual receipts.⁴³ U.S. Census Bureau 2012 data for Lessors of Residential Buildings and Dwellings show that there were 42,911 firms that operated for the entire year.⁴⁴ Of that number, 42,618 firms operated with annual receipts of less than \$25 million per year, while 142 firms operated with annual receipts between \$25 million and \$49,999,999 million.⁴⁵ Therefore, based on the SBA's size standard the majority of Lessors of Residential Buildings and Dwellings are small entities.

17. *Property Owners' Associations.* This industry comprises establishments formed on the behalf of individual property owners, to make collective decisions based on the wishes of a majority of owners.⁴⁶ This includes associations formed on behalf of individual residential condominium owners or homeowners. These associations may provide overall management, publish a telephone directory of the owners, sponsor seasonal events for the owners, establish and collect funds to operate the project, enforce rules and regulations, settle differences of opinion among residents, and make other decisions that are vital to the owners. Associations formed on behalf of individual real estate owners or tenants that provide no property management, but which arrange and organize civic and social functions are included here as well. The appropriate SBA size standard for this industry classifies a business as small if it has \$7.5 million or less in annual receipts.⁴⁷ U.S. Census Bureau 2012 data for Property Owners' Associations show that there were 17,379 firms that operated for the entire year.⁴⁸ Of that number, 16,963 firms operated with annual receipts of less than \$5 million per year, while 334 firms operated with annual

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³⁸ 13 CFR § 121.201, NAICS Code 517919.

³⁹ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ4, *Information: Subject Series - Estab and Firm Size: Receipts Size of Firms for the United States: 2012*, NAICS code 517919, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4//naics~517919.

⁴⁰ *Id.*

⁴¹ Leasing of building space to the Federal Government by Owners: For Government procurement, a size standard of \$38.5 million in gross receipts applies to the owners of building space leased to the Federal Government. The standard does not apply to an agent.

⁴² U.S. Census Bureau, 2012 NAICS Definitions, "531110 Lessors of Residential Buildings and Dwellings," *See* <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.531110#>.

⁴³ 13 CFR § 121.201; NAICS code 531110.

⁴⁴ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1253SSSZ4, *Real Estate and Rental and Leasing: Subject Series - Estab & Firm Size: Summary Statistics by Revenue Size of Firms for the U.S.: 2012*

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receipts between \$5 million and \$ 9,999,999 million.⁴⁹ Therefore, based on the SBA's size standard the majority of Property Owners' Associations are small entities.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

18. The proposed updates to the OTARD rule, if adopted, would not impose any new or additional reporting, recordkeeping, or other compliance obligations. However, the number of entities subject to the rule's protections and the labelling requirements may expand as a result of the proposals.

19. The Commission takes steps to reduce regulatory impediments to deployment by ensuring that State, local, and private restrictions do not delay or impede the installation of fixed wireless hub or relay antennas on private property. If enacted, the Commission's proposal would benefit fixed wireless providers – both small and large – by creating more siting opportunities, and we anticipate our proposal would spur investment in and deployment of needed infrastructure. We seek comment on this proposal and, in particular, on the potential impact it may have on infrastructure deployment in rural areas and by small providers.

20. As part of our efforts to modernize and update the OTARD regulatory framework to reflect the current technological landscape, we also seek comment on other steps the Commission could take to facilitate the deployment of the infrastructure necessary for modern fixed wireless networks, and on what implementation issues we should consider. Following our review and consideration of any comments filed in response to the Notice, we will fully address any requirements adopted that impose new or additional reporting, recordkeeping, or other compliance obligations, and/or will require small entities to hire attorneys, engineers, consultants, or other professionals to comply.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities and Significant Alternatives Considered

21. The RFA requires an agency to describe any significant, especially small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of

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NAICS Code 531110, See https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/53SSSZ4/naics~531110. This data includes only firms and establishments of firms with payroll. In addition, data for corporate, subsidiary, and regional managing offices and establishments of these firms that are classified in other categories is excluded.

⁴⁵ *Id.* Available census data does not provide a more precise estimate of the number of firms with revenues of \$27.5 million or less.

⁴⁶ U.S. Census Bureau, 2012 NAICS Definitions, “8139904 Property Association Owners,” See <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en/ECN.NAICS2012.8139904#>.

⁴⁷ 13 CFR § 121.201; NAICS code 813990.

⁴⁸ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1281SSSZ4, Other Services (Except Public Administration): Subject Series: Estab and Firm Size: Receipts/Revenue Size of Firms for the U.S.: 2012 NAICS Code 8139904, See https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/81SSSZ4/naics~8139904. This data includes only firms and establishments of firms with payroll. In addition, data for corporate, subsidiary, and regional managing offices and establishments of these firms that are classified in other categories is excluded.

⁴⁹ *Id.* Available census data does not provide a more precise estimate of the number of firms with revenues of \$7.5 million or less.

the rule, or any part thereof, for such small entities.”⁵⁰

22. The proposed rule changes contemplated by the Commission in this proceeding would relieve small as well as large companies from private and governmental restrictions on the placement of devices integral to the deployment of modern fixed wireless infrastructure. However, to better evaluate the economic impact on small entities, which could occur as a result of the actions proposed in this Notice, the Commission has sought comment. By revising the OTARD framework to allow fixed wireless providers to site hub and relay antennas more quickly and efficiently, in areas within their exclusive use or control (provided that devices are properly labelled as required by the existing rule), the Commission seeks to significantly reduce the economic impact on small and large entities involved in deploying fixed wireless infrastructure. Moreover, while these changes would be beneficial to all companies, they should be particularly beneficial to small entities that may not have the resources and economies of scale of larger entities. In addition, these proposed changes represent alternatives to the existing framework which will allow the Commission to continue to fulfill its statutory responsibilities, while reducing the burden on small entities by removing unnecessary impediments to the rapid deployment of modern fixed wireless infrastructure across the country.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

23. None.

⁵⁰ 5 U.S.C. § 603(c)(1) – (4).

**STATEMENT OF
CHAIRMAN AJIT PAI**

Re: *Updating the Commission's Rule for Over-the-Air Reception Devices*, WT Docket No. 19-71.

Two of the key inputs into 5G are spectrum and wireless infrastructure. Our April open meeting began with two items that will help push more spectrum into the marketplace.

With respect to wireless infrastructure, we've undertaken a comprehensive review of our rules over the past two years. We've sought to modify or eliminate outdated regulations that either no longer make sense or don't address the needs of next-generation wireless networks.

That's where this Notice comes in. Our proposal to revise our rules on over-the-air-reception devices is designed to promote the deployment of new fixed-wireless infrastructure.

Today, our rules prohibit states, localities, and private actors (such as homeowners' associations) from enforcing regulations or restrictions that limit the ability of fixed-wireless customers using certain antennas to transmit via over-the-air devices. But while these rules apply to many fixed wireless antennas, they don't protect hub or relay antennas that transmit signals to and receive signals from multiple customer locations.

Our proposal would bring these antennas under federal protection, while retaining exceptions for safety or historic preservation. If adopted, the proposal would jumpstart the deployment of antennas that could be part of mesh networks—essentially, webs of wireless network nodes. And it would also help providers develop and deliver more competitive broadband services in areas that are currently on the wrong side of the digital divide, including in lower-income urban areas.

I look forward to reviewing the record that will be compiled in response to this Notice and would like to thank the team that worked on it: Jonathan Campbell, Garnet Hanly, Eli Johnson, Betsy McIntyre, Jennifer Salhus, Dana Shaffer, Chris Smeenk, Don Stockdale, Cecilia Sulhoff, and Suzanne Tetreault from the Wireless Telecommunications Bureau; Michelle Carey, Martha Heller, Kenneth Lewis, Maria Mullarkey, and Holly Saurer from the Media Bureau; Kate Matraves, Giulia McHenry, and Emily Talaga from the Office of Economics and Analytics; Chana Wilkerson and Sanford Williams from the Office of Communications Business Opportunities; and Ashley Boizelle, Tom Johnson, David Konczal, Linda Oliver, Bill Richardson, Royce Sherlock, and Anjali Singh from the Office of General Counsel.

**STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY**

Re: *Updating the Commission's Rules for Over-the-Air Reception Devices*, WT Docket No. 19-71

The Commission has already taken many necessary steps to facilitate broadband network construction in rural America and to realize the full potential of 5G technologies. Today, we look at another means to ease the burdens of infrastructure siting by opening a new proceeding to inquire whether the Commission's rules for over-the-air reception devices, or OTARD, can be updated to expedite and lower the cost of network deployments.

I am enthusiastically supportive of a wide array of efforts that will get next-generation broadband networks built, deliver 5G services to the American people, and ensure continued U.S. leadership in wireless technologies. We simply cannot accept unnecessary and indefensible barriers to infrastructure deployment, especially when so many Americans are without adequate service options and need us to act quickly. So, congrats to the creativity of the Commission staff and those outside parties providing sound recommendations on the topic.

At the same time, this item should be a gentle reminder that exact and precise statutory language is important, as language can sometimes be stretched and maneuvered to meet newer FCC goals that were not foreseen at the time a law was passed. By way of background, the Telecommunications Act of 1996 and the Commission's original OTARD rules focused on eliminating restrictions that would prohibit the use of an antenna on a consumer's leased or owned property to access over-the-air video programming, including television broadcast signals and DBS services. However, in 2000 the scope of our rules was greatly expanded to apply to consumer-end antennas used in fixed wireless systems. Now, we are considering extending these rules to all fixed wireless transmitters and receivers, if they fit certain size limitations. To be clear, I'm all for this interpretation and believe it's consistent with the law even if Congress didn't actually intend for the provision to extend to broadband mesh networks when the statute was passed.

Accordingly, I approve today's notice and look forward to engaging with interested parties on this matter.

**STATEMENT OF
COMMISSIONER BRENDAN CARR**

Re: *Updating the Commission's Rule for Over-the-Air Reception Devices*, WT Docket No. 19-71

Providing fast Internet to unserved communities can be a heavy lift. I learned that quite literally last June on a rooftop outside of Boston. I was at the headquarters of Starry¹, a wireless Internet service provider. It's a startup that looks the part. It has industrial warehouse offices where t-shirts and shorts outnumbered my slacks.

Starry was just beginning to expand its Boston footprint, especially in more working-class neighborhoods like those in Somerville, Mass. Starry's concept is to beam high-speed Internet from a head-end—in this case, the roof of an office building—to equipment Starry installs on the top of dense housing, like an apartment building. From that access point on the building, it can provide service directly to routers in customers' living rooms.

At that time, at least, Starry's radios and antennas were heavy—75 pounds or so. And the team had to be scrappy and opportunistic, finding the highest point with a clear line of sight to their target building. That meant hauling the 75 pounds of equipment up ladders and narrow chutes to the roof. When I showed up in a suit offering to help swap out an antenna, Starry's techs, Maksim and Dan, were skeptical—and understandably so. But I did my part, or at least I thought so.

Shortly after my visit, the equipment we installed went live, providing 200 Mbps Internet access to a building that previously didn't have a high-speed option. Starry later partnered with the Boston Housing Authority to offer low-cost access to families in the area who needed it.

Starry is one of many WISPs that provide access to hard-to-serve places. Other WISPs I've visited have attached antennas to barns and water towers. Two weeks ago in Ohio, I joined a WISP on top of a grain elevator that they're using to beam broadband for miles around.

Finding space on which to attach equipment is among the greatest challenges a WISP faces. And the challenge can be compounded by rules that restrict placement even when a property owner wants the equipment and service there.

This Notice aims to expedite fast Internet access by clearing some of the impediments to siting WISPs' equipment. It asks for data on the severity of siting issues and how they might impede service. I am interested in the feedback we will get, including on the scope of our legal authority to expand our OTARD rules in the ways we seek comment on here.

So I want to thank the Wireless Bureau for its work on this Notice. It has my support.

¹ <https://twitter.com/BrendanCarrFCC/status/1007695297382887425>

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL**

Re: *Updating the Commission's Rule for Over-the-Air Reception Devices*, WT Docket No. 19-71

Small cells have taken on outsized importance in our discussions about wireless communications. There's good reason for that. Our 5G future will require massive network densification. By some estimates, we will need to deploy as many as 800,000 small cells for the United States to be competitive in the next generation of wireless service. Compare that to the roughly 280,000 traditional cell towers that were necessary to blanket the nation with the current generation of service and it is clear we have a real infrastructure challenge.

In large part, this is because small cells are typically deployed in public rights of way or on civic infrastructure. That means you need government approval for their installation. And last year my colleagues determined that the best way to expedite the deployment of these antenna devices was to insert the federal government into the negotiations between cities and private companies. This agency decided it would play the role of small cell rate-maker. Instead of working with our state and local partners to develop incentives to speed the way to 5G deployment, this agency cut them out. It told them that going forward Washington would make choices for them about what could be deployed and at what cost in their own backyard.

I think this is extraordinary federal overreach. I do not believe that the constitution or the Communications Act allows Washington to run roughshod over state and local authority like this. Moreover, I believe the lawsuits that followed in the wake of our decisions will not speed our 5G future, but instead slow it down.

That's why in September of last year, I offered a different idea. Instead of treating the challenge of small cell deployment through regulatory fiat in Washington, what if we developed more creative market-based solutions? What if instead of micromanaging municipalities across the country, we fostered competition that could bring down prices? As I suggested back then, one innovative way to do this involves dusting off our 20-year-old over-the-air-reception device rules, or OTARD rules.

OTARD rules provide users with the right to install communications equipment on property they control. By updating our OTARD rules, we could create more siting options for antennas, which could bring down fees through competition instead of government ratemaking. Moreover, this approach could create more opportunities for rural deployment by giving providers more siting and backhaul options.

We didn't explore this market-based alternative then, but I am pleased we begin to do so in today's rulemaking. While the bulk of this rulemaking focuses on fixed wireless infrastructure, it now also asks about small cell siting at my request. I thank my colleagues for making this change.

It's important for two reasons. First, it seems increasingly likely that the courts will return some part of our small cell infrastructure decisions back to this agency with a remand. This could send us right back to the starting line of the 5G race with respect to infrastructure reform—and should that happen, we will need new ideas that are ready to go. Second, despite lofty promises about how our infrastructure reforms will help close the digital divide, the data on small cell deployment to date suggests they have under-delivered. Today 5G deployment is concentrated in a few densely populated areas and has yet to reach rural communities. Again, we're going to need new ideas to ensure it reaches everywhere. Because today's rulemaking starts to explore these kind of opportunities, it has my support.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *Updating the Commission's Rule for Over-the-Air Reception Devices*, WT Docket No. 19-71

Last month, I had the privilege of visiting one of the Nevada Health Centers clinics in Amargosa Valley, Nevada – population about 1,500. Nevada Health Centers is the largest provider of primary care for the uninsured, underinsured, and geographically isolated in the state of Nevada. While there, Corie Nieto, the director of the clinic's telehealth services, deftly demonstrated how telehealth technology connects doctors from distant urban centers with patients in rural communities. Ms. Nieto explained that her office has a 25 Mbps connection, but when they use the connection for a patient, which they do many times a day, the rest of the clinic's internet service noticeably deteriorates.

We have all heard about the myriad benefits of telehealth—from virtual appointments with far away specialists to remote surgeries performed across continents. However, without a sufficiently robust broadband connection these lifesaving technological advances will be out of reach to the many living in rural America. Today's item, which seeks comment on proposals to update the OTARD rules and spur deployment of wireless infrastructure, offers a promising path toward increasing the availability of broadband services in rural communities such as Amargosa Valley. The next generation of wireless technology is expected to unleash tremendous innovations in many sectors, including telehealth. It is our duty to ensure that all Americans, no matter who they are or where they live, have access to affordable, high-quality broadband, and by extension, to the benefits and opportunities such a connection brings.

My thanks to the staff of the Wireless Telecommunications Bureau for your work on this item.