

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

In the Matter of)
)
Amendment of Section 74.1231(i) of the) MB Docket No. 20-401
Commission's Rules on FM Broadcast Booster)
Stations)
)
Modernization of Media Initiative) MB Docket No. 17-105
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Amendment of Section 74.1231(i) of the) RM-11854
Commission's Rules on FM Broadcast Booster)
Stations)

NOTICE OF PROPOSED RULEMAKING

Adopted: November 20, 2020

Released: December 1, 2020

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

Reply Comment Date: [60 days after publication in the Federal Register]

By the Commission: Commissioner O'Rielly concurring and issuing a statement; Commissioners Carr and Starks issuing separate statements.

I. INTRODUCTION

1. In this Notice of Proposed Rulemaking (NPRM), we seek comment on whether to modify the Commission's rules governing the operation of FM booster stations by FM radio broadcasters in certain limited circumstances. Consistent with the petition for rulemaking (Petition) submitted by GeoBroadcast Solutions LLC (GeoBroadcast or Petitioner), through this NPRM we seek input regarding changes to the booster station rules that could enable FM broadcasters to use FM booster stations to air geo-targeted content (e.g., news, weather, and advertisements) independent of the signals of its primary station within different portions of the primary station's protected service contour for a limited period of time during the broadcast hour.

2. The Commission's current rules authorize FM booster stations to retransmit only the signal of their primary station. The booster station must operate on the same frequency as the primary station within the primary station's protected service contour. As a technical matter, however, Petitioner asserts that an FM booster station can air different content for limited periods of time within the primary

1 See generally Petition for Rulemaking of GeoBroadcast Solutions LLC, RM-11854 (filed Mar. 13, 2020) (Petition). Comments regarding the Petition were also filed in the Commission's Media Modernization docket (MB Docket No. 17-105); therefore, we incorporate the relevant comments from that docket into this proceeding.

2 47 CFR § 74.1231(i) ("An FM broadcast booster station is authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities. The FM booster station shall not retransmit the signals of any other station nor make independent transmissions, except that locally generated signals may be used to excite the booster apparatus for the purpose of conducting tests and measurements essential to the proper installation and maintenance of the apparatus.")

3 Id.

station's protected service contour without causing any adjacent-channel interference, and that any resulting co-channel interference (or "self-interference") would be manageable and not detrimental to listeners. Petitioner further asserts that allowing for geo-targeted content will generate significant public interest benefits, including advancing localism and diversity. Petitioner therefore asks that we modify our rules to permit—with certain restrictions—FM booster stations to originate a limited amount of original programming.

3. We find that the Petition presents novel technical and public interest issues that would benefit from additional consideration. Indeed, provided that the technical operation would not unduly degrade the FM service, the use of FM booster stations to air geo-targeted content could potentially help FM broadcasters, including small and independent broadcast stations owned by women, minorities, and small businesses, to provide important and more locally relevant information and to better compete for advertising revenue in an increasingly dynamic media marketplace. Accordingly, with this proceeding, we seek comment on whether—and if so, how—to amend our rules to permit FM booster stations to transmit original geo-targeted content.⁴

II. BACKGROUND

4. Traditionally, an FM broadcast station transmits its signal from a single, elevated transmission site central to its protected service contour. This results in a stronger signal near the transmitter and a weaker signal as the distance from the transmitter increases. Intervening terrain can also reduce signal strength (i.e., terrain shielding), regardless of the distance from the transmitter.⁵ The FM booster service—a low power secondary service in the FM broadcast band—was created in 1970 to allow FM stations to improve signal strength within their authorized service contour.⁶ Specifically, booster stations were designed to address gaps in coverage, such as those caused by distance or terrain shielding. FM booster stations are only licensed to the licensee of the primary station, must operate on the same frequency as the primary station, and are limited to rebroadcasting the signal of the primary station (i.e., no transmission of original content).⁷ At the time, the Commission noted that "indiscriminate use" of FM booster stations could degrade the signal of the primary station and urged licensees to engineer and deploy booster stations in a manner that would limit such interference.⁸ As a secondary service, FM booster stations are not permitted to cause adjacent-channel interference to other primary services or previously-authorized secondary stations.⁹ The Commission's rules also address interference to the

⁴ This proceeding is limited to consideration of content origination via FM boosters. Comments regarding alternate proposals for content origination through other means, such as FM translator stations, should be directed to the appropriate docket or submitted in a distinct petition for rulemaking. *See, e.g.*, Broadcasters for Limited Program Origination Comments and Petition for Rulemaking, RM-11858 (filed May 4, 2020).

⁵ Petition at 7-8.

⁶ *See Amendment of Part 74 of the Commission's Rules and Regulations to Permit the Operation of Low Power FM Broadcast Translator and Booster Stations*, Report and Order, 20 Rad.Reg.2d (P & F) 1538 (1970) (*Low Power FM Broadcast Translator and Booster Stations*).

⁷ 47 CFR § 74.1231(i).

⁸ *Low Power FM Broadcast Translator and Booster Stations*, 20 Rad.Reg.2d (P & F) at para. 20.

⁹ 47 CFR § 74.1203(a).

primary station caused by the booster station.¹⁰ Many of the current FM booster station rules have not been significantly updated since the 1980s.¹¹

5. *Petition for Rulemaking.* On March 13, 2020, GeoBroadcast filed a petition for rulemaking seeking to amend section 74.1231(i) of the Commission’s rules to permit FM booster stations to transmit original content for a limited period of time during the broadcast hour.¹² This “geo-targeted” content would only be available in the specific part of the primary station’s protected service contour served by the booster station; outside of the permitted transmission periods, the booster would continue to retransmit the primary station’s signal.¹³ Under the proposal, the booster station’s programming would have to be “substantially similar” to the primary station’s programming.¹⁴ In a subsequent filing, Petitioner clarified that, in order to be substantially similar, the booster station would be required to retransmit the same content as the primary station except for advertisements, promotions for upcoming programs, and enhanced capabilities including hyper-localized content, and to limit transmission of such original content to 5 percent of the broadcast hour.¹⁵ Petitioner asserts that this proposal would not cause adjacent-channel interference and that technology has developed such that FM booster stations can be sufficiently synchronized with the primary station so as to avoid harmful self-interference.¹⁶ Petitioner claims that only a targeted change to section 74.1231(i) is necessary to facilitate this proposal—which does not seek any changes to the rules regarding primary stations or FM translators—and that the proposed booster station operation is compatible with all existing interference rules.¹⁷

6. On April 2, 2020, the Consumer and Governmental Affairs Bureau issued a public notice seeking comment on the Petition. Comments were due on May 4, 2020; reply comments were due on May 19, 2020. The Petition garnered significant public participation, including from established industry stakeholders, broadcasters (large and small), civil rights advocates, radio engineers, and members of the listening public.

¹⁰ *Id.* § 74.1203(c) (“An FM booster station will be exempted from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station’s signal, *provided* it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station.”).

¹¹ *See, e.g., Amendment of Part 74 of the Commission’s Rules Concerning FM Booster Stations and Television Booster Stations*, Report and Order, 2 FCC Rcd 4625 (1987) (amending the “FM booster rules to permit substantial increases in the output power of FM booster stations and to eliminate the restriction that such stations may only rebroadcast signals received over-the-air.”).

¹² *See generally* Petition. GeoBroadcast is a company that has developed and tested technology aimed at allowing broadcasters to take advantage of the type of FM booster station targeting at issue in this proceeding. In the Petition, GeoBroadcast asks that we “set aside” a similar petition for rulemaking it filed in 2012 and instead consider the instant Petition. *Id.* at 21. We grant this request and dismiss RM-11659.

¹³ *Id.* at 4-5.

¹⁴ Petition at Exh. A (“[T]he programming must be the same except for advertisements, promotions for upcoming programs, and enhanced capabilities including hyper-localized content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news).”). The definition of substantially similar advanced by Petitioner was derived from the rules regarding broadcast television stations’ voluntary transition to the ATSC 3.0 transmission standard. *Id.* at 20. Stations that transition to ATSC 3.0 must simulcast their primary signals in ATSC 1.0 format, and that simulcast must be “substantially similar” to the signal aired in ATSC 3.0. *See e.g.*, 47 CFR § 73.3801(b)(1).

¹⁵ Letter from Gerard J. Waldron, Counsel, GeoBroadcast Solutions LLC, to Marlene H. Dortch, Secretary, FCC, RM-11854, at 1-2 (filed July 17, 2020) (GeoBroadcast July 17 *Ex Parte*).

¹⁶ Petition at 9-10.

¹⁷ *Id.* at 7-8. Given that this section applies to both commercial and noncommercial educational (NCE) FM stations, we treat the Petition as applying to both commercial and NCE stations and seek comment accordingly below.

7. Most commenters support the Petition, although some raise concerns that they assert should be addressed in this proceeding.¹⁸ For example, the National Association of Broadcasters (NAB) supports the petition, but “remains concerned about potential interference that, although apparently limited geographically and confined to within a station’s booster cluster, could spur listeners to change channels or worse, audio sources, and reflect poorly on FM radio service.”¹⁹ NAB also notes that Petitioner’s geo-targeting technology—the only technology addressed in the Petition—currently only works with analog FM service and may disrupt digital audio broadcasting (commonly referred to as HD Radio) in the geo-targeted areas.²⁰ REC Networks (REC) supports the ability to “split” content for brief periods of time during a broadcast, but raises potential interference concerns regarding low power FM (LPFM) and FM translator stations.²¹ While REC is concerned that the proposal could lead to an increase in demand for FM booster stations, they expect that the existing interference rules would continue to protect existing LPFM and FM translator stations.²² The Multicultural Media, Telecom and Internet Council (MMTC), filing on behalf of 21 national public interest, civil rights, and business advocacy organizations, “whole-heartedly support[s] the Petition” and states that geo-targeting “would permit minority-owned stations to better serve their communities.”²³ MMTC envisions the “ability to deliver geo-targeted content as a benefit to both minority broadcasters and minority communities”²⁴ and urges the Commission to promptly issue a notice of proposed rulemaking for the Petition.²⁵

8. By contrast, a group of broadcasters comprised of Beasley Media Group, LLC; Cumulus Media Inc.; Entercom Communications Corp.; and iHeartCommunications Inc. (collectively, Beasley et al.) caution that there is “no necessity to rush” into a notice of proposed rulemaking absent additional real-world testing.²⁶ These broadcasters state that the existing testing is insufficient to prove that geo-targeted programming does not cause self-interference, and would not cause “confusion among radio listeners.”²⁷ Xperi Communications (Xperi) also sought to delay the issuance of a notice of proposed rulemaking, with particular concerns regarding the potential impact on HD Radio broadcasts.²⁸ Based on

¹⁸ We note that there was a significant show of support from many small broadcasters that filed nearly identical comments. *See, e.g.*, Ashley Communications Comments; HubCast Broadcasting Comments; M & M Broadcasting Comments; Sky Media Comments. The volume of comments demonstrates that there is meaningful interest on behalf of radio broadcasters in the ability to offer geo-targeted programming using FM booster stations, which supports our decision to issue this NPRM.

¹⁹ NAB Comments at 5-6.

²⁰ *Id.* at 6.

²¹ REC Comments at 1-5. REC states that it “is a leading advocate for a citizen’s access to spectrum with a heavy focus on the Low Power FM (LPFM) broadcast stations as well as full-service noncommercial educational (NCE) broadcast stations and non-broadcast services such the Amateur Radio Service.” *Id.* at 1.

²² *Id.* at 5 (“While most booster additions and modifications will not cause interference, full-service facilities that were authorized subsequent to LPFM stations may have difficulty placing boosters in areas near LPFM stations and it is our expectation that the Commission will protect previous authorized LPFM and FM translators if a new or modified booster facility creates interference that would fall under [section] 74.1203(a) and [section] 74.1204(f).”)

²³ MMTC Comments at 1.

²⁴ *See* Letter from David Honig, President Emeritus and Senior Advisor, Multicultural Media, Telecom and Internet Council, to Hon. Geoffrey Starks, Commissioner, FCC, RM-11854, at 2 (filed Aug. 25, 2020).

²⁵ MMTC Comments at 1.

²⁶ Beasley et al. Comments at 1-2 (asserting that the Commission should “authorize more testing through experimental authorizations, covering varying geographic, market, and spectrum-use areas, in order to provide a fact-based foundation to evaluate the possible benefits and risks of the technology to the broadcast industry and listening public”).

²⁷ *Id.* at 1.

subsequent discussions with Petitioner, however, Xperi now recommends that the Commission move forward with this proceeding.²⁹

9. In its reply, Petitioner asserts that its existing testing regime provides a sufficient basis upon which to proceed to a notice of proposed rulemaking.³⁰ Petitioner also notes the level of support from radio broadcasters—notwithstanding the objections from Beasley et al.—including two of the broadcasters with whom Petitioner partnered on the experimental authorizations,³¹ and highlights the potential public interest benefits of the proposed rule change, including advancing localism, supporting minority-owned broadcasters, providing emergency alert capability, and helping radio broadcasters compete in the current challenging environment.³²

III. DISCUSSION

10. We seek comment below on whether—and if so, how—to change our FM booster station rules to permit FM boosters to transmit original geo-targeted content. First, we seek comment on technical issues, such as whether permitting FM boosters to transmit original geo-targeted content may result in self-interference that would be disruptive to listeners and whether there are alternatives to the Petitioner’s proposal, including conforming changes to other Commission rules, that we should consider. Second, we seek comment on whether to require programming originated by the FM booster station to be “substantially similar” to the primary station’s programming, and how to define this term. Finally, we seek comment on potential public interest implications if we permit FM boosters to transmit original geo-targeted content, including the impact, if any, on localism, diversity, and competition in the media marketplace, and any attendant costs and benefits. We also ask for comment on the effect of these proposals on small entities and seek comment as to alternatives that would minimize burdens on such small entities.

A. Technical Operation

11. *Interference Issues.* We seek comment on whether permitting FM boosters to transmit original geo-targeted content would result in additional interference, either to the primary station or to other broadcast stations serving the same area. The Petition asserts that the only interference-related impact of its proposed rule change would be self-interference with the primary station where the FM booster station and the primary station contours meet, rather than adjacent-channel interference between broadcasters and therefore, it would be incumbent upon the stations using FM booster stations to originate programming to manage the self-interference to ensure that service to its community was not degraded.³³

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²⁸ Xperi Comments at 2-3.

²⁹ Letter from Paul Davis, General Counsel, Xperi Corporation, to Marlene H. Dortch, Secretary, FCC, RM-11854, at 1 (filed May 28, 2020) (“Given our conversations with GeoBroadcast and the planned demonstrations, Xperi suggests that the Commission continue with the process to move toward an NPRM. The NPRM process will give all parties ample time to explore these various issues.”) (Xperi May 28 *Ex Parte*).

³⁰ GeoBroadcast Reply at 5-6. GeoBroadcast has performed three tests of its technology pursuant to experimental authorizations from the Commission: in 2010 with KDUT in Randolph, Utah, an area with mountainous terrain; in 2011 with WWOJ in Avon Park, Florida, an area with flat terrain; and in 2016 with WIIL in Union Grove, Wisconsin, an urban area. *Id.* Detailed technical information for these tests was provided in a Technical Exhibit to Petitioner’s reply.

³¹ *Id.* at 2-3, 5 (“Bustos Media, then-licensee of KDUT (Randolph, UT), the site of GeoBroadcast’s first test, called that test ‘a resounding success.’ Alpha Media, licensee of WIIL (Union Grove, WI), the site of GeoBroadcast’s most recent test, stated: ‘[a]fter hearing the results of that test, we have no doubt that the system used to deliver different programming on multiple boosters works and we support the new technology.’”).

³² *Id.* at 2-4, 7.

³³ Petition at 5.

Is this assessment accurate? Is it reasonable to expect stations to adequately manage self-interference without additional guidance or mandates, and what is the likely financial impact of managing any self-interference? Our existing rules do not require FM booster stations to protect second adjacent stations from interference. Should we impose second adjacent channel interference protection requirements for FM booster stations? What would be the correct protection requirements to impose? Should second adjacent channel interference protection requirements apply to all FM booster stations or only those using multiple boosters to provide geo-targeted content? To the extent FM booster stations result in interference to other stations, are our existing rules and procedures able to sufficiently address the interference? Do the proposed booster operations pose a distinct threat to other types of stations, such as LPFM or HD Radio broadcasters?³⁴ For example, are our existing rules sufficient to address the potential interference to certain LPFM stations identified by REC?³⁵

12. Should FM stations utilizing booster stations for geo-targeted programming be required to provide notice to other local broadcasters and/or the public to help identify potential sources of interference? If so, how should we structure the notice? For example, should notice be provided using an FCC form—existing or newly created—that would be put out for public notice prior to commencing operation? How many days in advance of operations should notice be required (e.g., 30 days)? Should other stations or listeners be permitted to raise concerns immediately based on the potential for interference or must they wait and only report actual interference? What are the costs and benefits associated with any proposed notice requirement?

13. Petitioner acknowledges that, while an FM booster station is broadcasting different content from its primary station, self-interference is possible. What is the likely impact of self-interference on listeners? Could such interference significantly degrade the quality of service on the FM band? What would the listener experience as they moved between zones broadcasting different content or if they otherwise were located near the boundary between two zones (e.g., someone whose home was near the boundary (fixed) or who was driving along or close to the boundary (mobile))? Could there be circumstances in which a listener travelling in an automobile moves from a booster zone to the primary zone and then to another booster zone in quick succession? How would these sudden, repeated changes impact the listening experience? Should we restrict the protected service contour, size, or proximity of booster “zones” to address self-interference concerns? Or is the Commission’s existing rule prohibiting boosters from causing impermissible interference to the primary station’s signal sufficient to address any such concerns? What impact could any increase in self-interference have on emergency broadcasts being transmitted from the primary station? Will broadcasters be sufficiently incentivized to address self-interference concerns if it means potentially forfeiting additional revenue from geo-targeted advertising or should we consider additional interference restrictions?

14. To help prevent potential self-interference, should the Commission place a limit on the number of FM boosters that can be associated with a primary station for purposes of geo-targeted programming? If so, we seek comment on the appropriate cap and the reasoning supporting any such cap. Should certain types of stations be exempt from the restriction, and, if so, how should the Commission determine which stations are exempt? Should we consider changes to section 74.1204(i) to better protect first-adjacent channel stations? Also, does the likely increase in the number of authorized FM booster stations warrant a new rule that provides predicted protections for co-channel stations, as opposed to only protecting against actual interference?

15. Should we adopt any additional rules or guidelines to address instances of self-interference? For example, should a station be required to shut down a booster station offering geo-targeted programming upon the filing of an interference complaint until the station can prove it has eliminated the interference? How many separate interference complaints should be filed before resolution

³⁴ See, e.g., REC Comments at 2-5; Xperi Comments at 2.

³⁵ REC Comments at 2-5

is required? Is one complaint sufficient? Should we require six complaints in order to be consistent with the minimum number of complaints required in the FM translator context (based on population served)?³⁶ What should be included in these complaints? We seek comment generally on how to structure such a complaint process.

16. From a consumer electronics standpoint, will the impact of self-interference be the same for all radios or are some receivers more susceptible to co-channel interference? We are particularly interested in comments from receiver manufacturers, retailers, and/or auto manufacturers regarding the extent to which they are concerned about consumer confusion and whether such confusion is likely to result in warranty claims and/or equipment returns.

17. Finally, have the previous experimental operations provided us with enough information upon which to identify and address interference concerns?³⁷ If not, what additional information or testing is necessary before we can determine whether to permit geo-targeted programming? For example, is there sufficient technical information to assess potential adjacent channel interference for short-spaced and grandfathered stations? How might this technology impact our treaty obligations if deployed near the border? We seek comment generally on these issues.

18. *FM Booster Station Rules.* Consistent with the proposal in the Petition, we seek comment on whether to change section 74.1231(i) of the Commission's rules, which applies to both commercial and noncommercial educational (NCE) FM stations. If the Commission were to modify that rule, would any conforming changes be needed to other Commission rules? For example, would section 74.1201(f) need to be revised to reflect the fact that FM booster stations would no longer be limited to retransmitting the signal of the primary station? Are there any changes to power limitations under section 74.1235 that we should consider for booster stations that will air geo-targeted content? Should any changes be made to the FM booster station application process under section 74.1233 for boosters that will air geo-targeted content? How should we deal with mutually exclusive FM booster station applications (e.g., two proposed booster stations that are short-spaced under section 74.1204(g))? Additionally, as noted above, the proposed rule change to section 74.1231(i) would apply to commercial and NCE FM stations. Is there any reason to restrict the ability to offer geo-targeted programming to commercial stations? Conversely, should we also permit LPFM stations to offer geo-targeted programming via FM booster stations? What rules would need to be revised to facilitate this change?

19. How might permitting FM boosters to transmit original geo-targeted content impact demand for FM booster stations? What variables influence the number of boosters necessary to support geo-targeted programming? Will an increase in FM booster stations result in an increase to the noise floor in the FM band that would be detrimental to the quality of the FM service? Petitioner asserts that any increase in the noise floor would be minor and localized near the transmitter sites and that any such increase would not negatively impact other broadcasters or listeners.³⁸ We seek comment on these issues and assertions. Similar to the self-interference context, should we limit the number of FM boosters that can be used for geo-targeted programming in order to address noise-floor issues? Should such limits apply as an aggregate cap across all FM licensees in a market and/or a limit on the number of booster stations that can be associated with a primary station? If we adopt any such limitation, what measures should we take to ensure that broadcasters that do not currently have FM booster stations, especially small, independent, women, and minority station owners, have a meaningful opportunity to provide geo-targeted programming?

20. At present, FM booster station applications can be filed at any time, without limitation on the number of boosters associated with a primary station. As some commenters suggest, if the

³⁶ 47 CFR § 74.1203(a)(3).

³⁷ See *supra* notes 30 and 31.

³⁸ See GeoBroadcast July 17 *Ex Parte* at 1.

Commission permits FM boosters to transmit original geo-targeted content, should the Commission consider one or more special filing windows for certain types of stations, such as Class A stations, to ensure equitable and timely access to FM booster station licenses?³⁹ Is the anticipated demand for additional booster stations such that the Commission's existing processing capabilities would be insufficient to meet demand? If so, which stations should be able to participate in these early filing windows? How should we assess which stations may need and benefit from such a process? For example, should we adopt MMTC's proposal that Class A stations be given first priority, followed by a second priority window for Class B and C stations?⁴⁰ Should we consider other methods to address these issues, such as a limit on the number of pending applications that can be associated with a primary station? We seek comment generally on these issues.

21. The Petition focuses on geo-targeted programming on FM radio based on FM booster station technology developed by Petitioner. Would the proposed rule change limit other companies from developing similar geo-targeting technology using FM booster stations? If so, what changes would be necessary to ensure competition in the delivery of such geo-targeting solutions?

22. Finally, we note that the FM booster station rules were originally adopted to address signal quality issues caused by distance from the main transmitter site and/or terrain shielding.⁴¹ The proposed use of boosters to provide geo-targeted programming would not be based on such considerations, however. How should this impact our assessment of the proposal?

23. *HD Radio.* It is our understanding that, at present, geo-targeting technology is only compatible with analog broadcasts; accordingly, we lack any testing data on the operation of geo-targeted programming by HD Radio broadcast stations. If the intent is to expand this service offering to HD Radio stations, what is the impact of the change in programming on the advanced features of the HD Radio signal? Would the booster station only replace the content on the HD1 channel or would it also (and simultaneously) change programming on the HD2/HD3/HD4 channels? How does this impact the scrolling information the receiver displays? Is the expense associated with an HD Radio system similar to the analog equipment? We acknowledge that there may be insufficient information upon which to address these questions at this time. How should we address potential HD Radio operation in the absence of such information? What other issues should we consider in this context?

B. Substantially Similar Programming

24. For purposes of determining whether or not a booster may originate programming, we seek comment on whether to require the FM booster station to air content that is "substantially similar" to the content on the primary channel.⁴² What would the purpose of such a requirement be and what would be the consequences of not adopting such a requirement? If we do impose this requirement, consistent with the Petition, should "substantially similar" mean that "the programming must be the same except for advertisements, promotions for upcoming programs, and enhanced capabilities including hyper-localized content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news)"?⁴³ This definition is based on the rules governing the voluntary broadcast television transition to ATSC 3.0 with regard to the ATSC 1.0 simulcasting requirement.⁴⁴ We seek comment on whether this definition of substantially

³⁹ See Letter from David Honig, President Emeritus and Senior Advisor, Multicultural Media, Telecom and Internet Council, to Marlene H. Dortch, Secretary, FCC, RM-11854, at 2 (filed Aug. 17, 2020) (stating that most minority-owned FM stations are Class A stations and advocating special filing windows for Class A, B, and C stations) (MMTC Aug. 17 *Ex Parte*).

⁴⁰ *Id.*

⁴¹ See *supra* para. 4.

⁴² Petition at 7, 20.

⁴³ *Id.* at Exh. A.

⁴⁴ See e.g., 47 CFR § 73.3801(b); see also *supra* note 14.

similar is sufficient and appropriate in this context. Do licensees need additional guidance as to the types of original programming that are permitted within the categories of “advertisements, promotions for upcoming programs, and enhanced capabilities?” Should we expand or contract on these categories? Is it necessary to include any other aspects of the substantially similar requirement in the ATSC 3.0 context, such as that any programming required to be retransmitted from the primary station must be aired at the same time to satisfy the rule?⁴⁵

25. We also seek comment on whether there should be any differences in the definition of substantially similar programming as between commercial and NCE FM stations, in particular in the categories of original programming that are permitted. For example, NCE stations do not run paid advertisements, though they do provide underwriting acknowledgement messages.⁴⁶ Should we allow such hyper-targeted messages to be included in the categories of original programming transmitted by booster stations? Are there any other programming differences that we should consider?

26. For purposes of determining whether an FM booster station’s programming is substantially similar to its primary station, GeoBroadcast recommended a time limit for original programming of 5 percent of the broadcast hour (i.e., three minutes), which is similar to Nielsen’s requirement that a broadcaster’s online stream(s) mirror their over-the-air signal at least 95 percent of the time for online and over-the-air ratings to be aggregated.⁴⁷ We therefore seek comment on whether to adopt the 5 percent limitation. Are there other alternatives we should consider? We encourage parties addressing the time limit to discuss the potential impact of content origination on our existing rules and policies for licensing new stations. If any such limitation is generally appropriate, should we provide for exceptions in emergency situations, where additional local information may be particularly valuable to listeners? What are the costs and benefits associated with any proposed time limits? For example, what impact would a time limit have on potential benefits associated with enhanced localism, increased local advertising, and additional emergency information? What are the costs associated with additional interference or the possibility of increased interference?

C. Public Interest Benefits

27. We seek comment on whether, and if so how, revising the FM booster station rules to permit original geo-targeted content would benefit listeners and broadcasters and otherwise serve the public interest. For example, the Petition claims that the rule change would promote localism by allowing FM radio stations to provide hyper-local news and alerts, weather, traffic, and advertising that would be particularly relevant to certain sectors of their protected service contour.⁴⁸ We seek comment on these potential benefits and whether such services are consistent with the Commission’s localism goals. To the extent targeted advertising includes political content, how would that impact the primary station’s political file requirements, or any other requirements related to political advertisements?

28. The Petition also asserts that it would benefit small businesses and other local advertisers who may not be able to afford or be interested in buying advertisements to air in the station’s entire market but who could be interested in more targeted ads.⁴⁹ While not typically part of the Commission’s public interest assessment, should we take into account the impact on small businesses and local advertisers in assessing the public interest benefits of the proposal? Would national advertisers also benefit from geo-targeted programming? The Petition further asserts that the proposal would generate additional economic opportunity for broadcasters at a time when many FM broadcasters are facing

⁴⁵ See e.g., 47 CFR § 73.3801(b)(2).

⁴⁶ See REC Comments at 1.

⁴⁷ See GeoBroadcast July 17 *Ex Parte* at 1-2.

⁴⁸ Petition at 16-17.

⁴⁹ *Id.* (citing a February 2020 BIA report provided as Exhibit B to Petition).

financial hardship.⁵⁰ We seek comment on these issues, in particular on any economic benefits that small, independent, minority, and women owned FM station owners could derive from increased advertising opportunities.

29. In addition, we seek comment on whether the proposal is likely to have any impact on diversity, in particular on FM station ownership by minorities, women, and small businesses. Would the ability to geo-target content increase ownership opportunities for these underrepresented and diverse station owners in the FM service? Would it strengthen their existing operations, for example by increasing their audience share and consequently their ability to increase revenue? What other specific opportunities would small, independent, minority, and women owned FM station owners gain if we authorize geo-targeting?⁵¹

30. How would the proposed rule change affect competition among existing FM station owners, in particular those who currently operate FM booster stations and those who would need to secure a new FM booster license to implement geo-targeting? Does the voluntary nature of the proposed change, coupled with the availability of vendor financing for the transmission equipment necessary to implement geo-targeting, increase the likelihood that small, independent, or diverse station owners that seek to gain access to this technology will be able to do so?⁵² Does vendor financing of the transmission equipment raise any public interest concerns or otherwise impact our existing rules? To what extent would the vendor be involved in programming the geo-targeted content? Are the costs associated with the proposal such that smaller broadcasters would be unable to deploy the technology absent vendor financing? Should cost concerns impact our decision whether to permit geo-targeted programming? Are there any special considerations for stations that are being operated pursuant to a sharing agreement (e.g., local marketing agreement)?

31. We also seek comment on whether the proposal could have a negative impact on listeners. For example, could interference issues reduce the effectiveness of emergency alerts (either localized or those broadcast throughout the local market)? Could certain parts of the local market be ignored in favor of population clusters deemed more valuable to advertisers? According to MMTC, radio is “especially vital” to minority communities that may be underserved by other media, and geo-targeted programming could increase the amount of content directed toward such communities, such as second-language programming.⁵³ What impact would geo-targeted programming have on underserved populations? To the extent we identify any public interest harms and/or technical concerns with the proposed operations, how should we balance any potential public interest benefits against such concerns?

IV. PROCEDURAL MATTERS

32. *Initial Regulatory Flexibility Act Analysis.* The Regulatory Flexibility Act of 1980, as amended (RFA), requires that a regulatory flexibility analysis be prepared for notice and comment rulemaking proceedings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”⁵⁴ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the

⁵⁰ Petition at 18-20.

⁵¹ See MMTC Aug. 17 *Ex Parte* at 1; Urban One Comments at 1.

⁵² See MMTC Comments at 2 (“To mitigate affordability issues that could discourage minority broadcasters from adopting the technology, we have been assured that the petitioner for rulemaking, GEO, will provide vendor financing to small and diverse broadcasters. Specifically, GEO will bear the upfront costs and receive a share of just the incremental revenue.”).

⁵³ *Id.* at 1-2.

⁵⁴ 5 U.S.C. § 603.

term “small business concern” under the Small Business Act.⁵⁵ 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 Small Business Administration (SBA).⁵⁶

33. With respect to this Notice of Proposed Rulemaking, an Initial Regulatory Flexibility Analysis (IRFA) under the RFA is contained in the Appendix. Written public comments are requested on the IRFA and must be filed in accordance with the same filing deadlines as comments on this Notice of Proposed Rulemaking, with a distinct heading designating them as responses to the IRFA. In addition, a copy of this Notice of Proposed Rulemaking and the IRFA will be sent to the Chief Counsel for Advocacy of the SBA and will be published in the Federal Register.

34. *Paperwork Reduction Act.* This document seeks comment on whether the Commission should adopt new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens and pursuant to the Paperwork Reduction Act of 1995, Public Law 104-13, invites the general public and the Office of Management and Budget (OMB) to comment on these information collection requirements. 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.

35. *Ex Parte Rules - Permit-But-Disclose.* This proceeding shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.⁵⁷ 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 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.

36. *Filing Requirements—Comments and Replies.* 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. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

⁵⁵ *Id.* § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, 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.” 5 U.S.C. § 601(3).

⁵⁶ 15 U.S.C. § 632.

⁵⁷ 47 CFR §§ 1.1200 *et seq.*

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent 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.
 - 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.U.S.
 - Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington DC 20554
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.⁵⁸
- During the time the Commission's building is closed to the general public and until further notice, if more than one docket or rulemaking number appears in the caption of a proceeding, paper filers need not submit two additional copies for each additional docket or rulemaking number; an original and one copy are sufficient.

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

38. *Availability of Documents.* Comments, reply comments, and *ex parte* submissions will be available for public inspection during regular business hours in the FCC Reference Center, Federal Communications Commission, 45 L Street, NE, Washington, DC 20554. These documents will also be available via ECFS. Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

39. *Additional Information.* For additional information on this proceeding, contact Albert Shuldiner, Audio Division, Media Bureau at Albert.Shuldiner@fcc.gov or 418-2721, or James Bradshaw, Audio Division, Media Bureau at James.Bradshaw@fcc.gov or (202) 418-2739.

V. ORDERING CLAUSES

40. Accordingly, **IT IS ORDERED** that, pursuant to the authority contained in section 1.407 of the Commission's rules, 47 CFR § 1.407, the Petition for Rulemaking of GeoBroadcast Solutions LLC **IS GRANTED** to the extent specified herein and the Petition for Rulemaking in RM-11659 **IS DISMISSED**.

41. Accordingly, **IT IS ORDERED** that, pursuant to the authority found in sections 1, 4, 7, 301, 302, 303, 307, 308, 309, 316, 319, and 324 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 157, 301, 302, 303, 307, 308, 309, 316, 319, and 324, this Notice of Proposed Rulemaking **IS ADOPTED**.

42. **IT IS FURTHER ORDERED** that, pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments on the Notice of Proposed Rulemaking in MB Docket No. 20-166 on or before thirty (30) days

⁵⁸ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (2020).

after publication in the *Federal Register* and reply comments on or before sixty (60) days after publication in the *Federal Register*.

43. **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 Act Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Federal Communications Commission (Commission) has prepared this present Initial Regulatory Flexibility Analysis (IRFA) concerning the possible significant economic impact on small entities by the policies and rules proposed in the Notice of Proposed Rulemaking (NPRM). 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 provided on the first page of the NPRM. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.³

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

2. The NPRM seeks comment on changes to the Commission's rules governing the use of FM booster stations by FM radio broadcasters. Traditionally, an FM broadcast station transmits its signal from a single, elevated transmission site central to its protected service contour. This results in a stronger signal near the transmitter and a weaker signal as the distance from the transmitter increases. Intervening terrain can also reduce signal strength, regardless of the distance from the transmitter.⁴ The FM booster service—a low power secondary service on the FM broadcast band—was created in 1970 to allow FM stations to improve signal strength within their authorized service contour.⁵ FM booster stations are only licensed to the licensee of the primary station, must operate on the same frequency as the primary station, and are limited to rebroadcasting the signal of the primary station (i.e., no transmission of original content).⁶ As a secondary service, FM booster stations are not permitted to cause adjacent-channel interference to other primary services or previously-authorized secondary stations.⁷ The Commission's rules also address interference to the primary station caused by the booster station.⁸ Many of the current FM booster station rules have not been significantly updated since the 1980s.⁹

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 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 (CWAAA).

² See 5 U.S.C. § 603(a).

³ See *id.*

⁴ Petition for Rulemaking of GeoBroadcast Solutions LLC, RM-11854 at 7-8 (filed Mar. 13, 2020) (Petition).

⁵ See *Amendment of Part 74 of the Commission's Rules and Regulations to Permit the Operation of Low Power FM Broadcast Translator and Booster Stations*, Report and Order, 20 Rad.Reg.2d (P & F) 1538 (1970).

⁶ 47 CFR § 74.1231(i).

⁷ *Id.* § 74.1203(a).

⁸ *Id.* § 1203(c) (“An FM booster station will be exempted from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station's signal, *provided* it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station.”).

⁹ See, e.g., *Amendment of Part 74 of the Commission's Rules Concerning FM Booster Stations and Television Booster Stations*, Report and Order, 2 FCC Rcd 4625 (1987) (amending the “FM booster rules to permit substantial increases in the output power of FM booster stations and to eliminate the restriction that such stations may only rebroadcast signals received over-the-air”).

3. On March 13, 2020, GeoBroadcast Solutions LLC (GeoBroadcast or Petitioner) filed a petition for rulemaking seeking to amend section 74.1231(i) of the Commission’s rules to permit FM booster stations to transmit original content for a limited period of time during the broadcast hour.¹⁰ This “geo-targeted” content would only be available in the specific part of the primary station’s protected service contour served by the booster station; outside of these periods, the booster would continue to retransmit the primary station’s signal.¹¹ Under the proposal, the content aired by the boosters must be “substantially similar” to the content aired by the primary station.¹² The NPRM preliminarily defines “substantially similar” as programming must that is the same except for advertisements, promotions for upcoming programs, and enhanced capabilities including hyper-localized content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news). Petitioner asserts that this proposal would not cause adjacent-channel interference and that technology has developed such that FM booster stations can be sufficiently synchronized with the primary station so as to avoid harmful self-interference.¹³ Petitioner claims that only a targeted change to section 74.1231(i) is necessary to facilitate this proposal—which does not seek any changes to the rules regarding primary stations or FM translators—and that the operation is compatible with all existing interference rules.¹⁴

4. The NPRM seeks comment on whether to change the Commission’s FM booster station rules consistent with the proposal set forth in the Petition. We also seek comment on alternative approaches to permitting FM boosters to transmit original geo-targeted content. First, the NPRM seeks comment on technological issues, such as whether permitting FM boosters to transmit original geo-targeted content may result in self-interference that would be disruptive to listeners, degrade the quality of service on the FM band, cause interference and a distinct threat to particular types of stations, such as LPFM or HD Radio broadcasters stations, and whether there are alternatives to the Petitioner’s proposal, including conforming changes to other Commission rules, that the Commission should consider. Second, the NPRM seeks comment on whether geo-targeted content should be substantially similar to the primary station’s content, and how to define this term. Finally, the NPRM seeks comment on potential public interest benefits, including the impact, if any, on ownership diversity. Petitioner asserts that its proposal would benefit small businesses and other local advertisers who may not be able to afford or be interested in buying advertisements to air in the station’s entire market but who could be interested in more targeted ads. The NPRM asks whether the Commission should take into account the impact on small businesses and local advertisers in assessing the public interest benefits of the proposal. Further the NPRM seeks comment on the costs associated with the proposal, such that smaller broadcasters would be unable to deploy the technology absent vendor financing, and whether such cost concerns should impact our decision.

B. Legal Basis

5. The proposed action is authorized pursuant to sections 1, 4, 7, 301, 302, 303, 307, 308, 309, 316, 319, and 324, of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 157, 301, 302, 303, 307, 308, 309, 316, 319, and 324.

¹⁰ See generally Petition.

¹¹ *Id.* at 4-5.

¹² Petition at Exh. A (“[T]he programming must be the same except for advertisements, promotions for upcoming programs, and enhanced capabilities including hyper-localized content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news).”). The definition of substantially similar advanced by Petitioner was derived from the rules regarding broadcast television stations’ voluntary transition to the ATSC 3.0 transmission standard. *Id.* at 20. Stations that transition to ATSC 3.0 must simulcast their primary signals in ATSC 1.0 format, and that simulcast must be “substantially similar” to the signal aired in ATSC 3.0. See 47 CFR § 73.3801(b)(1).

¹³ Petition at 9-10.

¹⁴ *Id.* at 7-8.

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, if adopted.¹⁵ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹⁶ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁷ 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.¹⁸ Below, we provide a description of such small entities, as well as an estimate of the number of such small entities, where feasible.

7. *Radio Broadcasting.* Given the potential impact of the proposal to allow FM boosters to transmit original geo-targeted content, radio broadcasting stations may be affected by rule changes.

8. The U.S. Economic Census radio broadcasting category “comprises establishments primarily engaged in broadcasting aural programs by radio to the public.”¹⁹ Programming may originate in the establishment’s own studio, from an affiliated network, or from external sources. The SBA has created the following small business size standard for this category: those having \$41.5 million or less in annual receipts.²⁰ Census data for 2012 show that 2,849 firms in this category operated in that year.²¹ Of this number, 2,806 firms had annual receipts of less than \$25 million, 17 with annual receipts between \$24,999,999 and \$50 million, and 26 with annual receipts of \$50 million or more.²² Because the Census has no additional classifications that could serve as a basis for determining the number of stations whose receipts exceeded \$41.5 million in that year, we conclude that the majority of radio broadcast stations were small entities under the applicable SBA size standard.

9. Apart from the U.S. Census, the Commission has estimated the number of licensed AM radio stations to be 4,560²³ and the number of commercial FM radio stations to be 6,704, along with 8,339 FM translator and booster stations.²⁴ Based on 2019 revenue data, 4,263 AM stations and 6,731 FM stations had revenues of \$41.5 million or less, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Television Database (BIA). In addition, the Commission has estimated

¹⁵ 5 U.S.C. § 603(b)(3).

¹⁶ *Id.* § 601(6).

¹⁷ *Id.* § 601(3) (incorporating by reference the definition of “small-business concern” in 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.” *Id.* § 601(3).

¹⁸ 15 U.S.C. § 632.

¹⁹ U.S. Census Bureau, 2017 NAICS Definitions, “515112 Radio Stations,” <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

²⁰ 13 CFR § 121.201 (2012), NAICS Code 515112.

²¹ U.S. Census Bureau, American FactFinder, http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ4&prodType=table.

²² *Id.*

²³ *Broadcast Station Totals as of September 30, 2020*, FCC News Release (rel. Oct. 2, 2020) (Broadcast Station Totals), <https://www.fcc.gov/document/broadcast-station-totals-september-30-2020>.

²⁴ *Id.*

determined the number of noncommercial educational (NCE) FM radio stations to be 4,196.²⁵ NCE stations are non-profit, and therefore considered to be small entities.²⁶ Therefore, we estimate that the majority of radio broadcast stations are small entities.

10. *Low Power FM Stations.* The same SBA definition that applies to radio stations applies to low power FM stations. As noted, the SBA has created the following small business size standard for this category: those having \$41.5 million or less in annual receipts.²⁷ While the U.S. Census provides no specific data for these stations, the Commission has estimated the number of licensed low power FM stations to be 2,143.²⁸ Given the fact that low power FM stations may only be licensed to not-for-profit organizations or institutions that must be based in their community and are typically small, volunteer-run groups, we will presume that these licensees qualify as small entities under the SBA definition.

11. We note again, however, that in assessing whether a business concern qualifies as “small” under the above definition, business (control) affiliations²⁹ must be included. Because we do not include or aggregate revenues from affiliated companies in determining whether an entity meets the applicable revenue threshold, our estimate of the number of small radio broadcast stations affected is likely overstated. In addition, as noted above, one element of the definition of “small business” is that an entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio broadcast station is dominant in its field of operation. Accordingly, our estimate of small radio stations potentially affected by the rule revisions discussed in the NPRM includes those that could be dominant in their field of operation. For this reason, such estimate likely is over-inclusive.

12. *Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment.³⁰ Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.³¹ The SBA has established a small business size standard for this industry of 1,250 employees or less.³² U.S. Census Bureau data for 2012 shows that 841 establishments operated in this industry in that year.³³ Of that number, 828 establishments operated with fewer than 1,000 employees, 7 establishments operated with between 1,000 and 2,499 employees, and 6 establishments

²⁵ *Id.*

²⁶ 5 U.S.C. § 601(4), (6).

²⁷ 13 CFR § 121.201 (2012), NAICS Code 515112.

²⁸ Broadcast Station Totals.

²⁹ “[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has the power to control both.” 13 CFR § 21.103(a)(1).

³⁰ 13 CFR § 121.201 (2012), NAICS Code 334220. *See also* U.S. Census Bureau, 2012 NAICS Definitions, “334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing” <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.334220#>.

³¹ 13 CFR § 121.201 (2012), NAICS Code 334220.

³² *Id.*

³³ U.S. Census Bureau, 2012 *Economic Census of the United States*, Table EC1231SG2, Manufacturing: Summary Series: General Summary: Industry Statistics for Subsectors and Industries by Employment Size: 2012, NAICS Code 334220, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/31SG2//naics~334220.

operated with 2,500 or more employees.³⁴ Based on this data, we conclude that a majority of manufacturers in this industry are small.

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

13. In this section, we identify the reporting, recordkeeping, and other compliance requirements proposed in the NPRM and consider whether small entities are affected disproportionately by any such requirements. As discussed above, the NPRM seeks comment on changes to the Commission's rules governing the use of FM booster stations by FM radio broadcasters. Providing geo-targeted programming as proposed in the NPRM would be voluntary. The NPRM does not propose any new mandatory reporting, recordkeeping, or compliance requirements for small entities, unless such entities, i.e., licensees, choose to use FM booster stations to provide geo-targeted programming. We note that the adoption of the proposed rule may require modification of current requirements and processes for entities that choose to provide geo-targeted programming, such as modification of FCC forms, including but not limited to, FCC Form 2100, Schedules 349 and 350.³⁵ The NPRM thus will not impose additional obligations or expenditure of resources on small businesses unless they choose to acquire FM booster stations.

14. *Reporting Requirements.* The NPRM does not propose to adopt new reporting requirements.

15. *Recordkeeping Requirements.* The NPRM does not propose to adopt new recordkeeping requirements.

16. *Other Compliance Requirements.* The NPRM seeks comment on whether stations utilizing booster stations for geo-targeted programming should be required to provide notice to other local broadcasters and/or the public to help identify potential sources of interference? The NPRM seeks comment on the structure of such a notice, timeframe for providing such notice, if/how stations or listeners should be permitted to raise concerns, and the costs and benefits associated with any proposed notice requirement.

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

17. The RFA requires an agency to describe any significant 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 the rule, or any part thereof, for small entities.”³⁶

18. The NPRM seeks comment on a voluntary process by which FM broadcasters could utilize FM booster stations to offer geo-targeted content that may be of particular interest to listeners in certain areas within the station's service contour. Petitioner asserts that this would benefit broadcasters (large and small) and listeners, alike by promoting localism through hyper-local news and alerts, weather, traffic, and advertising that would be particularly relevant to certain sectors of their protected service contour. The Petition also asserts that it would not only generate additional economic opportunity for broadcasters at a time when many FM broadcasters are facing financial hardship, but also benefit small

³⁴ *Id.*

³⁵ The FCC Forms are available via the Commission's website at <https://www.fcc.gov/media/radio/lms-help-center>.

³⁶ 5 U.S.C. § 603(c)(1)-(c)(4).

businesses and other local advertisers who may not be able to afford or be interested in buying advertisements to air in the station's entire market but who could be interested in more targeted ads.

19. The Commission considers in the NPRM specific steps it could take and significant alternatives to the proposed rules that could minimize potential economic impact on small entities that could be affected by the rule change proposed in the NPRM, as well as any other rule changes that may be required. Potential economic costs and burdens that could impact small businesses include, for example, interference arising from geo-targeted programming. Specifically, the Bureau considers as an alternative the possibility that the proposed operation may not result in interference to other broadcasters and has also considered the possibility that existing rules are able to address such circumstances. The Bureau also considers ways to assist small entities that wish to engage in geo-targeted broadcasting, such as whether to open special filing windows for FM booster applications and, to the extent the Commission limits the number of booster stations a primary station may license, whether to exempt certain types of broadcasters from these limits.

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

20. None.

**STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY,
CONCURRING**

Re: *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, MB Docket No. 20-401; Modernization of Media Initiative, MB Docket No. 17-105; Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, RM-11854.*

I have long advocated for the elimination of asymmetric regulations that undermine the ability of legacy providers to compete effectively with their unregulated counterparts, and this need is no more apparent than in the broadcast industry. In fact, the Commission should jettison much of its regulatory model for legacy providers, especially broadcasters. I therefore welcome newcomers to this discussion who offer creative ideas that seek to achieve the same or similar goals, such as today's Notice. While I have certain reservations regarding the contemplated approach in today's Notice and have questions as to how it would work in practice, the item's broad scope and fairly neutral tone make it appropriate to at least open the discussion on the changes under consideration. The record should be quite telling on this matter.

At the same time, the rollout of the Notice seems a bit hasty, given its substantial implications for reshaping FM radio policy and the radio advertising marketplace. It's not a perfect analogy, but when one considers the many years that went into studying NextGenTV and all the twists and turns that came with the process, this rulemaking's embrace of new radio technologies seems to have occurred at almost light speed. In addition to these process-related concerns, there are also substantive reasons to proceed with caution. As I have noted elsewhere regarding proprietary technology and regulations, any rulemaking that considers taking steps that rely on a proprietary technology should be done under a watchful and extremely skeptical eye. It can take years, if not decades, to undue problematic regulations that contain embedded technologies.

Further, geotargeting will likely have different consequences for different stations, and it will be important for the record to flesh out the relevant benefits and drawbacks of more targeted ad sales. Some argue that increased targeting could expand ad sales by making smaller stations, and even boosters, more attractive to ad buyers. However, it is also possible, at the same time, that geotargeted ads will lower station revenues overall because these ads will be cheaper as a result of reaching fewer ears, leaving stations with a more limited product to offer and putting them in the position of having to recoup lost revenue.

If advertisers can slice any given market into half a dozen mini markets, it is possible they will only buy spots in certain neighborhoods and forego others, while potentially reallocating remaining funds to digital advertising or other media. In the best-case scenario, radio stations would be under heightened pressure to sell *even more* ads, at a time when potential ad sales are already being lost to other media. In the worst-case scenario, the door could be opened to allowing advertisers to entirely ignore certain neighborhoods or mini markets, placing an untenable strain on small stations or broadcast boosters that operate in these areas and harming consumers who live there. In the absence of more robust analysis, the assumption that these changes will promote diversity of voices, much less ownership, is incredibly premature.

While I have many questions and concerns about geotargeting and how it would be implemented, this Notice is fairly even handed and should provide an appropriate opportunity for advocates and skeptics alike to adequately develop the record as needed. Let's open the discussion but ensure the Commission does not rush to conclude this proceeding without understanding all of its implications.

**STATEMENT OF
COMMISSIONER BRENDAN CARR**

Re: *Amendment of Section 74.1231(i) of the Commission’s Rules on FM Broadcast Booster Stations*, MB Docket No. 20-401; *Modernization of Media Initiative*, MB Docket No. 17-105; *Amendment of Section 74.1231(i) of the Commission’s Rules on FM Broadcast Booster Stations*, RM-11854.

One of the greatest technological success stories of the last 40 years is the evolution of cellular networks. Without an FCC mandate or the need to ask permission, network operators have continued to upgrade their technology platforms to unlock the potential of wireless communications. Rather than broadcasting the same content over wide areas, cellular architecture has evolved from the first and tinny phone calls of the analog 1G era to today’s 4G and 5G networks, which allow carriers to deliver whatever content a user wants—and an occasional phone call—directly to their smartphone.

For too long, broadcasters have not enjoyed the same freedom to experiment with new technologies as their mobile wireless brethren, particularly when it comes to technologies that allow them to geo-target their content. As a result, changes to broadcast television technology have been slow and largely limited to the transition from analog to digital. But things are looking up thanks to a new and innovative broadcast transmission standard known as ATSC 3.0. This new standard will give television broadcasters the flexibility to send targeted or customized content directly to a particular household or handheld device. And this won’t be limited to traditional video offerings, as ATSC 3.0 will also support innovative new services, such as autonomous vehicle support, IoT, smart ag, and telemedicine.

In recognition of this immense potential, I have been leading the FCC’s recent efforts to promote this new set of “Broadcast Internet” services. This summer, we ensured that these services would not be weighed down by legacy media regulations. And we will soon be voting on another item that will continue to promote investment in these exciting new offerings.

Which brings us to broadcast radio. For most radio stations, broadcast technology has been largely unchanged since its inception and even those stations broadcasting in digital lack the kind of targeted content offerings that consumers value, indeed demand, in other services. That could soon change, however, thanks to a decades-long fixture of the FM band—booster stations. Due to market-driven innovations in technology, it is now possible for FM stations to use boosters to broadcast original content in a specific geographic area instead of just passively repeating a signal from the primary station. This technology promises to enhance service in local markets and help these stations compete in an ever-expanding media marketplace. And it means that the freedom to transmit targeted or customized content, which mobile wireless carriers have long enjoyed and broadcast television stations are now realizing with ATSC 3.0, could soon extend to broadcast radio as well.

Getting this Notice of Proposed Rulemaking across the finish line required more than a few oars in the water. So I want to extend my thanks to Commissioner Starks for partnering with me on this effort. We both saw the public interest benefits of this new technology, and I welcomed the chance to work with him and his team over the past few weeks and months to ensure that the Commission launched this rulemaking.

Ultimately, the FCC cannot operate as a restraint on innovation and deployment of next-generation services, regardless of the platform. We have been presented with potentially industry-altering technology that will allow FM broadcasters to deliver targeted content over their existing spectrum. These possibilities must be explored, and I am glad that my colleagues have agreed to do just that with this item.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations*, MB Docket No. 20-401; *Modernization of Media Initiative*, MB Docket No. 17-105; *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations*, RM-11854.

Promoting and advancing media diversity is both a statutory mandate for the Commission, and a personal mission for me. For many years, this Commission has struggled to come up with effective ways to fulfill this important responsibility. Diversity efforts made as part of the 2010 and 2014 Quadrennial Regulatory Reviews, and the Commission's 2017 order adopting an incubator program to help new entrant and small broadcasters purchase and operate radio stations, were largely vacated and remanded by the U.S. Court of Appeals for the Third Circuit. Moreover, diversity-related proposals in the 2018 Quadrennial Review proceeding remain pending, which means we have not meaningfully advanced the ball on media diversity in at least a decade.

We must do better, and we must do more to reverse decades of inaction and ineffective policies that have kept radio ownership diversity at unacceptably low levels. The numbers for African American majority ownership in AM and FM radio stations are nowhere near where they should be. While African Americans represent more than 13% of the U.S. population, the latest data show they had a majority ownership interest in only 3% of AM stations, and only 2% of FM stations.¹ Something is off.

To meet our media diversity goals and to ensure that our public airwaves serve the public interest as Congress intended, we must strive to make sure that every aspect of America's broadcasters looks more like the population of America, from who holds the broadcast licenses, to who manages the stations, to who develops and delivers the content.

One factor that has made it harder for small and diverse radio broadcasters to stay on the air and thrive is the steady decline of revenues, especially advertising revenues. Admittedly, that decline is due in part to competition from other media, but it has been worsened by the economic uncertainty of the COVID pandemic. Public radio companies reported revenue declines of around 50% in the second quarter of 2020 and estimates for 2020 local advertising revenue was recently adjusted down another \$4 billion between April and August.²

Which brings us to today. The fact of the matter is that many minority broadcast owners are small or singleton owners that have been hurting during the pandemic. So what can be done? Some months ago, a large group of Civil Rights organizations reached out to me about the GeoBroadcast Solutions proposal, including MMTC, the National Association of Black Owned Broadcasters (NABOB), National Urban League, and 18 others who filed a joint letter in support of it. Many of these same organizations have been leading the charge on efforts to increase minority ownership and employment in media, and I am proud to stand with them in support of an initiative that could help advance both these causes.

¹ See *Fourth Report on Ownership of Broadcast Stations*, FCC Form 323 and Form 323-E Ownership Data as of October 1, 2017, DA 20-161 (MB 2020), at <https://docs.fcc.gov/public/attachments/DA-20-161A1.pdf>. African Americans had a majority ownership interest in 103 commercial AM radio stations (3%) in 2017 and 87 of these stations (2.5%) in 2015. African Americans had a majority ownership interest in 114 commercial FM radio stations (2.1%) in 2017 and 72 (1.3%) of these stations in 2015.

² Radio Ink, *COVID Dealing A Severe Blow To Revenue* (Aug. 13, 2020), at <https://radioink.com/2020/08/13/bia-revises-revenue-down-again/>. See also Ross Benes, *Radio ad spending is set to decline by 25% in 2020*, Business Insider (Sep. 22, 2020) (adjusting its 2020 forecast for U.S. radio ad spending from an expected decline of just 1.0% in March 2020 to an anticipated a 25.0% drop).

The ability to use of booster stations to provide hyper-localized content potentially opens up opportunities for station owners to increase advertising revenue, which for struggling stations could increase their chance of staying on the air to serve their local communities. It could also provide a cost-effective means for other small businesses to customize advertising to a targeted audience.

Another benefit to this proposal is that it could address one of the major barriers to minorities becoming broadcasters—access to capital. GeoBroadcast Solutions has developed an advertising revenue sharing model that would help smaller stations install boosters and new technology necessary to use the system without having to come up with up front capital and operational expenses. If this innovative proposal can provide a new revenue stream that keeps even a few struggling stations on air or opens up opportunities for new broadcasters to enter the market, it is well worth our serious consideration.

Because of the potential to increase the quality of local programming and revenue opportunities for diverse broadcasters, I am pleased to support this item. I also want to thank Commissioner Carr and his staff for their strong support of this proposal, and for collaborating with me to help bring this rulemaking to a vote.

I look forward to hearing from broadcasters who believe they would benefit if we adopt this proposal, in particular whether they think this initiative will help them better compete for audience share and advertising dollars and help them better serve their local audiences. Thank you to the Media Bureau for their work on this proceeding.