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

In the Matter of	)	
	)	
Modernization of the Nation's Alerting Systems	)	PS Docket No. 25-224
	)	

NOTICE OF PROPOSED RULEMAKING

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By the Commission: Chairman Carr and Commissioners Gomez and Trusty issuing separate statements.

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I. INTRODUCTION

1. With this Notice of Proposed Rulemaking (*Notice*), we begin a reexamination of the Emergency Alert System (EAS) and Wireless Emergency Alerts (WEA) from the ground up and explore whether fundamental changes could make these lifesaving systems more effective, efficient, and better able to serve the public's needs. Today, EAS and WEA are vital sources of emergency alerts that save lives and reduce property loss. Although the public safety value of EAS and WEA is not in question, both systems were first introduced many years ago to address specific public needs using the technology that was available at the time. While the Commission has periodically recognized the need to overhaul EAS,[1] it has not done so comprehensively, and EAS has operated under essentially the same distribution

[1] See, e.g., Amendment of the Commission's Rules Regarding the Emergency Alert System; Wireless Emergency Alerts, PS Docket Nos. 15-91 and 15-94, Notice of Proposed Rulemaking, 31 FCC Rcd 594 (2016); Amendment of the Commission's Rules Regarding the Emergency Alert System, PS Docket No. 15-94, Notice of Proposed Rulemaking and Notice of Inquiry, 36 FCC Rcd 17920 (2021).

architecture since 1994.[2] WEA was designed for modern wireless networks, and implemented in 2012, but the telecommunications landscape in which it was conceived has also evolved. Through this *Notice*, the Commission seeks comment on what goals these alerting systems should aim to achieve, whether these systems are currently effective at achieving these goals, and what steps the Commission should take to modernize these systems to improve their usefulness and better leverage modern technology while minimizing burdens on stakeholders. As part of this examination, we seek comment on how EAS and WEA are working in practice for the public safety authorities who send alerts every day and the public that receives these alerts.

II. BACKGROUND

2. The United States maintains a national public alerting capability that provides the President and authorized federal, state, Tribal, territorial, and local entities (known as alerting authorities) with the ability to send alerts to the public. As illustrated in Figure 1, below, this national public alert and warning framework comprises several components, including the Integrated Public Alert and Warning System (IPAWS), administered by the Federal Emergency Management Agency (FEMA),[3] and EAS and WEA, which are administered by the Commission. IPAWS is an IP-based system that aggregates alerts received from alerting authorities and distributes those alerts to EAS, WEA, and other alert distribution platforms, which in turn deliver the alerts to the public. Since 2012, more than 1,800 federal, state, local, Tribal, and territorial alerting authorities have used IPAWS 4.86 million times to alert the public about dangerous weather, missing children, and other critical situations,[4] saving countless lives in the process.

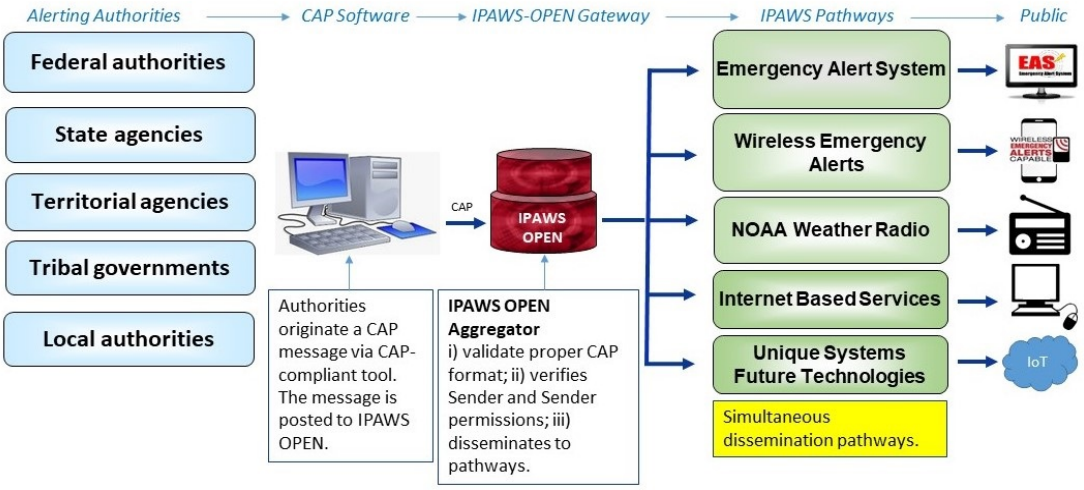

Figure 1. National Public Alert and Warning Framework[5]

3. EAS is a national public warning system through which television (TV) and radio broadcasters, cable systems, and other service providers (EAS Participants) deliver alerts via radio and

[2] *See Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System*, FO Docket Nos. 91-171 and 91-301, Report and Order and Further Notice of Proposed Rulemaking, 10 FCC Rcd 1786, 1787, para. 1 (1994).

[3] FEMA, *IPAWS 101, Integrated Public Alert & Warning System* (Jan. 2024), https://www.fema.gov/sites/default/files/documents/fema_ipaws_101-slicksheet_042024.pdf. Because IPAWS falls within FEMA's purview, it is outside the scope of this proceeding.

[4] *See* FEMA, OpenFEMA Dataset: IPAWS Archived Alerts - v1, https://www.fema.gov/openfema-data-page/ipaws-archived-alerts-v1 (last visited Apr. 28, 2025).

[5] FEMA, IPAWS, *State, Territorial, Tribal, Local – Level*, https://www.fema.gov/sites/default/files/2020-11/fema_ipaws-infographic_photo_11-17-2020.jpg (last visited May 21, 2025).

television to the public about emergencies and dangers to life and property.[6] EAS Participants are required to participate in EAS and to distribute National Emergency Messages (National Alerts) sent by the President or the President's authorized designee, or by the Administrator of FEMA.[7] EAS Participants' transmission of emergency alerts for state or local area emergencies, which include weather alerts sent by the National Weather Service (NWS), is discretionary.[8] EAS messages are distributed either (i) through a broadcast-based, hierarchical distribution system in which an alert originator encodes (or arranges to have encoded) a message in the EAS Protocol;[9] or (ii) over the Internet from IPAWS, which FEMA makes available to EAS Participants so that they can receive state and local area emergency alerts with superior audiovisual characteristics.[10]

4. WEA is a tool that enables alerting authorities to send alerts and warnings to mobile devices that are capable of receiving a WEA and that are connected to the network of a Commercial Mobile Service (CMS) provider that has elected to participate in WEA (Participating CMS Provider).[11] The Warning Alert and Response Network (WARN) Act establishes WEA as a voluntary system.[12] CMS providers that elect to participate in WEA must do so in compliance with the FCC's technical standards, protocols, procedures, and other technical requirements.[13] Participating CMS Providers receive WEA messages from IPAWS, which they relay to the public, generally using cell broadcast technology. Pursuant to the WARN Act, the Commission's rules provide that the public may opt-out of receiving all

[6] The Commission's rules define EAS Participants to include analog radio broadcast stations, including AM, FM, and Low-power FM stations; digital audio broadcasting stations, including digital AM, FM, and Low-power FM stations; Class A television and Low-power TV stations; digital television broadcast stations, including digital Class A and digital Low-power TV stations; analog cable systems; digital cable systems; wireline video systems; wireless cable systems; direct broadcast satellite service providers; and digital audio radio service providers. *See* 47 CFR § 11.11(a); *see also id.* § 11.2(b).

[7] *See* 47 CFR § 11.2. The National Emergency Message is originated by FEMA via a network of highly resilient AM broadcast radio stations and satellite services (referred to as "Primary Entry Point" sources), collectively known as the National Public Warning System. Our rules for WEA and EAS use different nomenclatures to refer to a nationwide message sent to the general public alerting them of a national emergency. While the "National Emergency Message" used in EAS is the notice to all EAS Participants and the general public that EAS has been activated for a national emergency, the "National Alert" in WEA is an alert issued by the President, the President's authorized designee, or the FEMA Administrator, and can be nationwide or regional in distribution. *Compare* 47 CFR § 11.2(a) *with* 47 CFR § 10.400(a). For convenience, in this document, we use the term "National Alert" to refer to both the EAS National Emergency Message and the WEA National Alert.

[8] *See* 47 CFR § 11.55(a).

[9] This process of EAS alert distribution among EAS Participants is often referred as the "daisy chain" distribution architecture. Because this EAS architecture has been in place since the inception of EAS, it is also known as the "legacy EAS." In legacy EAS, when an EAS Participant broadcasts an alert message, the message is received not only by that EAS Participant's local audience but also by downstream EAS Participants that monitor that station's transmissions. EAS Participant monitoring assignments are described by State EAS Plans produced by State Emergency Communications Committees. *See* 47 CFR § 11.21; *see also* FCC, State Emergency Communications Committee Resources, https://www.fcc.gov/SECC-Resources. Legacy EAS provides the public with very basic information about the emergency involved. *See* 47 CFR § 11.31.

[10] The IP-based system uses the Common Alerting Protocol (CAP). *See* OASIS, Common Alerting Protocol Version 1.1, (Feb. 26, 2009), https://docs.oasis-open.org/emergency/cap/v1.1/ipaws-profile/v1.0/pr01/cap-v1.1-ipaws-profile-v1.0-pr01.html.

[11] *See* 47 U.S.C. § 1201(a); 47 CFR § 10.10(d) (defining a CMS Provider as an "FCC licensee providing commercial mobile service as defined in section 332(d)(1) of the Communications Act of 1934.").

[12] Warning, Alert, and Response Network Act, Title VI of the Security and Accountability for Every Port Act of 2006, 120 Stat. 1884, 1936 (2006) (WARN Act) (codified at 47 U.S.C. § 1201 *et seq.*).

[13] *See* 47 CFR § 10.210.

WEAs except for the National Alert.[14] While a National Alert has never been issued in connection with a national emergency, alerting authorities routinely use EAS and WEA to transmit other state and local area emergency alerts.

III. DISCUSSION

5. Congress established the Commission for the purposes of, among other things, the national defense and "promoting safety of life and property through the regulation of wire and radio communications networks."[15] For nearly 75 years, the Commission has implemented this mandate by adopting rules that set technical and other requirements to provide the public with an effective national public alert and warning system.[16] The Commission's approach to emergency alerting has been to implement regulations intended to leverage existing commercial communications infrastructure for public safety purposes and to update that existing capability over time to reflect advances in technology and evolving consumer expectations. While this approach has gradually improved the nation's alerting capabilities, it may also have restricted innovation by preserving alerting frameworks that are decades old without examining whether more fundamental structural changes are warranted.

6. In this *Notice*, we take a novel approach by seeking first to identify what goals the nation's alert and warning systems should be designed to serve. Proceeding from these first principles will enable the Commission to explore alternatives to our historical regulatory approach and consider how to maximize the usefulness, effectiveness, and resiliency of EAS and WEA consistent with our legal authority. As part of this examination, we seek to identify the objectives that an effective national alerting system should advance, how alerting systems should be designed to ensure that they serve the needs of alerting authorities, what kinds of information alerting systems should deliver, how that information can be most effectively conveyed to the public, public expectations when receiving that information, and other important considerations necessary for modernizing the nation's public alert and warning capabilities.

A. Objectives of Alerting Systems

7. We seek comment on the objectives that effective alert and warning systems should serve. Based on our experience in overseeing requirements for EAS and WEA, we identify and seek comment on the following three goals: (1) alerting systems should provide authorities with the ability to rapidly notify the public of emergencies that may put the public at risk; (2) alerting systems should be capable of delivering instructions that facilitate the protection of life and property; and (3) alerting systems should provide a mechanism for government officials to provide additional authoritative communications with the public before, during, and after an emergency. Do these statements accurately reflect the core goals of alerting systems, and if not, should they be articulated in a different way? Are there additional objectives related to the protection of life and property that the nation's alerting systems should serve? Should the objectives of these alerting systems be grounded solely in the capabilities that the alerting service should provide, or should the objectives also be grounded in achieving particular public safety outcomes (e.g., ensuring that all members of the public receive an alert and take protective action)?

B. The Role of Alerting Authorities

8. We seek comment on which entities need to be able to send alerts to fully accomplish

[14] 47 CFR §§ 10.280(a), 10.400(a); *see also* 47 U.S.C. § 1201(b)(1)(E) (prohibiting commercial licensees electing to transmit emergency alerts from providing their subscribers with the ability to opt out of receiving alerts issued by the President or the Administrator of the Federal Emergency Management Agency).

[15] 47 U.S.C. § 151.

[16] Beginning with the CONELRAD (Control of Electromagnetic Radiation) system in 1951, and progressing through the Emergency Broadcast System and the present-day EAS, the Commission has implemented and administered rules governing the transmission of emergency warning information to the public.

these objectives in order to maximize the capabilities and effectiveness of alerting systems. Government entities, including agencies at the federal, state, Tribal, territorial, or local level, are currently allowed to send alerts.[17] Because of government agencies' differing responsibilities and geographic jurisdictions, we believe that the objectives of alerting systems are best served by all of these types of agencies having the ability to send alerts. We seek comment on this view. Is it important that each of these types of government agencies be able to send alerts? How does the ability to send alerts at different levels of government advance the objectives of the nation's alerting systems? Are there ways in which the current range of alert originators either undermines or fails to adequately support these objectives? For example, are there agencies, especially at different levels of government, that have similar roles, and if so, can and should alerting systems reconcile alerts from different sources so as to avoid duplication and alert fatigue? If so, how should this be done?

9. The Commission has consistently concluded that a core purpose of EAS is to enable the transmission of an emergency alert from the President or his designee during a national emergency.[18] We believe that the President's ability to effectively communicate with the public in times of crisis remains of paramount importance to public safety during a national emergency and therefore is critical to accomplishing the nation's alerting objectives. In furtherance of those objectives, we believe that the nation's alerting systems should be designed to allow the President to both send the public an immediate warning to take protective action and to later provide additional information and reassurance to the public. We seek comment on these views. How should alerting systems be designed to ensure that these capabilities are available and maximally effective during national emergencies? For example, would it be most effective for alerting systems to be able to support video messages from the President? We seek estimates of the incremental cost of implementing a universal, "video-rich" alert system for the United States. What are the different ways that video-based alerts could be implemented in EAS and WEA today? We encourage commenters to provide cost estimates on implementing a video-rich alert system and address how video-rich alerts may impact network availability for the public and public safety. What technical steps would EAS Participants and Participating CMS Providers need to take to implement video alerting capabilities within the next two years?

10. Nearly all alerts that the public receives day-to-day are originated by other agencies at the federal, state, Tribal, territorial, or local level. This includes weather alerts sent by NWS, early earthquake warnings sent by the Department of Interior's United States Geological Survey, and AMBER alerts sent by numerous state and local agencies nationwide.[19] In light of the essential role that these other agencies play in achieving the nation's alert and warning objectives, we believe that the alerting needs of these agencies should also play a driving role in the design of the nation's alerting systems. We seek comment on this view. Are EAS and WEA, as designed today, effective tools that allow these agencies to fully achieve their alerting objectives? If not, what changes should be made to these systems to better support these agencies? Would it be effective for alerting systems to be able to support video messages from these agencies? Are there certain kinds of emergencies that EAS and WEA are not designed to adequately support today, and if so, what steps can be taken to better support those emergencies? If the

[17] *See* FEMA, *IPAWS Alerting Authorities – Agencies and Organizations* (July 23, 2025), https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/public-safety-officials/alerting-authorities/agencies-organizations.

[18] *See, e.g.*, *Review of the Emergency Alert System*, EB Docket No. 04-296, First Report and Order and Further Notice of Proposed Rulemaking, 20 FCC Rcd 18625, 18628, para. 8 (2005) (*First EAS Report and Order and Further Notice of Proposed Rulemaking*); 47 CFR § 11.1 (stating that EAS "provides the President with the capability to provide immediate communications and information to the general public at the National, State and Local Area levels during periods of national emergency"); § 11.2 (National Emergency Message), § 11.54 (EAS operation during a National Level emergency).

[19] NWS generates approximately 90% of EAS activations, which are typically short-duration weather warnings and watches. NOAA, *NOAA's National Weather Service (NWS) and the Emergency Alert System*(Mar. 2025), https://www.weather.gov/media/nwr/EAS_factsheet_2025.pdf.

Commission were to incentivize greater use of EAS and WEA by local officials, would the resulting increase in alerts make the public more likely to receive life-saving alerts? Does alerting by local officials offer any unique benefits? Would an increase in local alerting increase the risk of alert fatigue, and if so, how can this risk be mitigated?

11. Are there any circumstances in which it would serve the objectives of the nation's alert and warning systems for non-government entities to send safety-related alerts via these systems? If so, which types of entities should be permitted to send alerts and in what situations should they be permitted to send them? For example, should utility companies have the ability to more immediately notify the public of hazards like downed power lines, gas leaks, rolling blackouts, or dangers in the potable water supply, rather than relying on government entities to relay messages on their behalf? Does accomplishing the nation's alert and warning objectives require an expansion of the ability of EAS and WEA to support machine-to-machine alerting (e.g., using networked sensors to trigger automated protective action, such as slowing trains or closing water valves)? How should EAS and WEA be redesigned to better support these types of alerts? In cases of non-governmental entities transmitting safety-related alerts and machine-to-machine alerting, what level of transparency and governmental oversight would be needed to ensure effective and resilient alerting, and preserve consumer trust in the information being conveyed? On the other hand, should government agencies be the sole initiators of alerts via the nation's alert and warning systems because of their unique responsibilities, such as their roles in protecting public safety? Would allowing only government agencies to originate alerts preserve public trust in alert and warning systems and maintain democratic accountability?

C. Transmission Capabilities of Alerting Systems

12. We seek comment on the alert transmission capabilities that a national public alert and warning system must have to achieve its objectives. What are alert originators' expectations for the ways and the circumstances under which alerts should be successfully delivered? Should the nation's alerting systems be designed with the purpose of guaranteeing delivery of each alert to the intended audience, regardless of the conditions on the ground? Or should these alerting systems instead be designed to require only a "best effort" attempt at delivery and rely on a likelihood that the audience will receive at least one alert from a number of possible sources? Are there certain types of alerts, such as alerts sent by the President, for which delivery must be consistently guaranteed for the objectives of the alerting system to be satisfied? Does voluntary, rather than mandatory, participation in the nation's alerting systems diminish alert originators' confidence that their alert will reach their targeted audience? Today, it is voluntary for EAS Participants to transmit state and local alerts. For WEA, participation by CMS providers is voluntary,[20] though once a CMS provider elects to participate in WEA, it is required to transmit alerts in a manner consistent with the Commission's rules.[21] Is voluntary participation consistent with the objectives of the nation's alert and warning systems? We seek comment on the steps that the Commission and other stakeholders should take to strike a better balance between burdens of supporting EAS and WEA and the goals of ensuring uniformity and consistency in alert transmission.

13. *Resilience.* We believe that not only is it reasonable to expect that alerts will be successfully delivered to all targeted members of the public during blue-sky conditions, but that alerting systems should also incorporate resilience to common causes of disruption to communications, such as power outages and physical damage to infrastructure. We seek comment on this view, including what approaches to resiliency would best achieve the objectives of the nation's alert and warning systems. EAS, for instance, was originally designed to continue operating when traditional communication methods are not functioning and alerts can only be delivered via independently powered broadcast facilities. Does this approach to EAS resiliency remain necessary today? Are there other alternative communications pathways that EAS and WEA can leverage to ensure redundancy? Should EAS and WEA both be independently resilient (i.e., having multiple redundant pathways within EAS, as well as

[20] *See* 47 U.S.C. § 1201(b)(2).

[21] *See* 47 CFR § 10.210.

within WEA) or is it sufficient for EAS to provide a redundant source of alerts to WEA and vice versa? Could existing public alert and warning infrastructure be made more resilient by increasing the interoperability of EAS and WEA (e.g., by enabling mobile devices capable of receiving a WEA to receive EAS alerts when cellular infrastructure is damaged)?

14. *Geographic targeting.* We also believe that it is necessary for alerting systems to be capable of delivering alerts to specific populations that are targeted by alerting authorities, without delivering the alert to populations that are not targeted. We seek comment on this view. What levels of precision and accuracy do alerts need to fulfill the objectives of the nation's alert and warning systems? Can existing technologies deliver alerts with that precision or accuracy, and if so, should those technologies be integrated into the design of EAS and WEA? What is the potential for future technologies to improve upon the geographic precision with which alerts can be delivered? How can the Commission's rules be amended to facilitate such innovation and not impede it? Are alert originators less likely to use alerting systems when their geographic targeting is insufficiently accurate? The Commission has historically been concerned that the receipt of alerts that are not relevant to the recipient can cause alert fatigue, which can cause people to ignore future alerts and, in the case of WEA, opt out of receiving certain types of alerts.[22] We seek comment on what the threshold should be at which geographic overshoot becomes unreasonable and undermines alerting objectives. What changes would need to be made to EAS and WEA to ensure that overshoot does not exceed that threshold? In the past, NWS has observed that threats that arise due to extreme weather are not stationary, but continually in motion (e.g., tornados, hurricanes, wildfires, extreme winds, storm surges).[23] Should alerting systems be designed to support the targeting of alerts to a continually updated target area and to the people entering and leaving that area? If so, what technical changes would need to be made for EAS and WEA to support this capability?

15. *Security.* We believe that the nation's alerting systems should be designed to be secure against cyberattacks from our nation's adversaries. If an adversary were to gain access to these systems, they could potentially send a false alert, which could cause public panic, or prevent a real alert from being issued, which could cause a significant loss of life. As a consequence, keeping these systems secure is essential to both national security and achieving the nation's alerting objectives. We seek comment on this view. Are there specific authentication, validation, and security measures that EAS and WEA should be designed to incorporate? Would public trust in alerts be enhanced if alerting systems provided some kind of visual indication that an alert is authoritative and trustworthy? When considering the tradeoffs of competing aspects of the design of EAS and WEA such as security, the support of multimedia alert content, and the speed of alert delivery, which should we prioritize? Commenters are encouraged to address any trade-offs to implementation on security and authentication based on the urgency or severity of an event. For example, for large or impactful disasters, how would security validation or authentication require adjustments due to lack of access to infrastructure or to ensure resiliency?

D. Information Conveyed to the Public

16. We seek comment on the kinds of information that alerts need to be able to convey to the public for the nation's alert and warning systems to effectively accomplish their objectives. For instance, our WEA rules require Participating CMS Providers to support five mandatory elements in WEA

[22] *See Wireless Emergency Alerts, Amendments to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91 and 15-94, Second Report and Order and Second Order on Reconsideration, 33 FCC Rcd 1320, 1343, para. 38 (2018) ("Without more granular geo-targeting, the use of WEA can result in over-alerting, which leads to "alert fatigue" and confusion for consumers. Consumers that are outside of an area of concern, but receive alerts anyway, begin to ignore alerts or even choose to opt out of receiving future WEA Alert Messages on their mobile devices.").

[23] *See* National Weather Service Comments, PS Docket No. 15-91, at 5-6 (rec. July 21, 2023); *see also* NOAA, *FACETs; THREATS-IN-MOTION*, https://inside.nssl.noaa.gov/facets/2021/03/threats-in-motion/ (last visited May 12, 2025).

messages: the type of hazard event, the geographic area affected, a recommended protective action, the expiration time of the alert, and the identity of the sending agency.[24] Research indicates that when people receive this information, they are much more likely to take the protective actions described in the alert.[25] We believe that the nation's alert and warning systems should be designed to support the transmission of each of these elements in an alert message to the public. We seek comment on this view. Notwithstanding EAS and WEA's capability to support these informational elements, research has found that most WEA messages lack some of this information.[26] We seek comment on whether there are resources, such as training materials or best practices, that could be made available to alert originators to promote alert message quality, uniformity, and consistency.

17. Should EAS and WEA be designed to require that all of these elements be included in the alerts that are sent to the public, or would such an approach be too inflexible for alerting authorities, and if so, how? What approaches to EAS and WEA design can be taken to maximize the likelihood that alerts include information that is most relevant to their recipients? Are there other types of information or ways of communicating that alerting systems need to support in order to be effective? For example, would the ability to include a static graphic or a video as part of an alert better allow alerting authorities to achieve their public safety goals? We seek comment on how the nation's alerting systems can better serve communities by delivering alerts in the languages they understand. Building on prior efforts to support multilingual alerting, should the Commission take additional steps to ensure alerts effectively reach non-English-speaking populations? We invite input on how multilingual capabilities should inform the design and modernization of EAS and WEA.

E. How the Public Receives Alerts

18. We seek comment on how alerts must be received by the public for the objectives of the nation's alert and warning systems to be realized. Today, the public can receive emergency alerts from various sources like mobile devices, radio and television broadcasts, cable services, wireline video services, and road signs. The public, however, increasingly engages with content through other media and platforms that are not equipped to interrupt content to provide emergency messages, such as personal computers, tablets without commercial mobile service, wearable technology, gaming consoles, smart speakers, streaming services, and social media.[27] This shift in consumer behavior indicates that fewer people may be using the platforms through which emergency messages have been traditionally issued, which may frustrate the EAS and WEA systems' objectives of widespread public notification about emergencies. Are the services that transmit EAS alerts—radio and television broadcast, cable service, wireline video services, and certain satellite services—representative of how people consume video and

[24] 47 CFR § 10.420. This requirement does not apply to National Alerts. *Id.*

[25] *See* Jeannette Sutton, Michele K. Olson & Nicholas A. Waugh, *The Warning Lexicon: A Multiphased Study to Identify, Design, and Develop Content for Warning Messages* (Oct. 30, 2023), https://ascelibrary.org/doi/10.1061/NHREFO.NHENG-1900.

[26] *See* Jeannette Sutton, *Message Design Dashboard (MDD)*, https://www.fema.gov/sites/default/files/documents/fema_message_design-dashboard.pdf at 67-72 (last visited May 19, 2025) (finding that 27.5% of WEAs do not include the name of the hazard to which they pertain, 78.9% of WEAs do not include a description of the hazard's impacts, 61.9% of WEA messages do not include the time period during which the emergency alert was relevant, 15.7% of WEAs do not include description of the geographic area in which the alert was relevant, 30.4% of WEAs did not include guidance on protective actions that the public can take, and 65.2% of WEA's do not attribute the message to an authoritative source).

[27] *See, e.g.*, Felix Richter, *Streaming Hits 40% of U.S. TV Usage for the First Time* (Jul. 18, 2024), https://www.statista.com/chart/25381/tv-consumption-in-the-us-by-channel/ (finding that, as of June 2024, streaming services reached a share of 40.3% of television usage in the United States and noting that cable and broadcast fall behind at 27.2% and 20.5%, respectively); Pew Research Center, *About 6 in 10 young adults in U.S. primarily use online streaming to watch TV* (Sept. 13, 2017), https://www.pewresearch.org/short-reads/2017/09/13/about-6-in-10-young-adults-in-u-s-primarily-use-online-streaming-to-watch-tv/ (finding that about six-in-ten young adults report streaming services as the primary way by which they use television).

audio services today? Does EAS remain an effective tool for alert originators if it only makes alerts available over those services? If the public's media habits are changing, what changes can the Commission implement to make sure that EAS and WEA continue to follow the public's eyes and ears, consistent with the scope of its legal authority? Alternatively, is a new alerting system needed to reach the public on these other media and platforms? If so, what minimum requirements would be necessary to preserve consumer trust?

19. We seek comment on whether the nation's alert and warning systems would be more effective if their design placed a greater focus on the capabilities of the end-user devices that receive and present alerts, rather than solely around the communications pathways that transmit them. For example, would EAS be more effective if consumer "smart" devices connected to the Internet (e.g., radios, TVs, and other video displays) were able to directly receive EAS messages from alerting sources, regardless of the user's choice of programming at the time that the alert is received? Would this allow for new alerting capabilities that the current design of EAS cannot technically support? Could introducing the capability to receive and present EAS messages into end user devices promote flexibility and consumer choice by allowing for greater tailoring as to how alerts are received and presented (e.g., language, locations, screen placement, font size, text-to-speech, and other accessibility options)? Would these changes allow EAS to better achieve its public safety objectives or be a more efficient way of distributing alerts to the public? Would these changes enable the Commission to reduce regulatory burdens for EAS Participants? What communications paths (e.g., internet, radio, satellite) would be required to connect devices to alerting sources? What changes to or limitations imposed by communications service provider networks would affect implementation of these capabilities? We invite comment on any technical or procedural challenges that equipment manufacturers would confront in supporting the capability to monitor IPAWS for EAS messages directly, rather than, or in addition to, receiving them from communications service providers. What can the Commission do to mitigate these challenges and otherwise encourage the adoption of alerting capabilities on end-user devices? How would these changes affect device costs, including upfront incremental labor and material costs for redesign, reprogramming, retooling, etc.?

20. We seek comment on the general public's experience with emergency alerts. Do consumers have frustrations with the alerts that they are receiving today, and if so, what are those frustrations? What can the Commission do to help alleviate them? Are there changes that should be made to how emergency alerts are presented to make them easier to understand? Are there end-user features that the public would like to see and utilize in their devices that are capable of presenting emergency messages? Conversely, are there end-user features that alert originators, Participating CMS Providers, or equipment and device manufacturers believe should not be left to end-user customization because they would likely frustrate the goal of these alerting systems? How can we balance consumer choice over the products that consumers use and the emergency alerts that they want presented with alert originator expectations and objectives? Under what circumstances should one be prioritized over the other and how should the Commission measure the costs and benefits of those tradeoffs?

F. Other Issues

21. In light of the discussion above, we seek comment on whether EAS and WEA are meeting the needs and expectations of both the public and alerting authorities. Do EAS and WEA remain useful? Are there situations in which EAS and WEA are proving to have limited value and in what ways are they falling short? Do EAS and WEA need to be redesigned or otherwise modified to fully reach their potential for achieving the nation's alerting objectives? What should EAS and WEA be technically capable of achieving in the next five to ten years? What technical steps would need to be taken to implement these modifications, how long would they take, and how much would these technical steps cost? Conversely, are there aspects of EAS and WEA that exist today that do not serve the objectives discussed above that should be eliminated? Are there aspects of EAS and WEA whose purported benefits seem outweighed by the burdens involved in their provision? What costs would be associated with any steps taken to improve the effectiveness of EAS and WEA and how could the Commission limit these costs for small entities? We seek comment on whether certain reforms or modifications offer greater cost effectiveness than others or significantly improve outcomes that align with the objectives of EAS and

WEA. Commenters are encouraged to submit quantitative analyses, supporting data, and documentation associated with the modernization or redesign of the EAS and WEA systems.

22. We seek comment on how increased training for alert originators, education for the public, and collaboration among all alerting stakeholders can help alerting systems meet the goals they are designed to achieve. Are there gaps in the trainings or best practices available to alert originators? Is there sufficient and meaningful public outreach and education about how alerts are received, alert system capabilities, the purpose of alerts, and the action the public should take if it receives an alert? If so, we seek comment on how these gaps should be filled, and who should be responsible for filling them. Can voluntary collaboration between alerting stakeholders help to close these gaps?

IV. PROCEDURAL MATTERS

23. *Regulatory Flexibility Act*. The Regulatory Flexibility Act of 1980, as amended (RFA),[28] requires that an agency prepare a regulatory flexibility analysis 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."[29] Accordingly, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning potential rule and policy changes contained in this *Notice*. The IRFA is set forth in Appendix A. The Commission invites the general public, in particular small businesses, to comment on the IRFA. Comments must be filed by the deadlines for comments on the *Notice* indicated on the first page of this document and must have a separate and distinct heading designating them as responses to the IRFA.

24. *Paperwork Reduction Act*. This document does not contain proposed information collections subject to the Paperwork Reduction Act of 1995 (PRA), 44 U.S.C. §§ 3501-3521. In addition, therefore, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, 44 U.S.C. § 3506(c)(4).

25. *Providing Accountability Through Transparency* Act. Consistent with the Providing Accountability Through Transparency Act, Public Law 118-9, a summary of this document will be available on https://www.fcc.gov/proposed-rulemakings.

26. *Ex Parte Rules – Permit-But-Disclose*. The proceeding this *Notice* initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[30] 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

[28] 5 U.S.C. §§ 601 *et seq*., as amended by the Small Business Regulatory Enforcement and Fairness Act (SBREFA), Pub. L. No. 104-121, 110 Stat. 847 (1996).

[29] 5 U.S.C. § 605(b).

[30] 47 CFR § 1.1200 *et seq*.

their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

27. *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).

- *Electronic Filers*: Comments may be filed electronically using the Internet by accessing the ECFS: https://www.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 hand or messenger delivery, by commercial courier, or by the U.S. Postal Service. **All filings must be addressed to the Secretary, Federal Communications Commission.**
    - Hand-delivered or messenger-delivered paper filings for the Commission's Secretary are accepted between 8:00 a.m. and 4:00 p.m. by the Commission's mailing contractor at 9050 Junction Drive, Annapolis Junction, MD 20701. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
    - Commercial courier deliveries (any deliveries not by the U.S. Postal Service) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
    - Filings sent by U.S. Postal Service First-Class Mail, Priority Mail, and Priority Mail Express must be sent to 45 L Street NE, Washington, DC 20554.

28. *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).

29. *Additional Information*. For further information regarding this *Notice*, please contact George Donato, Associate Division Chief, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau, (202) 418-0729, or by email to George.Donato@fcc.gov; or Tara B. Shostek, Attorney-Advisor, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau, at (202) 418-8130, or by email to Tara.Shostek@fcc.gov.

V. ORDERING CLAUSES

30. Accordingly, IT IS ORDERED, pursuant to sections 1, 2, 4(i), 4(n), 301, 303(b), 303(e), 303(g), 303(j), 303(r), 303(v), 307, 309, 316, 335, 403, 624(g), 706 and 713 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 154(n), 301, 303(b), 303(e), 303(g), 303(j), 303(r), 303(v), 307, 309, 316, 335, 403, 544(g), 606, and 613, as well as by sections 602(a), (b), (c), (f), 603, 604 and 606 of the WARN Act, 47 U.S.C. §§ 1201(a), (b), (c), (f), 1203, 1204 and 1205, and the National Defense Authorization Act for Fiscal Year 2021, Pub. L. 116-283, 134 Stat. 3388, § 9201, 47 U.S.C. §§ 1201, 1206, that this *Notice of Proposed Rulemaking* IS hereby ADOPTED.[31]

31. 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* on or before 30 days after publication in the Federal Register, and reply comments on or before 45 days after publication in the Federal Register.

[31] Pursuant to Executive Order 14215, 90 Fed. Reg. 10447 (Feb. 20, 2025), this regulatory action has been determined to be significant under Executive Order 12866, 58 Fed. Reg. 68708 (Dec. 28, 1993).

32. IT IS FURTHER ORDERED that the Commission's Office of the Secretary 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

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[32] the Federal Communications Commission (Commission) has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the policies and rules proposed in the *Notice of Proposed Rulemaking* (*Notice*) assessing the possible significant economic impact on a substantial number of small entities. The Commission requests written public comments on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments specified on the first page of the *Notice*. The Commission will send a copy of the *Notice*, including this IRFA, to the Chief Counsel for the Small Business Administration (SBA) Office of Advocacy.[33] In addition, the *Notice* and IRFA (or summaries thereof) will be published in the Federal Register.[34]

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

2. In the Communications Act of 1934, Congress mandated that the Commission promote the safety of life and property through the use of wire and radio communication,[35] and, by extension, ensure that the public is able to receive critical information regarding impending disasters and other emergencies in a timely fashion. The performance and accessibility of the nation's alert and warning systems, which includes the Emergency Alert System (EAS) and Wireless Emergency Alert System (WEA), are essential to safeguarding the lives and property of all people. In the *Notice*, the Commission seeks comment on the goals that the nation's public alert and warning systems should aim to achieve, how emergency alerting systems should be designed to achieve those objectives, what kinds of information emergency alerting systems need to convey to accomplish their objectives, how that information needs to be conveyed so that the objectives are fully realized, how emergency alert systems should be able to geographically target alerts so that their objectives are fully realized, and what kinds of end-user features they should offer to maximize value for recipients. The Commission also seeks comment on whether any changes should be made to EAS and WEA to either better ensure that nation's alerting objectives are being achieved or to eliminate unnecessary requirements that do not advance those objectives.

B. Legal Basis

3. The proposed action is authorized pursuant to sections 1, 2, 4(i), 4(n), 301, 303(b), 303(e), 303(g), 303(j), 303(r), 303(v), 307, 309, 316, 335, 403, 624(g), 706 and 713 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 154(n), 301, 303(b), 303(e), 303(g), 303(j), 303(r), 303(v), 307, 309, 316, 335, 403, 544(g), 606, and 613, as well as by sections 602(a), (b), (c), (f), 603, 604 and 606 of the WARN Act, 47 U.S.C. §§ 1201(a), (b), (c), (f), 1203, 1204 and 1205, and the National Defense Authorization Act for Fiscal Year 2021, Pub. L. 116-283, 134 Stat. 3388, § 9201, 47 U.S.C. §§ 1201, 1206.

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

4. 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.[36] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small

[32] 5 U.S.C. §§ 601 *et seq*., as amended by the Small Business Regulatory Enforcement and Fairness Act (SBREFA), Pub. L. No. 104-121, 110 Stat. 847 (1996).

[33] 5 U.S.C. § 603(a).

[34] *Id.*

[35] *See* 47 U.S.C. § 151.

[36] 5 U.S.C. § 603(b)(3).

organization," and "small governmental jurisdiction."[37] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[38] 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.[39]

5. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe three broad groups of small entities that could be directly affected by our actions.[40] First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, in general, a small business is an independent business having fewer than 500 employees.[41] These types of small businesses represent 99.9% of all businesses in the United States, which translates to 34.75 million businesses.[42] Next, "small organizations" are not-for-profit enterprises that are independently owned and operated and not dominant their field.[43] While we do not have data regarding the number of non-profits that meet that criteria, over 99 percent of nonprofits have fewer than 500 employees.[44] Finally, "small governmental jurisdictions" are defined as cities, counties, towns, townships, villages, school districts, or special districts with populations of less than fifty thousand.[45] Based on the 2022 U.S. Census of Governments data, we estimate that at least 48,724 out of 90,835 local government jurisdictions have a population of less than 50,000.[46]

6. *Radio Stations*. This industry is comprised of "establishments primarily engaged in broadcasting aural programs by radio to the public."[47] Programming may originate in their own studio, from an affiliated network, or from external sources.[48] The SBA small business size standard for this industry classifies firms having $47 million or less in annual receipts as small.[49] U.S. Census Bureau data for 2017 show that 2,963 firms operated in this industry during that year.[50] Of this number, 1,879 firms

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[37] *Id*. § 601(6).

[38] *Id.* § 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."

[39] 15 U.S.C. § 632.

[40] 5 U.S.C. § 601(3)-(6).

[41] *See* SBA, Office of Advocacy, *Frequently Asked Questions About Small Business* (July 23, 2024), https://advocacy.sba.gov/wp-content/uploads/2024/12/Frequently-Asked-Questions-About-Small-Business_2024-508.pdf.

[42] *Id*.

[43] 5 U.S.C. § 601(4).

[44] *See* SBA, Office of Advocacy, *Small Business Facts, Spotlight on Nonprofits* (July 2019), https://advocacy.sba.gov/2019/07/25/small-business-facts-spotlight-on-nonprofits/.

[45] 5 U.S.C. § 601(5).

[46] *See* U.S. Census Bureau, 2022 Census of Governments –Organization, https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html, tables 1-11.

[47] *See* U.S. Census Bureau, *2017 NAICS Definition, "515112 Radio Stations*," https://www.census.gov/naics/?input=515112&year=2017&details=515112.

[48] *Id.*

[49] *See* 13 CFR § 121.201, NAICS Code 515112 (as of 10/1/22 NAICS Code 516110).

[50] *See* U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code

(continued….)

operated with revenue of less than $25 million per year.[51] Based on this data and the SBA's small business size standard, we estimate a majority of such entities are small entities.

7. The Commission estimates that as of March 31, 2025, there were 4,367 licensed commercial AM radio stations and 6,621 licensed commercial FM radio stations, for a combined total of 10,988 commercial radio stations.[52] Of this total, 10,987 stations (or 99.99 %) had revenues of $47 million or less in 2023, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Database (BIA) on April 4, 2025, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of March 31, 2025, there were 4,634 licensed noncommercial (NCE) FM radio stations, 1,976 low power FM (LPFM) stations, and 8,891 FM translators and boosters.[53] The Commission however does not compile, and otherwise does not have access to financial information for these radio stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of radio station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

8. We note, however, that in assessing whether a business concern qualifies as "small" under the above definition, business (control) affiliations[54] must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, another element of the definition of "small business" requires 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 or television broadcast station is dominant in its field of operation. Accordingly, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and is therefore possibly over-inclusive. An additional element of the definition of "small business" is that the entity must be independently owned and operated. Because it is difficult to assess these criteria in the context of media entities, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and similarly may be over-inclusive.

9. *FM Translator Stations and Low Power FM Stations*. FM translators and Low Power FM Stations are classified in the industry for Radio Stations.[55] The Radio Stations industry comprises

515112,https://data.census.gov/cedsci/table?y=2017&n=515112&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. We note that the US Census Bureau withheld publication of the number of firms that operated for the entire year. At this time, the 2022 Economic Census data is not available.

[51] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in the individual categories for less than $100,000, and $100,000 to $249,999 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher that noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

[52] Broadcast Station Totals as of March 31, 2025, Public Notice, DA 25-296 (rel. Apr. 4, 2025) (April 2025 Broadcast Station Totals PN), https://docs.fcc.gov/public/attachments/DA-25-296A1.pdf.

[53] *Id*.

[54] "[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).

[55] *See* U.S. Census Bureau, *2017 NAICS Definition, "515112 Radio Stations,"* https://www.census.gov/naics/?input=515112&year=2017&details=515112.

establishments primarily engaged in broadcasting aural programs by radio to the public.[56] Programming may originate in their own studio, from an affiliated network, or from external sources.[57] The SBA small business size standard for this industry classifies firms having $47 million or less in annual receipts as small.[58] U.S. Census Bureau data for 2017 show that 2,963 firms operated during that year.[59] Of that number, 1,879 firms operated with revenue of less than $25 million per year.[60] Therefore, based on the SBA's size standard we conclude that the majority of FM Translator stations and Low Power FM Stations are small. Additionally, according to Commission data, as of March 31, 2025, there were 8,891 FM Translator Stations and 1,976 Low Power FM licensed broadcast stations.[61] The Commission, however, does not compile and otherwise does not have access to information on the revenue of these stations that would permit it to determine how many of the stations would qualify as small entities. For purposes of this regulatory flexibility analysis, we presume the majority of these stations are small entities.

10. *Television Broadcasting.* This industry is comprised of "establishments primarily engaged in broadcasting images together with sound."[62] These establishments operate television broadcast studios and facilities for the programming and transmission of programs to the public.[63] These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studio, from an affiliated network, or from external sources. The SBA small business size standard for this industry classifies businesses having $47 million or less in annual receipts as small.[64] 2017 U.S. Census Bureau data indicate that 744 firms in this industry operated for the entire year.[65] Of that number, 657 firms had revenue of less than $25 million per year.[66] Based on this data we

[56] *Id.*

[57] *Id.*

[58] *See* 13 CFR § 121.201, NAICS Code 515112 (as of 10/1/22 NAICS Code 516110).

[59] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEREVFIRM, NAICS Code 515112, https://data.census.gov/cedsci/table?y=2017&n=515112&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. We note that the US Census Bureau withheld publication of the number of firms that operated for the entire year. At this time, the 2022 Economic Census data is not available.

[60] *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in the individual categories for less than $100,000, and $100,000 to $249,999 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with annual receipts that meet the SBA size standard would be higher that noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

[61] *Broadcast Station Totals as of March 31, 2025*, Public Notice, DA 25-296 (rel. Apr. 4, 2025) (April 2025 Broadcast Station Totals PN), https://docs.fcc.gov/public/attachments/DA-25-296A1.pdf.

[62] *See* U.S. Census Bureau, *2017 NAICS Definition, "515120 Television Broadcasting,"* https://www.census.gov/naics/?input=515120&year=2017&details=515120.

[63] *Id.*

[64] *See* 13 CFR § 121.201, NAICS Code 515120 (as of 10/1/22 NAICS Code 516120).

[65] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEREVFIRM, NAICS Code 515120, https://data.census.gov/cedsci/table?y=2017&n=515120&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[66] *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

estimate that the majority of television broadcasters are small entities under the SBA small business size standard.

11. As of March 31, 2025, there were 1,384 licensed commercial television stations.[67] Of this total, 1,307 stations (or 94.4%) had revenues of $47 million or less in 2023, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Television Database (BIA) on April 4, 2025, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates as of March 31, 2025, there were 383 licensed noncommercial educational (NCE) television stations, 383 Class A TV stations, 1,786 LPTV stations and 3,099 TV translator stations.[68] The Commission, however, does not compile and otherwise does not have access to financial information for these television broadcast stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of these television station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

12. *Cable Television Distribution Services*. Cable television distribution services fall within the U.S. Census Bureau industry classification category of Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband Internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.

13. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were engaged in the provision of fixed local services. Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

14. *Cable System Operators (Telecom Act Standard)*. The Communications Act of 1934, as amended, contains a size standard for a "small cable operator," which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[69] For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 498,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator.[70] Based on industry data, only six cable system operators have

[67] *Broadcast Station Totals as of March 31, 2025*, Public Notice, DA 25-296 (rel. Apr. 4, 2025) (*April 2025 Broadcast Station Totals PN*), https://docs.fcc.gov/public/attachments/DA-25-296A1.pdf.

[68] *Id*.

[69] 47 U.S.C. § 543(m)(2).

[70] *FCC Announces Updated Subscriber Threshold for the Definition of Small Cable Operator*, Public Notice, DA 23-906 (MB 2023) (*2023 Subscriber Threshold PN*). In this Public Notice, the Commission determined that there were approximately 49.8 million cable subscribers in the United States at that time using the most reliable source publicly available. *Id*. This threshold will remain in effect until the Commission issues a superseding Public Notice. *See* 47 CFR § 76.901(e)(1).

more than 498,000 subscribers.[71] Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million.[72] Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

15. *Cable Companies and Systems (Rate Regulation).* The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.[73] Based on industry data, there are about 420 cable companies in the U.S.[74] Of these, only seven have more than 400,000 subscribers.[75] In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.[76] Based on industry data, there are about 4,139 cable systems (headends) in the U.S.[77] Of these, about 639 have more than 15,000 subscribers.[78] Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.

16. *Satellite Telecommunications.* This industry comprises firms "primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications."[79] Satellite telecommunications service providers include satellite and earth station operators. The SBA small business size standard for this industry classifies a business with $44 million or less in annual receipts as small.[80] U.S. Census Bureau data for 2017 show that 275 firms in this industry operated for the entire year.[81] Of this number, 242 firms had revenue of less than $25 million.[82] Consequently, using the SBA's small business size standard most satellite telecommunications service providers can be considered small entities. The Commission notes however,

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[71] S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 06/23Q (*last visited Sept. 27, 2023); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

[72] The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(e) of the Commission's rules. *See* 47 CFR § 76.910(b).

[73] 47 CFR § 76.901(d).

[74] S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

[75] S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

[76] 47 CFR § 76.901(c).

[77] S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

[78] S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q (*last visited May 26, 2022).

[79] *See* U.S. Census Bureau, *2017 NAICS Definition, "517410 Satellite Telecommunications,"* https://www.census.gov/naics/?input=517410&year=2017&details=517410.

[80] *See* 13 CFR § 121.201, NAICS Code 517410.

[81] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEREVFIRM, NAICS Code 517410, https://data.census.gov/cedsci/table?y=2017&n=517410&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[82] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

that the SBA's revenue small business size standard is applicable to a broad scope of satellite telecommunications providers included in the U.S. Census Bureau's Satellite Telecommunications industry definition. Additionally, the Commission neither requests nor collects annual revenue information from satellite telecommunications providers and is therefore unable to more accurately estimate the number of satellite telecommunications providers that would be classified as a small business under the SBA size standard.

17. *All Other Telecommunications.* This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation.[83] This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.[84] Providers of Internet services (e.g. dial-up ISPs) or Voice over Internet Protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry.[85] The SBA small business size standard for this industry classifies firms with annual receipts of $40 million or less as small.[86] U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.[87] Of those firms, 1,039 had revenue of less than $25 million.[88] Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

18. *Broadband Radio Service and Educational Broadband Service.* Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable,"[89] transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service (ITFS)).[90] Wireless cable operators that use spectrum in the BRS often supplemented with leased channels from the EBS, provide a competitive alternative to wired cable and other multichannel video programming distributors. Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels.[91]

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[83] *See* U.S. Census Bureau, *2017 NAICS Definition*, "*517919 All Other Telecommunications,*" https://www.census.gov/naics/?input=517919&year=2017&details=517919.

[84] *Id.*

[85] *Id*.

[86] *See* 13 CFR § 121.201, NAICS Code 517919 (as of 10/1/22, NAICS Code 517810).

[87] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[88] *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

[89] The use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

[90] *See* 47 CFR § 27.4; see also Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

[91] Generally, a wireless cable system may be described as a microwave station transmitting on a combination of BRS and EBS channels to numerous receivers with antennas, such as single-family residences, apartment

(continued….)

19. In light of the use of wireless frequencies by BRS and EBS services, the closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (*except* Satellite).[92] The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.[93] U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.[94] Of this number, 2,837 firms employed fewer than 250 employees.[95] Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

20. According to Commission data as of December 2021, there were approximately 5,869 active BRS and EBS licenses.[96] The Commission's small business size standards with respect to BRS involves eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of BRS licenses, the Commission adopted criteria for three groups of small businesses. A very small business is an entity that, together with its affiliates and controlling interests, has average annual gross revenues exceed $3 million and did not exceed $15 million for the preceding three years, a small business is an entity that, together with its affiliates and controlling interests, has average gross revenues exceed $15 million and did not exceed $40 million for the preceding three years, and an entrepreneur is an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding $3 million for the preceding three years.[97] Of the ten winning bidders for BRS licenses, two bidders claiming the small business status won 4 licenses, one bidder claiming the very small business status won three licenses and two bidders claiming entrepreneur status won six licenses.[98] One of the winning bidders claiming a small business status classification in the BRS license auction has an active licenses as of December 2021.[99]

21. The Commission's small business size standards for EBS define a small business as an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests,

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complexes, hotels, educational institutions, business entities and governmental offices. The range of the transmission depends upon the transmitter power, the type of receiving antenna and the existence of a line-of-sight path between the transmitter or signal booster and the receiving antenna.

[92] *See* U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

[93] *See* 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

[94] *See* U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[95] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[96] Based on an FCC Universal Licensing System search on December 10, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR, ED; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

[97] *See* 47 CFR § 27.1218(a).

[98] *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 86: Broadband Radio Service, Summary, Reports, All Bidders, https://www.fcc.gov/sites/default/files/wireless/auctions/86/charts/86bidder.xls.

[99] Based on an FCC Universal Licensing System search on December 10, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

has average gross revenues that are not more than $55 million for the preceding five (5) years, and a very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than $20 million for the preceding five (5) years.[100] In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

22. *Direct Broadcast Satellite (DBS) Service*. DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic "dish" antenna at the subscriber's location. DBS is included in the Wired Telecommunications Carriers industry which comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks.[101] Transmission facilities may be based on a single technology or combination of technologies.[102] Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution; and wired broadband Internet services.[103] By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.[104]

23. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.[105] U.S. Census Bureau data for 2017 show that 3,054 firms operated in this industry for the entire year.[106] Of this number, 2,964 firms operated with fewer than 250 employees.[107] Based on this data, the majority of firms in this industry can be considered small under the SBA small business size standard. According to Commission data, however, only two entities provide DBS service - DIRECTV (owned by AT&T) and DISH Network, which require a great deal of capital for operation.[108] DIRECTV and DISH Network both exceed the SBA size standard for

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[100] *See* 47 CFR § 27.1219(a).

[101] *See* U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* https://www.census.gov/naics/?input=517311&year=2017&details=517311.

[102] *Id.*

[103] *See id*. Included in this industry are: broadband Internet service providers (*e.g.*, cable, DSL); local telephone carriers (wired); cable television distribution services; long-distance telephone carriers (wired); closed-circuit television (CCTV) services; VoIP service providers, using own operated wired telecommunications infrastructure; direct-to-home satellite system (DTH) services; telecommunications carriers (wired); satellite television distribution systems; and multichannel multipoint distribution services (MMDS).

[104] *Id*.

[105] *See* 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

[106] *See* U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[107] *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[108] *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eighteenth Report,* Table III.A.5, 32 FCC Rcd 568, 595 (Jan. 17, 2017).

classification as a small business. Therefore, we must conclude based on internally developed Commission data, in general DBS service is provided only by large firms.

24. *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.[109] 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.[110] The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small.[111] U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year.[112] Of this number, 624 firms had fewer than 250 employees.[113] Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

25. *Electronic Computer Manufacturing*. This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers.[114] Computers can be analog, digital, or hybrid.[115] Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.[116] Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements.[117] The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.[118] The SBA small business size standard for this industry classifies a business as small if it has 1,000 or fewer employees.[119] According to U.S. Census Bureau data for 2017, there were 300 firms in this industry that operated for the entire year.[120] Of this number, 291 firms had less than 250

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[109] *See* U.S. Census Bureau, *2017 NAICS Definition, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing,*" https://www.census.gov/naics/?input=334220&year=2017&details=334220.

[110] *Id*.

[111] *See* 13 CFR § 121.201, NAICS Code 334220.

[112] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 334220, https://data.census.gov/cedsci/table?y=2017&n=334220&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[113] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[114] *See* U.S. Census Bureau, *2017 NAICS Definition, "334111 Electronic Computer Manufacturing,*" https://www.census.gov/naics/?input=334111&year=2017&details=334111.

[115] *Id.*

[116] *Id.*

[117] *Id.*

[118] *Id*.

[119] *See* 13 CFR § 121.201, NAICS Code 334111.

[120] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Selected Sectors: Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 334111,

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employees.[121] Consequently, we estimate that the majority of firms in this industry are small entities.

26. *Audio and Video Equipment Manufacturing.* This industry comprises establishments primarily engaged in electronic audio and video equipment for home entertainment, motor vehicles, and public address and musical instrument amplification. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.[122] The SBA small business size standard for this industry classifies firms with 750 employees or less as small.[123] According to 2017 U.S. Census Bureau data, 464 firms in this industry operated that year.[124] Of this number, 399 firms operated with less than 250 employees.[125] Based on this data and the associated SBA size standard, we conclude that the majority of firms in this industry are small.

27. *Wireless Telecommunications Carriers (except Satellite).* This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves.[126] 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.[127] The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.[128] U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.[129] Of that number, 2,837 firms employed fewer than 250 employees.[130] Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 594 providers that reported they were engaged in the provision of

https://data.census.gov/cedsci/table?y=2017&n=334111&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[121] *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[122] *See* U.S. Census Bureau, *2017 NAICS Definition*, *"334310 Audio and Video Equipment Manufacturing,"* https://www.census.gov/naics/?input=334310&year=2017&details=334310.

[123] *See* 13 CFR 121.201, NAICS Code 334310.

[124] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Selected Sectors: Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 334310, https://data.census.gov/cedsci/table?y=2017&n=334310&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[125] *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that the U.S. Census Bureau withheld publication of the number of firms that operated for the entire year and the number of firms that operated with 5 to 9 employees, to avoid disclosing data for individual companies (see Cell Notes for "Firms operated for the entire year" and "Firms operated for the entire year with 5 to 9 employees"). Therefore, the number of firms with employees that meet the SBA size standard would be higher that noted herein.

[126] *See* U.S. Census Bureau, *2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite),"* https://www.census.gov/naics/?input=517312&year=2017&details=517312.

[127] *Id.*

[128] *See* 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

[129] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[130] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

wireless services.[131] Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees.[132] Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

28. *Broadband Personal Communications Service.* The broadband personal communications services (PCS) spectrum encompasses services in the 1850-1910 and 1930-1990 MHz bands.[133] The closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (except Satellite).[134] The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.[135] U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.[136] Of this number, 2,837 firms employed fewer than 250 employees.[137] Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

29. Based on Commission data as of November 2021, there were approximately 5,060 active licenses in the Broadband PCS service.[138] The Commission's small business size standards with respect to Broadband PCS involve eligibility for bidding credits and installment payments in the auction of licenses for these services. In auctions for these licenses, the Commission defined "small business" as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding $40 million for the preceding three years, and a "very small business" as an entity that, together with its affiliates and controlling interests, has had average annual gross revenues not exceeding $15 million for the preceding three years.[139] Winning bidders claiming small business credits won Broadband PCS licenses in C, D, E, and F Blocks.[140]

30. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size

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[131] Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

[132] *Id.*

[133] *See* 47 CFR § 24.200.

[134] *See* U.S. Census Bureau, *2017 NAICS Definition, "517312 Wireless Telecommunications Carriers* (*except Satellite*)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

[135] *See* 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

[136] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[137] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[138] Based on an FCC Universal Licensing System search on November 16, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = CW; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

[139] *See* 47 CFR § 24.720(b).

[140] *See* Federal Communications Commission, Office of Economics and Analytics, Auctions, Auctions 4, 5, 10, 11, 22, 35, 58, 71 and 78, https://www.fcc.gov/auctions.

standard.

31. *Narrowband Personal Communications Services*. Narrowband Personal Communications Services *(Narrowband PCS)* are PCS services operating in the 901-902 MHz, 930-931 MHz, and 940-941 MHz bands.[141] PCS services are radio communications that encompass mobile and ancillary fixed communication that provide services to individuals and businesses and can be integrated with a variety of competing networks.[142] Wireless Telecommunications Carriers (*except* Satellite)[143] is the closest industry with a SBA small business size standard applicable to these services. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.[144] U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.[145] Of this number, 2,837 firms employed fewer than 250 employees.[146] Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

32. According to Commission data as of December 2021, there were approximately 4,211 active *Narrowband PCS* licenses.[147] The Commission's small business size standards with respect to *Narrowband PCS* involve eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of these licenses, the Commission defined a "small business" as an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $40 million.[148] A "very small business" is defined as an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $15 million.[149] Pursuant to these definitions, 7 winning bidders claiming small and very small bidding credits won approximately 359 licenses.[150] One of the winning bidders claiming a small business status classification in these *Narrowband PCS* license auctions had an active license as of December 2021.[151]

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[141] *See* 47 CFR § 24.5.

[142] *Id*.

[143] *See* U.S. Census Bureau, *2017 NAICS Definition, "517312 Wireless Telecommunications Carriers* (*except Satellite*)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

[144] *See* 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

[145] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[146] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[147] Based on an FCC Universal Licensing System search on December 10, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = CN; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

[148] *See* 47 CFR § 24.321(a)(1)-(2).

[149] *Id.*

[150] *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 41: Narrowband PCS, Summary, Closing Charts, License By Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/41/charts/41cls2.pdf; Auction 50: Narrowband PCS, Summary, Closing Charts, License By Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/50/charts/50cls2.pdf.

[151] Based on an FCC Universal Licensing System search on December 10, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match

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33. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

34. *Wireless Communications Services*. Wireless Communications Services (WCS) can be used for a variety of fixed, mobile, radiolocation, and digital audio broadcasting satellite services. Wireless spectrum is made available and licensed for the provision of wireless communications services in several frequency bands subject to Part 27 of the Commission's rules.[152] Wireless Telecommunications Carriers (*except* Satellite)[153] is the closest industry with an SBA small business size standard applicable to these services. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.[154] U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.[155] Of this number, 2,837 firms employed fewer than 250 employees.[156] Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

35. The Commission's small business size standards with respect to WCS involve eligibility for bidding credits and installment payments in the auction of licenses for the various frequency bands included in WCS. When bidding credits are adopted for the auction of licenses in WCS frequency bands, such credits may be available to several types of small businesses based average gross revenues (small, very small and entrepreneur) pursuant to the competitive bidding rules adopted in conjunction with the requirements for the auction and/or as identified in the designated entities section in Part 27 of the Commission's rules for the specific WCS frequency bands.[157]

36. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

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only the following radio service(s)", Radio Service = CN; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

[152] *See* 47 CFR §§ 27.1 – 27.1607.

[153] See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

[154] *See* 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

[155] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[156] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[157] *See* 47 CFR §§ 27.201 – 27.1601. The Designated entities sections in Subparts D – Q each contain the small business size standards adopted for the auction of the frequency band covered by that subpart.

37. *700 MHz Guard Band Licensees*. The 700 MHz Guard Band encompasses spectrum in 746-747/776-777 MHz and 762-764/792-794 MHz frequency bands. Wireless Telecommunications Carriers (*except* Satellite)[158] is the closest industry with an SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.[159] U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.[160] Of this number, 2,837 firms employed fewer than 250 employees.[161] Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

38. According to Commission data as of December 2021, there were approximately 224 active 700 MHz Guard Band licenses.[162] The Commission's small business size standards with respect to 700 MHz Guard Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For the auction of these licenses, the Commission defined a "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $40 million for the preceding three years, and a "very small business" an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $15 million for the preceding three years.[163] Pursuant to these definitions, five winning bidders claiming one of the small business status classifications won 26 licenses, and one winning bidder claiming small business won two licenses.[164] None of the winning bidders claiming a small business status classification in these 700 MHz Guard Band license auctions had an active license as of December 2021.[165]

39. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small

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[158] *See* U.S. Census Bureau, *2017 NAICS Definition, "517312 Wireless Telecommunications Carriers* (*except Satellite*)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

[159] *See* 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

[160] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[161] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[162] Based on an FCC Universal Licensing System search on December 14, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = WX; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

[163] *See* 47 CFR § 27.502(a).

[164] *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 33: Upper 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/33/charts/33cls2.pdf, Auction 38: Upper 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/38/charts/38cls2.pdf.

[165] Based on an FCC Universal Licensing System search on December 14, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = WX; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

business size standard.

40. *Lower 700 MHz Band Licenses*. The lower 700 MHz band encompasses spectrum in the 698-746 MHz frequency bands. Permissible operations in these bands include flexible fixed, mobile, and broadcast uses, including mobile and other digital new broadcast operation; fixed and mobile wireless commercial services (including FDD- and TDD-based services); as well as fixed and mobile wireless uses for private, internal radio needs, two-way interactive, cellular, and mobile television broadcasting services.[166] Wireless Telecommunications Carriers (*except* Satellite)[167] is the closest industry with a SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.[168] U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.[169] Of this number, 2,837 firms employed fewer than 250 employees.[170] Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

41. According to Commission data as of December 2021, there were approximately 2,824 active Lower 700 MHz Band licenses.[171] The Commission's small business size standards with respect to Lower 700 MHz Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For auctions of Lower 700 MHz Band licenses the Commission adopted criteria for three groups of small businesses. A very small business was defined as an entity that, together with its affiliates and controlling interests, has average annual gross revenues not exceeding $15 million for the preceding three years, a small business was defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding $40 million for the preceding three years, and an entrepreneur was defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding $3 million for the preceding three years.[172] In auctions for Lower 700 MHz Band licenses 72 winning bidders claiming a small business classification won 329 licenses,[173]

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[166] *See* Federal Communications Commission, Economics and Analytics, Auctions, Auctions 44, 49, 60: Lower 700 MHz Band, Fact Sheet, Permissible Operations, https://www.fcc.gov/auction/44, https://www.fcc.gov/auction/49, and https://www.fcc.gov/auction/60.

[167] *See* U.S. Census Bureau, *2017 NAICS Definition, "517312 Wireless Telecommunications Carriers* (*except Satellite*)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

[168] *See* 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

[169] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[170] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[171] Based on an FCC Universal Licensing System search on December 14, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = WY, WZ; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

[172] *See* 47 CFR § 27.702(a)(1)-(3).

[173] *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 44: Lower 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/44/charts/44cls2.pdf.

26 winning bidders claiming a small business classification won 214 licenses,[174] and three winning bidders claiming a small business classification won all five auctioned licenses.[175]

42. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

43. *Upper 700 MHz Band Licenses*. The upper 700 MHz band encompasses spectrum in the 746-806 MHz bands. Upper 700 MHz D Block licenses are nationwide licenses associated with the 758-763 MHz and 788-793 MHz bands.[176] Permissible operations in these bands include flexible fixed, mobile, and broadcast uses, including mobile and other digital new broadcast operation; fixed and mobile wireless commercial services (including FDD- and TDD-based services); as well as fixed and mobile wireless uses for private, internal radio needs, two-way interactive, cellular, and mobile television broadcasting services.[177] Wireless Telecommunications Carriers (*except* Satellite)[178] is the closest industry with a SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.[179] U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.[180] Of that number, 2,837 firms employed fewer than 250 employees.[181] Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

44. According to Commission data as of December 2021, there were approximately 152 active Upper 700 MHz Band licenses.[182] The Commission's small business size standards with respect to

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[174] *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 49: Lower 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/49/charts/49cls2.pdf.

[175] *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 60: Lower 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, https://www.fcc.gov/sites/default/files/wireless/auctions/60/charts/60cls2.pdf.

[176] *See* 47 CFR § 27.4.

[177] *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 73: 700 MHz Band, Fact Sheet, Permissible Operations, https://www.fcc.gov/auction/73. We note that in Auction 73, Upper 700 MHz Band C and D Blocks as well as Lower 700 MHz Band A, B, and E Blocks were auctioned.

[178] *See* U.S. Census Bureau, *2017 NAICS Definition, "517312 Wireless Telecommunications Carriers* (*except Satellite*)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

[179] *See* 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

[180] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

[181] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[182] Based on an FCC Universal Licensing System search on December 14, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = WP, WU; Authorization Type = All; Status = Active. We note (continued….)

Upper 700 MHz Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For the auction of these licenses, the Commission defined a "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $40 million for the preceding three years, and a "very small business" an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $15 million for the preceding three years.[183] Pursuant to these definitions, three winning bidders claiming very small business status won five of the twelve available licenses.[184]

45. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

46. *Advanced Wireless Services (AWS) - (1710–1755 MHz and 2110–2155 MHz bands (AWS-1); 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz bands (AWS-2); 2155–2175 MHz band (AWS-3); 2000-2020 MHz and 2180-2200 MHz (AWS-4))*. Spectrum is made available and licensed in these bands for the provision of various wireless communications services.[185] Wireless Telecommunications Carriers (except Satellite)[186] is the closest industry with an SBA small business size standard applicable to these services. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.[187] U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.[188] Of this number, 2,837 firms employed fewer than 250 employees.[189] Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

47. According to Commission data as of December 2021, there were approximately 4,472 active AWS licenses.[190] The Commission's small business size standards with respect to AWS involve

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that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

[183] *See* 47 CFR § 27.502(a).

[184] *See Auction of 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction 73*, Public Notice, DA-08-595, Attachment A, Report No. AUC-08-73-I (Auction 73) (March 20, 2008). The results for Upper 700 MHz Band C Block can be found on pp. 62-63.

[185] *See* 47 CFR § 27.1(b).

[186] *See* U.S. Census Bureau, *2017 NAICS Definition, "517312 Wireless Telecommunications Carriers* (*except Satellite*)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

[187] *See* 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

[188] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Employment Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

[189] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

[190] Based on an FCC Universal Licensing System search on December 10, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = AD, AH, AT, AW; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of AWS licenses, the Commission defined a "small business" as an entity with average annual gross revenues for the preceding three years not exceeding $40 million, and a "very small business" as an entity with average annual gross revenues for the preceding three years not exceeding $15 million.[191] Pursuant to these definitions, 57 winning bidders claiming status as small or very small businesses won 215 of 1,087 licenses.[192] In the most recent auction of AWS licenses 15 of 37 bidders qualifying for status as small or very small businesses won licenses.[193]

48. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

49. *The Educational Broadcasting Services.* According to Commission data as of December 2021, there were 4,477 active EBS licenses.[194] The Commission estimates that the majority of these licenses are held by non-profit educational institutions and school districts and are likely small entities.

50. *Software Publishers.* This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction.[195] Establishments in this industry carry out operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation, and providing support services to software purchasers.[196] These establishments may design, develop, and publish, or publish only.[197] The SBA small business size standard for this industry classifies businesses having annual receipts of $47 million or less as small.[198] U.S. Census Bureau data for 2017 indicate that 7,842 firms in this industry operated for the entire year. [199]

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[191] *See* 47 CFR § 27.1002, 27.1102, 27.1104, 27.1106.

[192] *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 66: Advanced Wireless Services (AWS-1), Summary, Spreadsheets, https://www.fcc.gov/sites/default/files/wireless/auctions/66/charts/66cls2.pdf.

[193] *See Auction of Advanced Wireless Services (AWS-3) Licenses Closes; Winning Bidders Announced for Auction 97*, Public Notice, DA-15-131, Attachments A-B, (Auction No. 97) (January 30, 2015).

[194] Based on an FCC Universal Licensing System search on December 17, 2021. https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =ED; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

[195] *See* U.S. Census Bureau, *2017 NAICS Definition, "511210 Software Publishers,"* https://www.census.gov/naics/?input=511210&year=2017&details=511210.

[196] *Id.*

[197] *Id.*

[198] *See* 13 CFR § 121.201, NAICS Code 511210 (as of 10/1/22 NAICS Code 513210).

[199] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEREVFIRM, NAICS Code 511210, https://data.census.gov/cedsci/table?y=2017&n=511210&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available.

Of this number 7,226 firms had revenue of less than $25 million.[200] Based on this data, we conclude that a majority of firms in this industry are small.

51. *Noncommercial Educational (NCE) and Public Broadcast Stations*. Noncommercial educational broadcast stations and public broadcast stations are television or radio broadcast stations which under the Commission's rules are eligible to be licensed by the Commission as a noncommercial educational radio or television broadcast station and are owned and operated by a public agency or nonprofit private foundation, corporation, or association; or are owned and operated by a municipality which transmits only noncommercial programs for education purposes.

52. The SBA small business size standards and U.S. Census Bureau data classify radio stations[201] and television broadcasting[202] separately and both categories may include both noncommercial and commercial stations. The SBA small business size standard for both radio stations and television broadcasting classify firms having $47 million or less in annual receipts as small.[203] For Radio Stations, U.S. Census Bureau data for 2017 show that 1,879 of the 2,963 firms that operated during that year had revenue of less than $25 million per year.[204] For Television Broadcasting, U.S. Census Bureau data for 2017 show that 657 of the 744 firms that operated for the entire year had revenue of less than $25 million per year.[205] While the U.S. Census Bureau data does not indicate the number of non-commercial stations, we estimate that under the applicable SBA size standard the majority of noncommercial educational broadcast stations and public broadcast stations are small entities.

53. According to Commission data as of March 31, 2025, there were 5,017 licensed noncommercial educational radio and television stations.[206] In addition, the Commission estimates as

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[200] *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

[201] *See* U.S. Census Bureau, *2017 NAICS Definition, "515112 Radio Stations*," https://www.census.gov/naics/?input=515112&year=2017&details=515112.

[202] *See* U.S. Census Bureau, *2017 NAICS Definition, "515120 Television Broadcasting,*" https://www.census.gov/naics/?input=515120&year=2017&details=515120.

[203] *See* 13 CFR § 121.201, NAICS Code 515112 (Radio Stations) (as of 10/1/22 NAICS Code 516110); NAICS Code 515120 (Television Broadcasting) (as of 10/1/22 NAICS Code 516120).

[204] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEREVFIRM, NAICS Code 515112, https://data.census.gov/cedsci/table?y=2017&n=515112&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated for the entire year. We also note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in the individual categories for less than $100,000, and $100,000 to $249,999 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher that noted herein. We further note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

[205] *See* U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 515120, https://data.census.gov/cedsci/table?y=2017&n=515120&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

[206] Broadcast Station Totals as of March 31, 2025, Public Notice, DA 25-296 (rel. Apr. 4, 2025) (April 2025 Broadcast Station Totals PN), https://docs.fcc.gov/public/attachments/DA-25-296A1.pdf.

March 31, 2025, there were 383 licensed noncommercial educational (NCE) television stations, 383 Class A TV stations, 1,786 LPTV stations and 3,099 TV translator stations.[207] The Commission does not compile and otherwise does not have access to financial information for these stations that permit it to determine how many stations qualify as small entities under the SBA small business size standards. However, given the nature of these services, we will presume that all noncommercial educational and public broadcast stations qualify as small entities under the above SBA small business size standards.

54. *Cable and Other Subscription Programming.* The U.S. Census Bureau defines this industry as establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis.[208] The broadcast programming is typically narrowcast in nature (e.g., limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources.[209] The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.[210] The SBA small business size standard for this industry classifies firms with annual receipts less than $47 million as small.[211] Based on U.S. Census Bureau data for 2017, 378 firms operated in this industry during that year.[212] Of that number, 149 firms operated with revenue of less than $25 million a year and 44 firms operated with revenue of $25 million or more.[213] Based on this data, the Commission estimates that a majority of firms in this industry are small.

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

55. The RFA directs agencies to describe the economic impact of proposed rules on small entities, as well as projected reporting, recordkeeping and other compliance requirements, including an estimate of the classes of small entities which will be subject to the requirements and the type of professional skills necessary for preparation of the report or record.[214]

56. The Commission does not expect the actions proposed in the *Notice* will impose additional reporting or recordkeeping requirements for small entities that currently participate in EAS or WEA. However, small and other EAS Participants and Participating CMS providers could be subject to compliance obligations based on the Commission's inquiries in the *Notice*. In addition, the Commission explores how effectively the EAS and WEA systems are performing their objectives and what steps, if

[207] *Id*.

[208] *See* U.S. Census Bureau, *2017 NAICS Definition, "515210 Cable and Other Subscription Programming,"* https://www.census.gov/naics/?input=515210&year=2017&details=515210.

[209] *Id.*

[210] *Id.*

[211] *See* 13 CFR § 121.201, NAICS Code 515210 (as of 10/1/22, NAICS Code 516210).

[212] *See* U.S. Census Bureau, *2017 Economic Census of the United States*, *Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEREVFIRM, NAICS Code 515210, https://data.census.gov/cedsci/table?y=2017&n=515210&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. At this time, the 2022 Economic Census data is not available. The US Census Bureau withheld publication of the number of firms that operated for the entire year to avoid disclosing data for individual companies (see Cell Notes for this category).

[213] *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in all categories of revenue less than $500,000 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

[214] 5 U.S.C. § 603(b)(4).

any, the Commission should take to update these capabilities for the modern technological environment. The Commission also seeks comment on how EAS and WEA are working in practice for the public and public safety authorities, and whether they are structured to perform efficiently and with minimal unnecessary burdens for stakeholders. This includes whether a new alerting system inclusive of other media and platforms is needed to reach the public given consumers' shift away from traditional platforms that transmit EAS alerts. Such a system may impact small entities affiliated with platforms that are not currently equipped to transmit EAS alerts.

57. At this time, the record does not include sufficient information to allow the Commission to effectively quantify the costs of compliance for small entities, including whether it will be necessary for small entities to hire professionals to comply with the matters upon which we seek comment in the *Notice*. To help the Commission fully evaluate the cost of compliance for small entities, we request comment on the cost implications of potential changes to the EAS and/or WEA systems, including the quantification of, and any recommendations for, minimizing the costs for small entities related to the discussions in the *Notice*. We expect the information we receive in comments, including cost and benefit analyses, to help the Commission identify and evaluate relevant matters for small entities, including compliance costs and other burdens, that may result from the proposals and inquiries we make in the *Notice*.

E. Discussion of Significant Alternatives Considered That Minimize the Significant Economic Impact on Small Entities

58. The RFA directs agencies to provide a description of any significant alternatives to the proposed rules that would accomplish the stated objectives of applicable statutes, and minimize any significant economic impact on small entities.[215] The discussion is required to include alternatives such as: "(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 or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for such small entities."[216]

59. In the *Notice*, the Commission seeks comment on alternatives to the existing EAS and WEA, some of which may impact small entities if adopted. This includes whether a new alerting system, inclusive of other media and platforms with greater focus on the capabilities of end-use devices, is needed to reach the public, in contrast with the existing, traditional platforms that transmit EAS and WEA alerts. The *Notice* also requests comment on whether and how the potential for non-government entities to send alerts during emergencies should be taken into account when modernizing EAS and WEA. The Commission seeks comment on whether the nation's alerting system should be designed to guarantee delivery of each alert, or whether those originating alerts should rely on "best effort" at delivery. Relatedly, the *Notice* asks whether additional resiliency should be incorporated in EAS and WEA to allow for redundancy that could limit disruptions to emergency communications and promote the systems' objectives of widespread public notification about emergencies.

60. The Commission seeks comment on compliance cost information, including asking for recommendations to reduce any compliance burdens for EAS Participants and participating commercial service providers, including those that are small entities. The Commission expects to consider more fully the economic impact on small entities following its review of comments filed in response to the *Notice*, including cost analysis information. The Commission's evaluation of the comments filed in this proceeding will shape the next steps it ultimately takes to ensure the effectiveness of EAS and WEA while also minimizing the economic impact and burdens that small entities may incur from any rules we adopt in this proceeding.

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[215] *Id.* § 603(c).

[216] *Id*. § 603(c)(1)-(4).

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

61. There are no duplicating, overlapping, or conflicting rules.

STATEMENT OF
CHAIRMAN BRENDAN CARR

Re: *Modernization of the Nation's Alerting Systems*, Notice of Proposed Rulemaking, PS Docket No. 25-224.

One of the points that I have emphasized with the FCC's leadership team is that we should take a first principles approach to our jobs. Just because something has been done a certain way for a certain number of years, we should not hesitate to change things up—whether in big or small ways. That is certainly the approach we are taking with this item today.

Two of our most vital communications tools to keep people safe in times of crisis are the nation's alerting and warning systems: the Emergency Alert System (EAS) and Wireless Emergency Alerts (WEA). I've seen these tools in action, and there is no doubt that they have had a tremendous impact on public safety and saving American lives.

Since I've been at the Commission, we've made multiple changes to both programs. But the frameworks underlying EAS and WEA are 31 and 13 years old respectively. That's a long time by any measure, and a lifetime in the tech sector. Today, we are asking questions to assess whether EAS and WEA are delivering on their objectives, and if not, how they can be changed to make sure they are leveraging the latest technology to save lives.

For their work on this item, I'd like to thank Steven Carpenter, George Donato, David Kirshner, David Munson, Austin Randazzo, Bradley Rosen, Tara Shostek, and James Wiley.

STATEMENT OF
COMMISSIONER ANNA M. GOMEZ

Re: *Modernization of the Nation's Alerting Systems,* Notice of Proposed Rulemaking, PS Docket No. 25-224.

Last week, communities in Hawaii and Alaska were told by local, state, and national authorities to be ready to evacuate, take shelter or seek higher ground. That's because an 8.8-magnitude earthquake had struck the Russian coast and could soon threaten these two states with potentially deadly Tsunami waves. Parts of the West Coast were told to be on alert as well. And while thankfully the worst did not come to pass, this moment showed just how important it is for government to continue to look at ways to improve the way we communicate with the public during national disasters and emergency situations. Because there are always important lessons we can learn from our response to these unexpected moments. So, as I reviewed this item, I looked back at our government's response to recent emergencies in these areas and found some concerning reports.

First, in Hawaii we heard of severe traffic gridlock during this latest Tsunami threat due to over evacuation as these warnings came in during afternoon rush hour. People were initially told to leave entirely the areas at-risk, and authorities were slow to communicate alternatives like vertical evacuation in safe structures.

In Alaska, some confused residents were given conflicting messages as they struggled to understand what steps to take to keep themselves and their families safe. Some received WEAs with a mistaken evacuation order for Unalaska, which caused panic and confusion until authorities reversed course.

I want to be clear. I deeply value the work of our alerting authorities and First Responders in these situations. But they are human, and mistakes like these can happen. But that should not prevent us from looking at every possible way that we can minimize them, whether through new and improved technology, or through more targeted and streamlined systems. That's why I'm glad we are looking at all the ways in which we can modernize EAS and WEAs so that they reach more people in a more accurate and targeted way, and I thank the Chairman for elevating this issue.

I'd also like to note that in both of those instances, one key partner in our complicated but vital alerting infrastructure stepped up to help provide clarity for the public in moments of extreme confusion and perceived danger. That, of course, would be the public stations that serve these two regions. Despite enormous personal risk, the journalists at Hawaii Public Radio stayed put while everybody else fled. From their desks still within the evacuation zone or on-the-ground, they continued to report and provide updates to the public, helping clear up confusion as those stuck in traffic tuned in to their local public station to hear the latest guidance on evacuations.

In the end, it was public media who helped get the message out that there were other alternatives to leaving the area. And in Alaska, it was KUCB, the official primary alert station for the region and another public station, that noticed the mistaken evacuation order and worked with local and state authorities to provide the public with immediate clarity amidst the confusion.

There's no doubt how critical of a role public stations play in our alerting system. Back in April, I had the honor of visiting WHYY in Philadelphia, another public station that serves as an LP1, which is the technical term for how we describe a station that has the great responsibility of serving as the primary disseminator of emergency information to other stations in the region.

Despite the many false narratives coming out of Washington, this public station is deeply invested in serving their local community. They understand the value of staying true to the needs of their city and their region and play a key role in ensuring everybody they serve has the latest information to stay safe during an emergency. That's why it's been concerning to see unfounded political attacks against

these public stations, which most recently culminated in a successful effort to strip their funding and limit the ways in which they can effectively serve the public during emergency situations.

So, as we look at modernizing our alerting system, I will be paying close attention at how we can continue to support public media's vital role as a conduit for life-saving emergency alerts, and I would urge caution from this agency and any others seeking to further damage their ability to help save lives.

Finally, I want to thank the Chairman for working with me to include an edit to this item that recognizes the important role that multilingual communication plays in our alerting system. Again, if we look back at Hawaii, a state with a history of linguistic diversity, there is a lot more we can do to help communities receive emergency information in their chosen language. Tagalog ranks second in the list of languages other than English used by residents of the islands, with Chinese, Vietnamese, Korean, and Spanish not far behind.

All of these are part of the 13 languages that were slated to be required to be used by carriers as templates and included in their alerting capabilities, as this Commission voted unanimously to do last year.

Inexplicably, this FCC continues to stall on moving those templates forward for implementation. And after a disappointing coordinated campaign led by industry, this FCC has now shifted that burden back to alert originators, posting guidance that simply encourages the use of those templates. Sadly, even that poor substitute for real progress will likely go unnoticed, as it was buried in a web page that few will find, and this FCC has done nothing to promote. So, as we look ahead at how to improve our alerting capabilities, I urge others to continue to hold this FCC accountable to its promise to ensure more people are reached in an emergency, regardless of what language they speak.

Again, thank you to the Chairman for working with me on that edit, and to the Public Safety Bureau for their work on this item.

STATEMENT OF
COMMISSIONER OLIVIA TRUSTY

Re: *Modernization of the Nation's Alerting Systems*, Notice of Proposed Rulemaking, PS Docket No. 25-224.

One Halloween night, a couple in Trout, Louisiana was getting ready for bed in their mobile home when a Wireless Emergency Alert suddenly rang out on their cell phone. It was just past midnight, and the alert warned them of an approaching F-2 tornado. They immediately left their home and stayed with family in a safer area. Although, tragically, the tornado destroyed their home and all of their belongings, thanks to that timely alert, their lives were spared.[1]

This story is just one example of how Wireless Emergency Alerts can save lives by prompting people to move out of harm's way. But recent tragedies caused by devastating floods in Texas, North Carolina, and Kentucky have underscored that the Emergency Alert System remains a vital, yet imperfect, tool in warning Americans about impending danger.

These heartbreaking events have revealed vulnerabilities in our national alerting systems. They have raised critical questions about when and how emergency warnings reach the public, particularly in rural and underserved areas. In light of reports from North Carolina and Texas where residents had limited time to escape the floodwaters after receiving the alerts, it is critical that we explore where communication breakdowns may occur, and how federal alerting systems can be seamlessly integrated into state and local efforts to warn communities.

Today's Notice of Proposed Rulemaking seeks to modernize the Emergency Alert System and Wireless Emergency Alerts. It asks timely questions about the type of information alerts should convey, how to deliver them effectively, and how to align our alerting infrastructure with the many ways Americans consume media and technology today.

The NPRM also explores strategies to build greater resilience, including how to target specific populations better, like those in rural areas, without inadvertently contributing to alert fatigue in areas not at risk.

Ultimately, our goal is simple but urgent: to ensure that Americans receive life-saving information, at the right time, in the most effective format, so they can take action before disaster strikes. I am hopeful that by rethinking and reconfiguring our alerting systems, we can harness modern technology to save more lives when every second counts. I thank the Public Safety and Homeland Security Bureau for its work on this item.

[1] National Weather Service, National Oceanic and Atmospheric Administration, *WEA Saves Lives in Louisiana,* https://www.weather.gov/news/182711-wea-louisiana (last visited Aug. 7, 2025).