

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

In the Matter of)
Wireless Emergency Alerts) PS Docket No. 15-91
Amendments to Part 11 of the Commission’s Rules) PS Docket No. 15-94
Regarding the Emergency Alert System)

SEVENTH REPORT AND ORDER AND ELEVENTH FURTHER NOTICE OF PROPOSED RULEMAKING

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

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I. INTRODUCTION

1. Since the launch of the Wireless Emergency Alert (WEA) system in 2012, the alerts and warnings that commercial mobile service providers (CMS Providers) deliver to the mobile devices of people within the United States have become an integral part of our nation’s emergency preparedness and response infrastructure. WEA messages have served as a powerful, life-saving tool for authorized alert originators across a range of emergencies. Authorized alert originators have used WEA nearly 96,000

times to warn the public about dangerous weather, missing children, and other critical situations.¹ WEA messages have also been credited with bringing 198 missing children to safety.²

2. At the same time, however, we recognize that the WEA audio attention signal and vibration cadence (collectively, “Attention Signal”), which notifies subscribers that their mobile device has received an emergency alert, can be unexpected and jarring and cause some subscribers to experience “alert fatigue.”³ While WEA has saved lives, it can cause alert fatigue when it is used repeatedly for the same incident or when it is used overnight for AMBER Alerts and Blue Alerts that awaken people with a prompt to assist law enforcement in the search for a missing child or a person wanted by law enforcement on the other side of a large state. Worse, a loud audio attention signal can cause harm if it betrays the location of a student in hiding to an active shooter. When members of the public perceive the drawbacks of WEA as outweighing its benefits, they can opt out, which, going forward, would leave them without access to the potentially life-saving information that WEAs convey.

3. Accordingly, we take measures to reduce alert fatigue and consumer opt-out, as well as increase WEA’s versatility across different scenarios. In the Report and Order, we adopt our proposal to allow alert originators the option to send “silent alerts” that do not trigger WEA’s common audio attention signal or vibration cadence, granting alert originators greater flexibility in tailoring how WEA messages are presented. To make as clear as possible to the public, including people with disabilities, that any device marketed as a “WEA-capable mobile device” adheres to the full suite of WEA capabilities, we also adopt our proposal to define “WEA-capable mobile device” (as distinct from a “mobile device”) for the purpose of compliance with our WEA requirements. In the accompanying Further Notice of Proposed Rulemaking, we propose to broaden the circumstances where alert originators may send a WEA using the “Public Safety Message” classification, which can allow consumers greater flexibility in how messages are presented on their mobile device, including the potential ability to silence alerts. We also seek comment on whether subscribers should be empowered to further customize their receipt of WEA messages and additional steps that we can take to reduce the rate at which wireless subscribers opt out of WEA.

II. BACKGROUND

4. The WEA system is a tool for authorized federal, Tribal, state, local, and territorial government entities to geographically target alerts and warnings to the WEA-capable mobile devices of participating commercial mobile service providers’ subscribers. The Warning Alert and Response Network (WARN) Act establishes WEA as a voluntary system in which CMS Providers may elect to

¹ E-mail from Wade Witmer, FEMA IPAWS Program Management Office, to James Wiley, Public Safety and Homeland Security Bureau, Federal Communications Commission (Feb. 13, 2025, 12:54PM) (stating that WEA has been used 95,900 times as of February 12, 2025).

² National Center for Missing and Exploited Children, *AMBER Alert*, <https://www.missingkids.org/gethelpnow/amber> (last visited Feb. 13, 2025); see also *Wireless Emergency Alerts; Amendments to Part 11 of the Commission’s Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Further Notice of Proposed Rulemaking, 38 FCC Rcd at 3739, 3756-57, para. 29 (2023) (*2023 WEA Accessibility FNPRM*).

³ See *The Commercial Mobile Alert System*, PS Docket No. 07-287, Notice of Proposed Rulemaking, 22 FCC Rcd 21975, 22052, App. B, p. 53 (2007) (*2007 CMSAAC NPRM*); *The Commercial Mobile Alert System*, PS Docket No. 07-287, First Report and Order, 23 FCC Rcd 6144, 6168, para. 65 (2008) (*2008 CMAS Order*). The WEA audio attention signal is a loud, attention-grabbing, two-tone audio signal that uses frequencies and sounds identical to the attention signal used by the Emergency Alert System (EAS). Compare 47 CFR § 10.520 (WEA) with 47 CFR § 11.31(a)(2) (EAS). See also Andrew M. Parker, et al., *Assessing Public Reach of the 2023 National Test of the Wireless Emergency Alerts (WEA) System: Results of a National Survey*, at 69 (Aug. 1, 2024), https://www.rand.org/pubs/research_reports/RRA2451-1.html (RAND Report) (“[T]he proportion of U.S. adults with cell phones reporting opting out of at least one type of WEA alerts was 17.5 percent, a proportion significant enough to be a concern.”).

participate,⁴ and authorizes the Commission to adopt “relevant technical standards, protocols, procedures and other technical requirements . . . necessary to enable commercial mobile service alerting capability for commercial mobile service providers that voluntarily elect to transmit emergency alerts.”⁵ While participation by wireless providers is voluntary, those commercial mobile service providers that choose to offer the service (Participating CMS Providers) must adhere to the technical and operational requirements established by the Commission.

5. In 2008, pursuant to the WARN Act, the Commission adopted rules allowing CMS Providers to voluntarily deliver emergency alerts to subscriber mobile devices.⁶ The Commission defined a “mobile device” for the purpose of WEA as “[t]he subscriber equipment generally offered by CMS providers that supports the distribution of WEA Alert Messages.”⁷ Our rules do not define a WEA-capable mobile device, but use the term “wireless emergency alert capable devices” in the disclosure that Participating CMS Providers that elect to only transmit WEA alerts in part must offer to their subscribers and limit the devices that may be marketed “for public use under part 10.”⁸ The WEA equipment requirements describe the specific functionalities required of WEA-capable mobile devices.⁹ These functionalities include the basic components of support for WEA, including authentication of interactions with the commercial mobile service infrastructure, and monitoring for alert messages.¹⁰

6. To promote WEA’s accessibility for individuals with disabilities, based on the recommendations of the Commercial Mobile Service Alerting Advisory Committee (CMSAAC), the Commission adopted a distinct common audio attention signal and vibration cadence for WEA (Attention Signal).¹¹ Alert originators have no control over the presentation of the Attention Signal. Mobile devices may support the capability for the end user to mute the Attention Signal for all alerts using functions such

⁴ 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.*).

⁵ 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.”). Section 332(d)(1) defines the term “commercial mobile service” as any mobile service (as defined in 47 U.S.C. § 153) that is provided for profit and makes interconnected service available to the public or to such classes of eligible users as to be effectively available to a substantial portion of the public, as specified by regulation by the Commission. 47 U.S.C. § 332(d)(1).

⁶ See generally *The Commercial Mobile Alert System*, PS Docket No. 07-287, First Report and Order, 23 FCC Rcd 6144 (2008) (2008 First CMAS R&O).

⁷ See 47 CFR § 10.10(j); see also *The Commercial Mobile Alert System*, PS Docket No. 07-287, Third Report and Order, 23 FCC Rcd 12561 (2008). The Commission uses other terms to define a “mobile device” as relevant in other contexts. See, e.g., *Amendment of the Commission’s Rules Governing Hearing Aid-Compatible Mobile Handsets*, WT Docket No. 07-250, Policy Statement and Second Report and Order and Further Notice of Proposed Rulemaking, 25 FCC Rcd 11167, 11192-11200 paras. 74-93 (2010) (defining a mobile device for the purpose of hearing aid compatibility as “customer equipment used to provide wireless voice communications over any type of network among members of the public or a substantial portion of the public via a built-in speaker where the equipment is typically held to the ear”).

⁸ See 47 CFR §§ 10.240(c) (required “in-part” participation disclosure), § 10.520 (Common audio attention signal), § 10.530 (Common vibration cadence).

⁹ See 47 CFR § 10.500. The revised rules would clarify the required functionalities of various classes of devices that convey emergency alerts.

¹⁰ See 47 CFR § 10.500(a)-(b).

¹¹ 2008 First CMAS R&O, 23 FCC Rcd at 6166-67, paras. 58-59. The Attention Signal comprises an audio attention signal consisting of two tones (853 Hz and 960 Hz) with a temporal pattern of two (2) seconds, followed by two short tones of one (1) second each, with a half (0.5) second interval between the tones and a vibration cadence of the same temporal pattern. *Id.* at 6169-70, paras. 65-66; 47 CFR § 10.520; 47 CFR § 10.530.

as “do not disturb,” a hardware mute button, or the system volume controls, but none of those functions allow subscribers to mute the Attention Signal independent of other mobile device sounds and haptics.¹² Participating CMS Providers may associate unique tones and haptics with Public Safety Messages or offer their subscribers the ability to turn off Public Safety Messages during certain hours.¹³

7. In the same 2008 rulemaking, noting that the WARN Act did not define what constitutes an “emergency,”¹⁴ the Commission sought to limit the scope of permissible Alert Messages to those sent for “*bona fide* emergencies” to avoid “a serious risk” that the public would disregard WEAs or opt out of receiving them entirely.¹⁵ Accordingly, the Commission adopted three Alert Message classifications: (1) Presidential Alert—now called “National Alert;”¹⁶ (2) Imminent Threat Alert; and (3) AMBER Alert.¹⁷ Pursuant to the WARN Act, the Commission allowed Participating CMS Providers to provide consumers the ability to opt out of receiving WEAs sent as Imminent Threat and AMBER Alerts, but not National Alerts.¹⁸

8. In 2016, the Commission created a fourth WEA message classification, the “Public Safety Message.”¹⁹ A Public Safety Message is “an essential public safety advisory that prescribes one or more actions likely to save lives and/or safeguard property during an emergency” that “may only be issued in connection with” a National Alert, Imminent Threat Alert, or AMBER Alert.²⁰ The Commission specified that Public Safety Messages would be received by default and that Participating CMS Providers may provide their subscribers the option to opt out.²¹

9. In 2023, recognizing that WEAs were increasingly being used for new and different purposes, including during “active shooter” situations²² where the presentation of the Attention Signal

¹² 47 CFR § 10.520(e); 47 CFR § 10.530(c); *see also* 47 CFR § 10.510 (“[T]he user may be given the option to control how the Alert Message is presented on the mobile device with respect to the use of the common vibration cadence and audio attention signal.”).

¹³ *Wireless Emergency Alerts, Amendments to Part 11 of the Commission’s Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 11112, para. 24 (2016) (*2016 WEA R&O and FNPRM*).

¹⁴ *2008 First CMAS R&O*, 23 FCC Rcd at 6155, para. 26 *citing* WARN Act, § 1201(b)(2)(E).

¹⁵ *See 2008 First CMAS R&O*, 23 FCC Rcd at 6155-56, para. 27; *2016 WEA R&O and FNPRM*, 31 FCC Rcd at 11125-26, para. 16.

¹⁶ *See Amendment of Part 11 of the Commission’s Rules Regarding the Emergency Alert System Wireless Emergency Alerts*, PS Docket Nos. 15-94, 15-91, Report and Order and Further Notice of Proposed Rulemaking, 36 FCC Rcd 10694, 10699, paras. 8-9 (2021) (creating a “National Alerts” classification by re-naming and re-designating the Presidential Alerts to include alerts from both the President and FEMA Administrator).

¹⁷ *See 2008 First CMAS R&O*, 23 FCC Rcd at 6155, para. 26.

¹⁸ *See* 47 USC § 1201(b)(2)(e). The Commission’s rules allow CMS Providers to provide their subscribers with the option to opt of WEAs sent in the Imminent Threat Alert, AMBER Alert and Public Safety Message classifications. *See* 47 CFR § 10.280(a).

¹⁹ *2016 WEA R&O and FNPRM*, 31 FCC Rcd at 11126, para. 18.

²⁰ 47 CFR § 10.400(d); *2016 WEA R&O and FNPRM*, 31 FCC Rcd at 11128-29, para. 22.

²¹ *2016 WEA R&O and FNPRM*, 31 FCC Rcd at 11129, para. 23.

²² The FBI defines an active shooter as one or more individuals actively engaged in killing or attempting to kill people in a populated area. *See* FBI, Active Shooter Incidents in the United States 2023 (2024), <https://www.fbi.gov/file-repository/2023-active-shooter-report-062124.pdf/view>.

“could draw the attacker’s attention to those who need to stay hidden to stay safe,”²³ the Commission adopted a Notice of Proposed Rulemaking that refreshed the record from 2016 and proposed to allow alert originators the flexibility to send WEAs without triggering the Attention Signal.²⁴ Noting that the suppression of the Attention Signal could render WEAs inaccessible for people with disabilities, the Commission sought comment on steps that it could take to preserve the accessibility of silent WEA messages.²⁵ To prevent unnecessary alert fatigue and consumer opt out, the Commission again proposed to require Participating CMS Providers to offer consumers the option to durably turn off the WEA Attention Signal for all alerts.²⁶

10. On October 4, 2023, the Federal Emergency Management Agency (FEMA), in coordination with the Commission, conducted nationwide tests of WEA and EAS.²⁷ In connection with this test, FEMA engaged the Homeland Security Operational Analysis Center (HSOAC), which the RAND Corporation operates as a federally funded research and development center, to evaluate WEA’s performance.²⁸ Accordingly, the RAND Corporation conducted six online survey panels of the U.S. public immediately after the nationwide WEA test to study key aspects of its performance.²⁹ The RAND Corporation’s subsequent 2024 report (RAND Report) observes that “because the phone-to-human step is the last link in the chain of communication, opting out represents a key limitation of WEA’s capacity to alert the public.”³⁰ The RAND Report finds that 17.5% of U.S. adults with working cell phones (approximately one in six) reported opting out of at least one type of alert, with AMBER Alerts being the most common.³¹ The RAND Report finds that states with a historical pattern of issuing statewide AMBER Alerts have the highest rate of opt out of all alerts.³² The RAND Report also finds that “[i]ndividuals may opt out of alert types for many reasons, including but not limited to lack of interest, concerns over disruption due to alerts, and simply fatigue in receiving many alerts.”³³

III. REPORT AND ORDER

A. Silent Alerts

11. To ensure that WEA remains a tool that alert originators can use to save lives and property in their states and in their communities without prompting widespread opt out, and to promote WEA’s versatility to be used across a variety of circumstances and different times of day, we adopt our proposal to require Participating CMS Providers to support “silent alerts.”³⁴ A silent alert is an alert that,

²³ See *Wireless Emergency Alerts; Amendments to Part 11 of the Commission’s Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Further Notice of Proposed Rulemaking, 38 FCC Rcd 3739, 3756-57, para. 29 (2023) (*2023 WEA Accessibility FNPRM*).

²⁴ *Id.*

²⁵ See *id.* at 3756-57, paras. 29-30.

²⁶ See *id.* at 3758, para. 31.

²⁷ See *Public Safety and Homeland Security Bureau Announces Nationwide Tests of the Emergency Alert System (EAS) and Wireless Emergency Alerts (WEA) on October 4, 2023*, PS Docket Nos. 15-91, 15-94, Public Notice, DA 23-653, <https://www.fcc.gov/document/fcc-announces-nationwide-emergency-alerting-tests-october-4-2023> (PSHSB 2023) (*Nationwide Test PN*).

²⁸ RAND Report at iii-iv.

²⁹ *Id.* at v-vi (the survey panels resulted in a final analytic sample size of 80,161 responses).

³⁰ *Id.* at 67.

³¹ See *id.* at 68.

³² See *id.*

³³ *Id.* at 67.

³⁴ *2023 WEA Accessibility FNPRM*, 38 FCC Rcd at 3756-57, para. 29.

at an alert originator's discretion, is presented without either the common audio attention signal, the common vibration cadence, or both.³⁵ To ensure that WEAs sent without the Attention Signal can remain accessible to individuals with disabilities, we also require "WEA-capable mobile devices" to include the option to enable the presentation of the common vibration cadence for all WEA Alert Messages.³⁶ If selected, that option must override the alert originator's selection on that device. We decline to adopt our proposal that Participating CMS Providers provide their subscribers with the option to durably turn off WEA's audio attention signal and vibration cadence for all alerts, which was opposed by commenters, because we agree with commenters that giving consumers this option risks increasing the rate at which people fail to notice Imminent Threat Alerts to which they must react immediately to protect their lives and property.³⁷

12. This action addresses concern in the record that the mandatory use of the Attention Signal with every WEA is limiting the situations where the benefits of using WEA outweigh the potential drawbacks. The National Ashanti Alert Network Stakeholder Working Group and Pilot Project Participants Working Group, groups established by the Department of Justice to create and share promising practices for missing adult alerts, jointly state that "WEA is a fantastic tool but is currently limited by the jarring alert tone that is currently associated with each and every activation."³⁸ They observe that WEA activations cause complaints when the public does not interpret the intrusiveness of the WEA Attention Signal as commensurate with the alert's relevance.³⁹ They characterize the "blackout" periods that some alert originators have chosen to implement to spare the public from being awoken by a WEA at night as (in the case of AMBER Alerts) a "disservice to those who are missing and could be

³⁵ We recognize that an alert sent with the common audio attention signal enabled and the common vibration cadence disabled would technically not be "silent," but we nonetheless find this a useful term to express to alert originators the capability that they will have to silence the audio attentional signal, vibration cadence, or both as a result of this proceeding.

³⁶ We adopt a definition for a "WEA-capable mobile device" in Section III.B, *infra*. We note that participation in WEA is voluntary, which means that it is possible that not all devices that are technically capable of receiving WEA alerts and are in use by consumers today will be updated to support the newest WEA functionality, including this vibration override feature. We urge equipment manufacturers and Participating CMS Providers to work towards updating devices to support all of the required WEA functionalities where technically feasible.

³⁷ Verizon Comments, PS Docket Nos. 15-91, 15-94, at 13 (rec. Jul. 21, 2023) ("While it seems plausible that some consumers would avail themselves of this option rather than completely opt out of WEAs, Verizon expects that the outcome in many cases will be the same—i.e. a consumer that would have benefited from the alert will not hear it."); Apple Reply at 11-12 ("[R]evoking users' settings choices would significantly undermine consumer trust of the overall WEA system."); Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 21, 2023) ("ATIS WTSC does not believe that subscribers should have the option to turn off WEA's audio attention signal and vibration cadence for all alerts until a study of all potential use cases is performed and more information is gathered on the impact of WEA effectiveness based on the number of users that might opt out of the attention-getting signals, even for Imminent Threat alerts."); County of San Diego Department of Emergency Services Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 20, 2023) ("The County of San Diego supports the current 'opt-in/ opt-out' selective options that give consumers the right to control WEA message delivery on personal electronic devices."); Larimer Emergency Telephone Authority, Jefferson County Emergency Communications Authority, Boulder County Communications, Boulder County Sheriff's Office, Arapahoe County Office of Emergency Management, Arapahoe County 911 Authority, Adams County E-911 Emergency Telephone Service Authority Comments, PS Docket Nos. 15-91, 15-94, at 6 (Jul. 21, 2023) (Several Colorado Agencies Comments) ("[We request that the Commission] refrain from adopting proposed rule § 10.280, which would allow Participating CMS Providers to provide subscribers an option to turn off WEA's audio attention signal and vibration cadence.").

³⁸ National Ashanti Alert Network Stakeholder Working Group and Pilot Project Participants Working Group Comments, PS Docket Nos. 15-91, 15-94, at 2 (rec. Jan. 29, 2024).

³⁹ *Id.* at 1.

helped as there are many individuals who are awake and active (e.g., truck drivers) who could receive an alert and provide valuable assistance in locating a missing adult.”⁴⁰

13. Comments reflect that alert originators are generally best positioned to make the important decision of whether an alert will trigger the Attention Signal.⁴¹ The approach that we adopt today gives alerting authorities the “maximum flexibility” that alert originators like King County, Washington Emergency Management and New York City Emergency Management state that they need to increase the effectiveness of alerts.⁴²

14. WEA is a powerful tool. We recognize the perspective of ATIS and Several Colorado Agencies that “adding an option to be exercised by the alert originator in the moment, such as whether to include the audio attention signal, increases the potential for human error.”⁴³ There is a risk of alert originators “erroneously setting the ‘silent’ notification for alerts where a notification is needed (e.g., tornado)[,which] may result in citizens missing a WEA, putting them at risk.”⁴⁴ We believe, however, that alert originators are the right stakeholders in the WEA system to manage this risk. King County, Washington Emergency Management observes that some alert originators already have experience determining whether to associate an audio attentional signal and vibration cadence with alerts based on the alert’s urgency when they transmit those alerts via private mass notification systems.⁴⁵ Even for alert

⁴⁰ *Id.*; see also Michigan State Police OMS Comments, PS Docket Nos. 15-91, 15-94, at 4 (rec. Jul. 21, 2023) (Michigan State Police OMS Comments) (“[D]uring evening hours, when not all the public may be awake, having a quietly delivered WEA for a Weather, Silver, or Amber-type alerts [sic] would alert the public that is awake and interacting with their wireless device to receive the message timely and take appropriate actions.”); Language Accessibility in Alert and Warning Working Group Comments, PS Docket Nos. 15-91, 15-94, at 5 (rec. Jul. 20, 2023); County of San Diego Department of Emergency Services Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 20, 2023).

⁴¹ Federal Emergency Management Agency Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. May 22, 2024) (FEMA MEP Comments); Larimer Emergency Telephone Authority, Jefferson County Emergency Communications Authority, Boulder County Communications, Boulder County Sheriff’s Office, Arapahoe County Office of Emergency Management, Arapahoe County 911 Authority, Adams County E-911 Emergency Telephone Service Authority Comments, PS Docket Nos. 15-91, 15-94, at 6 (Jul. 21, 2023) (Several Colorado Agencies Comments); County of Sonoma, California Department of Emergency Management, City of Santa Rosa, California Fire Department Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 19, 2023).

⁴² King County, Washington Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 21, 2023); New York City Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. Jul. 20, 2023); Federal Emergency Management Agency Comments, PS Docket Nos. 15-91, 15-94, at 7 (rec. May 22, 2024) (FEMA MEP Comments); AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 15 (rec. Jul. 21, 2023).

⁴³ Larimer Emergency Telephone Authority, Jefferson County Emergency Communications Authority, Boulder County Communications, Boulder County Sheriff’s Office, Arapahoe County Office of Emergency Management, Arapahoe County 911 Authority, Adams County E-911 Emergency Telephone Service Authority Comments, PS Docket Nos. 15-91, 15-94, at 8 (Jul. 21, 2023) (Several Colorado Agencies Comments); Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 18 (rec. Jul. 21, 2023).

⁴⁴ Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 18 (rec. Jul. 21, 2023).

⁴⁵ King County, Washington Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 3 (Jul. 21, 2023) (“In the Pushover system, messages tagged with a priority of ‘-2’ are pushed to the device without audio, vibration, or pop-up notifications; those with a priority of ‘-1’ are pushed without audio, those with priority ‘0’ with audio, with priority ‘1’ with audio and interrupting the individual user’s device mute settings, and with priority ‘2’ repeating at intervals until the alert is acknowledged. Such configuration would allow alert authorities to individually tailor messages to the audience and circumstances.”). “Mass notification systems simultaneously broadcast real-time alerts and information to large numbers of individuals. The primary function of mass notification systems is to quickly alert people to potential threats or emergency situations and direct them how to respond to those situations.” U.S. Department of Homeland Security, *Mass Notification Systems* (Jan. 31, 2023), <https://www.dhs.gov/publication/mass-notification->

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originators that do not yet have experience controlling how the Attention Signal is presented along with their alerts, we believe that their experience managing emergencies in their communities is the most relevant to making decisions about how emergency alerts are presented. We therefore agree with AT&T that we should not attempt to establish “alert signal suppression rules for specific classes of WEA alerts that would remove the decision-making power from Alert Originators”⁴⁶ and decline New York City Emergency Management’s request that we limit alert originators’ discretion in the use of silent WEAs to specific situations or specific alert message classifications.⁴⁷ We encourage alert origination software developers to recognize the difficult task that alert originators confront and design this aspect of their alert origination software to be “configurable by each alerting authority” to maximize each agency’s potential for effective alerting and minimize opportunity for error.⁴⁸

15. The record reflects that the ability to send silent alerts will be particularly useful in three scenarios: (1) AMBER Alerts, Missing and Endangered Persons (MEP) Alerts, and Blue Alerts sent either statewide or overnight; (2) follow-up messaging to relay additional, essential actions likely to save lives and/or safeguard property during ongoing emergencies; and (3) active shooter situations. While using silent alerts in these scenarios cannot completely eliminate the reasons for which people opt out of WEA,⁴⁹ we agree with alert originators that use of silent alerts in the first two use cases can limit alert fatigue, which can reduce the rate of consumer opt out, and ultimately result in more people being opted in when their local alert originator sends an alert that could save their life.⁵⁰ Alert originators also state that the ability to suppress the Attention Signal would make them more likely to send AMBER Alerts, MEP Alerts, and Blue Alerts during the evening and night when people are likely to be asleep. Sending these types of WEAs silently will make it possible for individuals that are awake and interacting with their mobile devices to receive and act upon the messages, including by rendering assistance to law enforcement, while avoiding the risk that such message will awaken or otherwise disturb people that might respond to the intrusion by opting out of receiving WEAs going forward.⁵¹ The National Weather

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[systems#:~:text=Mass%20notification%20systems%20simultaneously%20broadcast,to%20respond%20to%20those%20situations](#). Most mass notification systems usually require individuals or businesses to sign up for or opt into receiving such messages. See, e.g., City of Laguna Woods, *FAQs*, <https://member.everbridge.net/453003085613900/faq> (last visited Oct. 31, 2024).

⁴⁶ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 16 (rec. Jul. 21, 2023).

⁴⁷ New York City Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. Jul. 20, 2023).

⁴⁸ Larimer Emergency Telephone Authority, Jefferson County Emergency Communications Authority, Boulder County Communications, Boulder County Sheriff’s Office, Arapahoe County Office of Emergency Management, Arapahoe County 911 Authority, Adams County E-911 Emergency Telephone Service Authority Comments, PS Docket Nos. 15-91, 15-94, at 8 (Jul. 21, 2023) (Several Colorado Agencies Comments).

⁴⁹ See Larimer Emergency Telephone Authority, Jefferson County Emergency Communications Authority, Boulder County Communications, Boulder County Sheriff’s Office, Arapahoe County Office of Emergency Management, Arapahoe County 911 Authority, Adams County E-911 Emergency Telephone Service Authority Comments, PS Docket Nos. 15-91, 15-94, at 8 (Jul. 21, 2023) (Several Colorado Agencies Comments) (stating that “[i]ndividuals opt out of alerting programs for reasons such as informational alerts (e.g., police presence in an area but no action required), bad messages (e.g., training messages sent in a live environment), and irrelevant messages (wrong target audience/overreach of WEA, etc.).

⁵⁰ Regional Disaster Preparedness Organization of the Portland-Vancouver Metro Region Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 20, 2023); Federal Emergency Management Agency, Integrated Public Alert and Warning System Program Management Office, PS Docket Nos. 15-91, 15-94, at 7 (rec. Jul. 19, 2023).

⁵¹ New York City Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. Jul. 20, 2023); Language Accessibility in Alert and Warning Working Group Comments, PS Docket Nos. 15-91, 15-94, at 5 (rec. Jul. 20, 2023). On October 4, 2024, at 4:52 am (CDT), the Texas Department of Public Safety issued a statewide Blue Alert. In response, we received approximately 4,600 complaints from the public about being woken up by the Attention Signal of an alert about an incident hundreds of miles away that did not require them to take immediate

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Service and the United States Geological Survey recognize the value that silent WEAs would offer for the transmission of essential information after the initial alert about weather that poses an imminent threat and about earthquakes, respectively.⁵² Commenters state that the ability to suppress the Attention Signal for active shooter alerts will make it more likely that they will use WEA as a tool to keep people safe during such events⁵³ because it will enable them to silently deliver WEAs that can direct people to avoid the area where the shooter is active while avoiding the risk that the Attention Signal will betray the location of people that need to remain hidden to stay safe.⁵⁴ In light of this clear record, we decline CTIA’s request that we seek further comment on whether the benefits of silent alerts outweigh the risks.⁵⁵

16. We agree with ATIS and CTIA that “the absence of any attention signal or vibration cadence will require the user to look at the mobile device display when the WEA is presented in order to be alerted” and that this creates “a risk that the user may be distracted away from their device because of the event and may miss any incoming WEA,” which would generally make those WEAs less effective.⁵⁶ Accordingly, we take this opportunity to amplify the guidance that alert originators offer in this proceeding about how this new capability can maximize the effectiveness of WEA:

- When there is an imminent threat to life, emergency alerts “*must* get the attention of the targeted audience and compel review of the content.”⁵⁷ There is an exception, however, for situations in

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action. See Sarah Grunau, *FCC flooded with more than 4,600 complaints after early morning Texas blue alert sparks frustrations* (Oct. 8, 2024), <https://www.houstonpublicmedia.org/articles/technology/2024/10/08/502309/fcc-flooded-with-more-than-4600-complaints-after-early-morning-texas-blue-alert-sparks-frustrations/#:~:text=The%20Federal%20Communications%20Commission%20was,to%20apprehend%20a%20dangerous%20criminal.%E2%80%9D>. Many complaints state that their receipt of this alert is prompting them, and likely many other Texans, to opt out of receiving WEAs.

⁵² National Oceanographic and Atmospheric Administration (NOAA) National Weather Service (NWS) Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 21, 2023) (stating that this capability would be helpful for weather alerts); United States Geological Survey Comments, PS Docket Nos. 15-91, 15-94, at 5 (rec. Jul. 27, 2023) (stating that this capability would be helpful for follow-up on earthquake alerts).

⁵³ Federal Emergency Management Agency Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. May 22, 2024) (FEMA MEP Comments); AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 21, 2023); DeMarcus Strange Comments, PS Docket Nos. 15-91, 15-94, at 1 (rec. Jun. 27, 2023).

⁵⁴ Language Accessibility in Alert and Warning Working Group Comments, PS Docket Nos. 15-91, 15-94, at 5 (rec. Jul. 20, 2023); County of San Diego Department of Emergency Services Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 21, 2023); New York City Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. Jul. 20, 2023).

⁵⁵ See Letter from Amy E. Bender, Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, PS Docket Nos. 15-91, 15-94, at 2, 4 (rec. Feb. 19, 2025) (CTIA *ex parte*).

⁵⁶ Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 18 (rec. Jul. 21, 2023); CTIA Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. Jul. 21, 2023) (“proposals to allow Alert Originators or consumers to suppress the WEA audio attention signal and/or vibration cadence are at odds with the purpose of WEA messages: to alert the public of a time-sensitive situation or impending emergency in their area as quickly as possible”).

⁵⁷ Larimer Emergency Telephone Authority, Jefferson County Emergency Communications Authority, Boulder County Communications, Boulder County Sheriff’s Office, Arapahoe County Office of Emergency Management, Arapahoe County 911 Authority, Adams County E-911 Emergency Telephone Service Authority Comments, PS Docket Nos. 15-91, 15-94, at 8 (rec. Jul. 21, 2023) (Several Colorado Agencies Comments) (emphasis in original); see also United States Geological Survey Comments, PS Docket Nos. 15-91, 15-94, at 5 (rec. Jul. 27, 2023) (“In the [Earthquake Early Warning (EEW)] . . . use case immediate protective action by the consumer is required, therefore allowing consumers to receive WEAs with the audio attention signal and vibration cadence turned off by default has the same result as opting out of WEA entirely.”).

which the audible delivery of the WEA Attention Signal could jeopardize the lives of those receiving the alerts, as described in the following bullet.⁵⁸

- Suppress the Attention Signal (1) when its presentation could jeopardize the lives of those receiving the alerts,⁵⁹ including during active shooter situations, or (2) in situations where the receipt of a WEA has been shown to prompt recipients to opt out of receiving alerts, such as statewide AMBER and Blue Alerts.⁶⁰
- Public safety messages that accompany Imminent Threat Alerts and that provide essential advisories, like boil water orders, may be issued as silent alerts.⁶¹
- State/Local WEA Tests should use the Attention Signal because people do not receive State/Local WEA Tests at all unless they have affirmatively opted in to receive them. Therefore, use of the Attention Signal “allows for public education on what the tone sounds like, ensuring the tone is working . . . in a controlled environment that would not increase opt-outs.”⁶²

We encourage but do not require alert originators to follow this guidance or to develop their own internal policies and procedures for determining whether and how to use the Attention Signal in their alerts.⁶³ It will be important for alert originators to create and follow best practices about the use of silent alerts so that their use enhances, rather than limits WEA’s efficacy.

17. Our action today to require that Participating CMS Providers and equipment manufacturers may only market a mobile device for public use under part 10 as a “WEA-capable mobile device” if the mobile includes a vibration cadence capability that enables subscribers to override alert originators’ suppression of the common vibration cadence will also enhance WEA’s efficacy. Ricky Harris, a Deaf resident of Houston, Texas, explains the challenges that individuals who are deaf and hard of hearing face during unpredictable thunderstorms and flash floods in his neighborhood: “I relied on guesswork and observation to navigate. Unfortunately, I was completely unaware that radio broadcasts were already issuing specific evacuation routes. This lack of information put me in danger and left me vulnerable. People later questioned my route choice, unaware of the communication gap I had experienced.”⁶⁴ With the action that we take today, individuals who are deaf and hard of hearing will have the option to ensure that the common vibration cadence is always presented along with their WEA

⁵⁸ Several Colorado Agencies Comments, at 8 (stating that consumers will be unlikely to opt out of receiving WEAs if they understand that the use of the attention signal is limited to imminent threats that require preparedness action).

⁵⁹ See Telecommunications for the Deaf and Hard of Hearing, Inc., Communication Service for the Deaf, Hearing Loss Association of America, National Association of the Deaf, Coalition on Inclusive Emergency Planning, Rehabilitation Engineering Research Center of Technology for the Deaf and Hard of Hearing, Gallaudet University Comments, PS Docket Nos. 15-91, 15-94, at 11 (rec. Jul. 21, 2023) (Accessibility Organizations and Academics Comments).

⁶⁰ Sarah Grunau, *FCC flooded with more than 4,600 complaints after early morning Texas blue alert sparks frustrations* (Oct. 8, 2024); RAND Report at 68.

⁶¹ New York City Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. Jul. 20, 2023); New York City Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 14 (rec. Dec. 8, 2016).

⁶² New York City Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. Jul. 20, 2023).

⁶³ This list of guidance and best practices is derived exclusively from the comments that alert originators have submitted in the record of this proceeding and should not be interpreted as the Commission’s perspective.

⁶⁴ Ricky Harris Comments, PS Docket Nos. 15-91, 15-94, at 2 (rec. Apr. 1, 2024) (stating that, similarly, “the rise in shootings in schools, malls, churches, and other public spaces creates a terrifying situation for D/HH individuals. We cannot rely on hearing the sounds of gunfire or noticing flashing lights from patrol cars speeding through neighborhoods. In these situations, I have often seen my hearing friends receive emergency notifications on their phones, while I remain completely unaware of the danger unfolding around me. This lack of accessible alerts leaves us vulnerable and uninformed.”).

messages, irrespective of the alert originator’s selection, which will draw their attention to the arrival of a WEA.⁶⁵ New York City Emergency Management notes that using the vibration cadence alone can be sufficient to get people’s attention in a range of scenarios.⁶⁶ The vibration cadence can be felt, including by many people with disabilities, when the mobile device is in contact with their body, and can often be heard when the mobile device is in contact with another surface. In this way, the action that we take today realizes, in part, the advocacy objectives of New York City Emergency Management and a coalition of Accessibility Organizations and Academics, that “users—not providers or alerting authorities—decide whether to silence WEAs or cancel vibration cadences to avoid a one-size-fits-all approach to WEA notifications.”⁶⁷ While the approach that we adopt today gives alerting authorities discretion over whether to transmit a silent alert, bearing in mind the needs of individuals with disabilities,⁶⁸ those individuals will now be presented with greater control over their receipt of the common vibration cadence to strike the right balance for their individual needs.⁶⁹ WEA-capable mobile devices must not, however, allow individuals to override alert originators’ decision to suppress the audio attention signal; doing so would eliminate or seriously reduce the value of WEA in active shooter situations. If people are hiding together from an active shooter, any one of their devices emitting the audio attention signal would be sufficient to betray their location. While we understand CTIA’s concern that allowing consumers to override the vibration cadence may potentially disclose a person’s location during an active shooter situation,⁷⁰ we find that supporting the ability for individuals with disabilities to receive potentially lifesaving alerts via the vibration cadence outweighs the low risk that the relatively quiet presentation of the WEA vibration cadence will result in injury or loss of life.

18. We reject Several Colorado Agencies’ recommended approach that the Commission “require the audio attention signal for both EAS and WEA.”⁷¹ We also reject the Language Accessibility

⁶⁵ Accessibility Organizations and Academics Comments, PS Docket Nos. 15-91, 15-94, at 1-2 (rec. Jul. 21, 2023).

⁶⁶ New York City Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 7 (rec. Jul. 20, 2023) (“For incidents where immediate attention is not needed, (i.e., advance notice travel ban for impending weather) audio can be omitted but still maintain the vibration cadence. For active shooter scenarios, utilizing a device’s flash and short, rapid vibrations or no vibrations could serve as an alternative. Both options do have a risk of not being noticed by alert recipients however, the benefits would likely outweigh the burden.”).

⁶⁷ Accessibility Organizations and Academics Comments, PS Docket Nos. 15-91, 15-94, at 1-2 (rec. Jul. 21, 2023); *see also id.* at 11 (“Although an active shooter situation may be a circumstance in which it may be appropriate to silence and cancel vibration of an alert to address broader safety concerns, allowing providers or alerting authorities to determine when vibration should or should not be provided could leave deaf or hard of hearing individuals without any knowledge that an alert has been received” . . . “alerting authorities should not be permitted to unilaterally mute the sound or vibration of WEAs for emergency weather events, natural disasters, or AMBER Alerts.”); *see also* Rehabilitation Engineering Research Center for Wireless Inclusive Technologies (Wireless RERC) and the Georgia Institute of Technology’s Center for Advanced Communications Policy (CACP) Comments, PS Docket Nos. 15-91, 15-94, at 9-10 (rec. Dec. 8, 2016) (stating, with respect to consumer control over opt out for certain alerts during certain times, “. . . no AMBER alerts between 1:00 am and 5:00 am. However, we recommend that the opt-out feature disables the alert notification signals and the message is saved to the device for later retrieval. Essentially, in this scenario, for certain periods the messages would be silent.”).

⁶⁸ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 16 (rec. Jul. 21, 2023) (“Alert Originators are best positioned to determine whether suppressing the attention signal and vibration cadence would be appropriate for a particular emergency, particularly balanced against the needs of people with disabilities for whom the unique audible and vibration signals were created”).

⁶⁹ To further support consumers’ understanding of the accessibility options for WEA, we direct the Consumer and Governmental Affairs Bureau and the Public Safety and Homeland Security Bureau to publish guidance for consumers about the availability of those options.

⁷⁰ *See* CTIA *ex parte* at 2.

⁷¹ Larimer Emergency Telephone Authority, Jefferson County Emergency Communications Authority, Boulder County Communications, Boulder County Sheriff’s Office, Arapahoe County Office of Emergency Management,

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in Alert and Warning Working Group and Regional Disaster Preparedness Organization of the Portland-Vancouver Metro Region’s recommended approach that “Alert Originators can set the WEA alert to one of three options: silent, follow the device’s notification sound setting, or override and make sound and vibration.”⁷² Accepting either of these recommendations would deprive consumers of the flexibility that they currently have under our rules to mute the Attention Signal, e.g., by putting their device in do-not-disturb mode.⁷³ We do not find removing this consumer choice to be in the public interest.

19. Nothing about the rule we adopt today would change functions that allow consumers to choose to opt out of receiving certain types of WEA messages, to mute the Attention Signal, or to specify vibration and audio attention signal presentation during active voice or data sessions.⁷⁴ Participating CMS Providers and equipment manufacturers will still have the ability to implement a binary consumer opt out feature that defaults to have subscribers opted in to receive all WEA Alert Message classifications and their associated Attention Signal and that allows them to opt out of Imminent Threat Alerts, AMBER Alerts, and Public Safety Messages entirely.⁷⁵ Participating CMS Providers and equipment manufacturers also may continue to enable subscribers to mute the Attention Signal using “do not disturb” and other mobile device capabilities for alerts where the Attention Signal is presented by default.⁷⁶ Finally, Participating CMS Providers and equipment manufacturers may specify how the Attention Signal is presented during an active voice or data session, insofar as they currently take advantage of that flexibility and it remains relevant in the modern technological environment.⁷⁷

B. Required Mobile Device Capabilities

20. To allow consumers to be confident that they are informed about the WEA capabilities of the mobile devices they purchase and to more fully describe how the requirements that we adopt today apply to those devices, we adopt our proposed definitions of a “mobile device” for the purposes of WEA and a “WEA-capable mobile device.” We define a “mobile device” for the purpose of WEA as “any customer equipment used to receive commercial mobile service.”⁷⁸ This definition of a mobile device for the purpose of WEA reflects the WARN Act’s direction that the Commission “adopt technical standards, protocols, procedures, and other requirements . . . necessary to enable *commercial mobile service* alerting capability.”⁷⁹ While it may be possible to deliver emergency alerts to customer wireless equipment that

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Arapahoe County 911 Authority, Adams County E-911 Emergency Telephone Service Authority Comments, PS Docket Nos. 15-91, 15-94, at 8 (Jul. 21, 2023) (Several Colorado Agencies Comments) (emphasis in original).

⁷² Language Accessibility in Alert and Warning Working Group Comments, PS Docket Nos. 15-91, 15-94, at 5 (rec. Jul. 20, 2023); Regional Disaster Preparedness Organization of the Portland-Vancouver Metro Region Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 20, 2023).

⁷³ See 47 CFR § 10.520(e) (“A device may include the capability to mute the audio attention signal.”); 47 CFR § 10.530(c) (“A device may include the capability to mute the vibration cadence.”).

⁷⁴ See 47 CFR § 10.510.

⁷⁵ See 47 CFR § 10.280.

⁷⁶ See 47 CFR § 10.520(e); 47 CFR § 10.530(c).

⁷⁷ 2016 WEA R&O and FNPRM, 31 FCC Rcd at 11152-53, para. 61 (allowing Participating CMS Providers to provide subscribers with the option to specify how the Attention Signal should be presented during an active voice or data session). Some older mobile devices were not capable of receiving a WEA while engaged in an active voice or data session. Modern mobile devices can be engaged in active voice or data sessions at the same time as they are tuned to the control channel that carries WEAs because they have multiple radios. See *id.* at 11152, para. 59. We are not aware that any Participating CMS Provider or equipment manufacturer has taken advantage of this flexibility.

⁷⁸ See 2023 WEA Accessibility FNPRM, 38 FCC Rcd at 3763, para. 45.

⁷⁹ WARN Act, § 1201(a) (emphasis added).

Participating CMS Providers sell by using a technology other than commercial mobile service, as a legal matter, we would not consider those emergency alerts to be WEAs. Defining a mobile device for the purpose of WEA as customer equipment that can receive commercial mobile service is also appropriate from a technical perspective. AT&T states that customer equipment needs to be able to attach to the commercial mobile service network to directly receive a WEA via cell broadcast, the technology generally used to transmit WEAs to mobile devices.⁸⁰ We also continue to believe, as the Commission stated in the *2023 WEA Accessibility FNPRM*, that this definition of a “mobile device” for the purpose of WEA is appropriate because, unlike the part 10 rules’ current definition of a mobile device, it acknowledges the possibility that equipment may not be technically capable of supporting WEA (i.e., if it is not capable of receiving commercial mobile service).⁸¹ At the same time, this definition is broad enough to potentially include devices that are commonly considered to be mobile devices, such as commercial mobile service-enabled tablets, wearables, or other non-smartphone devices.⁸²

21. The way that we define a mobile device for the purpose of WEA may include some smaller equipment that, AT&T opines, is not capable of presenting alert messages due to limitations such as chipset support, maintaining the form factor, and maintaining battery life.⁸³ While this equipment may not have been designed with WEA in mind, the definition of a mobile device for the purpose of WEA that we adopt today signals to Participating CMS Providers and equipment manufacturers that consumers may expect those devices to be WEA-capable. Our adoption of this rule may prompt Participating CMS Providers and equipment manufacturers to consider whether smaller, wearable equipment that does not support WEA today can be made WEA-capable through changes to hardware or software. The definition of a mobile device for the purpose of WEA that we adopt today also excludes some devices that Participating CMS Providers sell. A smartwatch that is capable of only Wi-Fi or Bluetooth connectivity, for example, may be able to present a WEA to its wearer by receiving it through a WEA-capable smartphone to which it is tethered.⁸⁴ We do not consider these devices to be “mobile devices” for the purpose of WEA, however, because their ability to receive a WEA is derivative of the device to which

⁸⁰ AT&T Comments at 6; *see also* Letter from Scott K. Bergmann, Senior Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC at 2 (rec. Apr. 13, 2022) (noting that cell-broadcast technology is used for WEA). While the Commission is technologically neutral with respect to how Participating CMS Providers deliver WEAs to their subscribers, we note that most Participating CMS Providers have chosen to do so using cell broadcast.

⁸¹ Distinguish this from a Non-service Initialized (NSI) phone. While NSI phones may not, in fact, receive commercial mobile service at a given point in time, they are technically capable of receiving commercial mobile service once service is initialized for the device. Therefore, NSI phones are “used to receive commercial mobile service” for the purpose of this rule and are “mobile devices” for the purpose of WEA. We clarify that Participating CMS Providers are not required to market NSI devices as “WEA-capable,” and may market them in this way conditionally (e.g., “WEA-capable upon activation of service”). NSI phones—like all mobile devices—may only be marketed as “WEA-capable” if the device complies with part 10, subpart E of our rules.

⁸² *See 2023 WEA Accessibility FNPRM*, 38 FCC Rcd at 3763, para. 45. A devices such as a tablet or wearable that connects to the Internet solely by means other than commercial mobile service (e.g., Wi-Fi) would not fall within section 10.10’s “mobile device” definition. *See* AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 29 (rec. Jul. 21, 2023). By contrast, devices such as tablets and wearables that support connection to the Internet via commercial mobile service would be considered as mobile devices for the purpose of WEA under this rule.

⁸³ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 29 (rec. Jul. 21, 2023) (“For smaller devices, such as smart watches, device manufacturers may encounter particularly difficult challenges to incorporate chipsets that support WEA, maintaining the form factor, or in maintaining sufficient battery life.”).

⁸⁴ *See, e.g.*, Apple Watch User Guide, Read Messages on Apple Watch, <https://support.apple.com/guide/watch/read-messages-apdcf848d29e/watchos> (last visited Sep. 5, 2023).

they are connected. Participating CMS Providers may continue to market this equipment for sale while continuing to participate in WEA “in whole.”⁸⁵

22. As proposed, we define a “WEA-capable mobile device” as a mobile device that is compliant with all of the Commission’s WEA rules.⁸⁶ When the Commission adopted the definition of a “mobile device” for the purpose of WEA in 2012 in anticipation of the system’s deployment, the primary distinction between mobile devices for the purpose of WEA was whether they could receive alert messages. Today, the wireless industry’s public disclosures reflect that devices marketed for public use under part 10 support a wide array of WEA functionalities, but that not all mobile devices support all of WEA’s required features.⁸⁷ For example, T-Mobile markets as “alert-capable” Apple’s iPhone 5, which is able to receive the basic 90-character maximum WEA text, but does not support clickable links, the preservation of alerts for user review, Spanish-language alerts, the presentation of alerts concurrent with active voice or data sessions, Public Safety Messages, State/Local WEA Tests, or enhanced geographic targeting.⁸⁸ While, generally, mobile devices released after a rule’s effective date support the features those rules require,⁸⁹ Participating CMS Providers and equipment manufacturers have not pushed software updates necessary to enable new WEA features to mobile devices in the field that no longer support software updates.⁹⁰ To account for the diversity among the WEA capabilities of mobile devices available today, we find it appropriate to update our regulatory framework to account for the extent to

⁸⁵ The Commission’s rules explain how CMS Providers must elect to participate in WEA in whole or in part, or elect not to participate, as well as how they can make changes to their election. *See* 47 CFR §§ 10.210-10.280. WEA Participation in part entails that a CMS Provider has not committed that all mobile devices that they offer at the point of sale are WEA-capable. *See* 47 CFR § 10.10(l); *see also* WARN Act, § 1201(b)(1)(B) (permitting WEA participation “in part”). The Commission’s review of public sources does not reveal any Participating CMS Provider that will no longer sell any WEA-capable mobile devices (and, therefore, need to withdraw their election to participate in WEA) as a result of this change.

⁸⁶ *See* 2023 WEA Accessibility FNPRM, 38 FCC Rcd at 3763, paras. 44-45. *I.e.*, that is compliant with the part 10, subpart E equipment requirements, as revised to incorporate the requirement to comply with the subpart D alert message requirements. *See infra* Appendix A.

⁸⁷ *See, e.g.*, WEA-capable Phones (Apr. 3, 2023), <https://www.att.com/idpassets/images/support/pdf/WEA-capablePhones.pdf>; Devices Tested for WEA Functionality, <https://www.t-mobile.com/WEA> (last visited Nov. 1, 2024); Wireless Emergency Alert Compatible Devices, <https://www.verizon.com/support/wireless-emergency-alerts-compatible-devices/> (last visited on Nov. 1, 2024). CTIA argues that Participating CMS Providers traditionally have “disclosed” the WEA capabilities of devices to consumers in this way in order to comply with the Commission’s rules rather than affirmatively “marketed” them as “WEA-capable,” and therefore the Commission’s rules should limit how “WEA-capable mobile device” is used in “disclosures” instead of in “marketing.” CTIA *ex parte* at 3-5. The purpose of the rule we adopt today is to avoid consumer confusion about the WEA capabilities of mobile devices. We find that the rule we adopt today addresses any communication with consumers about the WEA capabilities of devices, which we could consider for purposes of these rules to be a form of marketing, regardless of whether a Participating CMS Provider would consider that communication to be a “disclosure.” We further note that sections 10.510, 10.520, and 10.530 of our rules already restrict how Participating CMS Providers and equipment manufacturers can “market” devices that support WEA, so we believe that it is appropriate to continue to use that language in the interest of consistency. 47 CFR §§ 10.510-10.530. To further ensure that consistency, we amend section 10.500 to continue to also use that “marketing” language.

⁸⁸ *See* Devices Tested for WEA Functionality, https://www.t-mobile.com/content/dam/digx/tmobile/us/en/non-dynamic-media/pdf/TMobileWEA_V2.pdf (last visited Jan. 15, 2025).

⁸⁹ *See* ATIS Comments at 27 (“all new mobile devices” meet the Commission’s proposed definition of a “WEA-capable mobile device”); *see also, e.g.*, Letter from Steven Mollenkopf, Chief Executive Officer, Qualcomm Incorporated, to Ajit Pai, Chairman, Federal Communications Commission, PS Docket Nos. 15-91, 15-94 (Oct. 1, 2020) (stating that “all Qualcomm-enabled 5G chipsets already sold, and those to be sold in the future, in the United States will support WEA enhanced geotargeting capabilities.”).

⁹⁰ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 15 (rec. Jul. 21, 2023).

which the Commission has required WEA to evolve over the years to keep pace with advances in technology and changing consumer expectations for emergency communications. This change will promote informed consumer choice about the emergency alerting capabilities of mobile devices that consumers are considering for purchase.

23. We also make explicit that WEA-capable mobile devices must support each of the alert message requirements in part 10, subpart D. Specifically, a WEA-capable mobile device must support the WEA Alert Message classifications,⁹¹ device-based geo-targeting,⁹² Alert Messages that contain a maximum of 360 characters of alphanumeric text,⁹³ embedded references,⁹⁴ Spanish-language alerts,⁹⁵ the silent alert feature we adopt today, and the basic equipment requirements codified in subpart E of the WEA rules.⁹⁶ Insofar as consumers make mobile device purchasing decisions based on marketed WEA capabilities,⁹⁷ we believe that it is usually in connection with their purchase of a new device.⁹⁸ According to ATIS, new mobile devices either support all of WEA’s functions as of the date of their release, or they support none of them,⁹⁹ which supports the binary distinction (“WEA-capable” or not) that we adopt.¹⁰⁰

⁹¹ 47 CFR § 10.400.

⁹² 47 CFR § 10.450; *2023 WEA FNPRM* at para. 44. When the Commission enhanced its WEA geo-targeting requirement, it explicitly stated that mobile devices need not support device-based geo-fencing to be considered as WEA-capable as of the date of required compliance. *2023 WEA FNPRM*, 33 FCC Rcd at 1344-45, para. 9, n. 46. The action that we take today revisits and revises that conclusion to reflect that, to be marketed for public use as “WEA-capable,” mobile devices must support all of the subpart D alert message requirements, which include geo-targeting, among other requirements. *See* T-Mobile USA Comments, PS Docket Nos. 15-91, 15-94, at 12 (rec. Jul. 21, 2023) (“Devices that can receive and display WEA alerts may no longer warrant classification as ‘WEA-capable’ if they cannot suppress alerts consistent with the Commission’s geo-targeting requirements.”).

⁹³ 47 CFR § 10.430.

⁹⁴ 47 CFR § 10.441. WEA-capable mobile devices must also support National Alerts upon receipt and all other alerts on a first-in-first out basis, five mandatory CAP elements, and roaming capabilities as required by 47 CFR § 10.410, 47 CFR § 10.420, and 47 CFR 10.470, insofar as mobile device programming may be needed to support these functions.

⁹⁵ 47 CFR § 10.480. The FCC also adopted a rule requiring manufacturers to implement multilingual templates for WEA that alert originators can choose to send during life threatening emergencies. This rule is not yet effective, but will become effective 30 months after the Public Safety and Homeland Security Bureau publishes an order in the Federal Register that establishes the specific implementation parameters for the templates. *Wireless Emergency Alerts, Amendments to Part 11 of the Commission’s Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-94 and 15-91, Third Report and Order, 38 FCC Rcd 10116, 10130-32, paras. 25-27 (2023).

⁹⁶ 47 CFR § 10.500 *et seq.* (including requirements to authenticate interactions with CMS Provider infrastructure, monitor for Alert Messages, maintain subscriber opt-out selections, maintain subscriber alert language preferences, exact content in English and the subscribers preferred language, presentation of alert content to the device, detection and suppression of duplicate alerts, preservation of alert messages in a consumer-accessible format and location for at least 24 hours or until deleted by the subscriber; the call preemption prohibition, and the common audio attention signal and vibration cadence). If the Commission were to adopt new alert message or equipment requirements in the future, the rules we adopt today would require devices to support those new requirements in order to continue to be considered to be WEA-capable, beginning on the deadline for the implementation of those requirements. However, devices can continue to be considered WEA-capable prior to that implementation deadline. *See* CTIA *ex parte* at 2, 4 (suggesting clarification of the definition of a WEA-capable mobile device).

⁹⁷ *Cf.* T-Mobile USA Comments, PS Docket Nos. 15-91, 15-94, at 12 (rec. Aug. 21, 2023) (“There is little evidence that consumers make wireless device purchasing decisions based on WEA capabilities.”).

⁹⁸ *See* *Share of smartphone models sold in the United States from 207 to 20245, by model*, Statista, <https://www.statista.com/statistics/755671/united-states-smartphone-market-share-by-model/> (last visited Nov. 6, 2024).

⁹⁹ Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 27 (rec. Jul. 21, 2023); AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 29 (rec. Jul. 21, 2023) (“4G and 5G

(continued....)

Today, the term “WEA-capable mobile device” is undefined in our rules but Participating CMS Providers use it in their marketing materials to refer to new mobile devices as well as mobile devices that are over a decade old and support only the basic WEA functions available since 2012.¹⁰¹ The Language Accessibility in Alert and Warning Working Group, King County, Washington Emergency Management, Michigan State Police, the New York State Department of Homeland Security and Emergency Services, and the County of San Diego Department of Emergency Services support adoption of our proposed definition of a “WEA-capable mobile device” because clearly labeling devices that support all WEA functions promotes informed consumer choice about public safety services and promotes the use of mobile devices as disaster preparedness tools.¹⁰² We agree with APCO that “the status quo approach to mobile device eligibility may mislead consumers into mistakenly believing that all [mobile devices marketed as] ‘WEA-capable mobile devices’ offer all WEA capabilities.”¹⁰³ Accordingly, we disagree with T-Mobile that whether a device supports the basic receipt of a WEA message is the most important criterion to the definition of a “WEA-capable mobile device,”¹⁰⁴ and we disagree with Verizon that we should codify the WEA “versions” (e.g., 1.0, 2.0, and 3.0) on which existing marketing materials rely.¹⁰⁵

24. We recognize other commenters’ perspective that defining a WEA-capable mobile device as we do today could also be confusing.¹⁰⁶ Indeed, as a result of our action today, many mobile devices

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networks, as well as all new mobile devices, meet the Commission’s proposed “WEA-capable” definition because they support DBGF [(device-based geofencing)] and thus comply with the Commission’s geotargeting requirements”).

¹⁰⁰ See, e.g., T-Mobile, *WEA Device Lists*, <https://www.t-mobile.com/devices/wea-devices> (last visited Nov. 5, 2024) (last visited on Nov. 5, 2024) (marketing no tablets or wearable devices as “WEA-capable”).

¹⁰¹ See, e.g., Verizon Comments, PS Docket Nos. 15-91, 15-94, at 11 (rec. Jul. 21, 2023) (“Service providers’ online listings associate each device model with its associated WEA capabilities by distinguishing between WEA 1.0-, 2.0- and 3.0-capable devices.” This approach ensures that information is available to those consumers for whom specific WEA capabilities may be relevant to their purchasing and usage decisions.); T-Mobile, *WEA Device Lists*, <https://www.t-mobile.com/devices/wea-devices> (last visited Nov. 5, 2024) (marketing the Apple iPhone 5S, released in 2013, as “WEA-capable”). Participating CMS Providers’ WEA websites reveal that, under the moniker “WEA-capable,” Participating CMS Providers market mobile devices by version number, a convention not contemplated by our rules. See Verizon, *Wireless Emergency Alert Compatible Devices*, <https://www.verizon.com/support/wireless-emergency-alerts-compatible-devices/> (last visited on Nov. 5, 2024); AT&T, *WEA-capable Phones* (Apr 3, 2023), <https://www.att.com/idpassets/images/support/pdf/WEA-capablePhones.pdf>; T-Mobile, *WEA Device Lists*, <https://www.t-mobile.com/devices/wea-devices> (last visited Nov. 5, 2024).

¹⁰² County of San Diego Department of Emergency Services Comments, PS Docket Nos. 15-91, 15-94, at 4 (rec. Jul. 21, 2023) (“When identifying devices capable of receiving WEA messages, change the definition to exclude devices that are only WEA 1.0”); King County, Washington Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 4 (rec. Jul. 21, 2023) (“We support updating the definition of WEA-capable to include only mobile devices with the capabilities noted in Part 10, Subpart D of the Code of Federal Regulations”); Language Accessibility in Alert and Warning Working Group Comments, PS Docket Nos. 15-91, 15-94, at 5-6 (rec. Jul. 20, 2023) (“When identifying devices as capable of receiving WEA messages, we recommend changing the definition to exclude devices that are only WEA 1.0 (90 characters, no geotargeting). These types of phones are outdated and/or will no longer be supported, and we believe providers should support awareness and production of “WEA- Capable” phones regardless of model”); Michigan State Police OMS Comments at 4 (“providers should support awareness and production of “WEA Capable” phones regardless of model”).

¹⁰³ APCO Comments at 4.

¹⁰⁴ See T-Mobile USA Comments, PS Docket Nos. 15-91, 15-94, at 12 (rec. Jul. 21, 2023) (“The most important issue in determining whether a device is WEA-capable should be whether a device will receive and display WEA alerts, not whether a device is capable of satisfying newly minted performance criteria.”).

¹⁰⁵ Verizon Comments, PS Docket Nos. 15-91, 15-94, at 11 (rec. Jul. 21, 2023).

¹⁰⁶ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 28 (rec. Jul. 21, 2023) (“Redefining “WEA-capable mobile devices” as only those devices that support all WEA features, as the Commission proposes, would

(continued....)

that are compatible with presentation of WEAs will no longer be marketed as “WEA-capable.” By contrast to the status quo, we find this potential for confusion to be acceptable and mitigable. If a consumer is confused about the WEA capabilities of a mobile device marketed as WEA-capable as we define it today, it would only be the surprise of learning that a device, in fact, has WEA capabilities that it was not marketed as having. We find this to be preferable to the confusion that might result from purchasing a device marketed as “WEA-capable” only to discover that it supports fewer than all of WEA’s capabilities. To ensure that customers can be well informed about the WEA service that they should expect to receive on devices marketed as “WEA-capable,” we direct the Public Safety and Homeland Security Bureau to publish a consumer guide and keep up to date information regarding the capabilities required of such devices.

25. Pursuant to the WARN Act, our rules permit CMS Providers to participate in WEA so long as at least one mobile device that they offer for sale is WEA-capable.¹⁰⁷ We encourage Participating CMS Providers to make as many mobile devices as possible “WEA-capable” to ensure WEA is available on the types of devices often relied on by the public, including those with disabilities.¹⁰⁸ New York City Emergency Management emphasizes the importance of preserving WEA compatibility for older devices that may no longer support over-the-air software upgrades necessary to comply with all the WEA equipment requirements, particularly for “populations that may not have the resources to obtain a newer device.”¹⁰⁹ As AT&T, T-Mobile, and Verizon recognize, consumers with mobile devices that are no

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lead to consumer confusion about devices that support some, but not all, features”); T-Mobile USA Comments, PS Docket Nos. 15-91, 15-94, at 11-12 (rec. Jul. 21, 2023); Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 27; Verizon Comments, PS Docket Nos. 15-91, 15-94, at 11 (rec. Jul. 21, 2023); T-Mobile USA Reply, PS Docket Nos. 15-91, 15-94, at 11-12 (rec. Jul. 21, 2023); CTIA Comments at 24.

¹⁰⁷ WARN Act, § 1201(b)(1)(B); *see also* 47 CFR 10.10(l) (defining CMS providers participating in WEA in part as those that have “agreed to transmit WEA Alert Messages in a manner consistent with the technical standards, protocols, procedures, and other technical requirements implemented by the Commission in some, but not all of their geographic service areas, or CMS Providers that offer mobile devices at the point of sale that are not WEA-capable”). The Commission’s rules explain how CMS Providers must elect to participate in WEA in whole or in part, or elect not to participate, as well as how they can make changes to their election. *See* 47 CFR §§ 10.210-10.280.

¹⁰⁸ *See* CSRIC V, Social Media & Complementary Alerting Methods – Recommended Strategies & Best Practices, Final Report and Recommendations, at 27-29 (2016) (“People are now accustomed to receiving their information via a wide array of communications channels. Mobile devices are only one of several apparatus people use for communications . . . If alerting is to be successful, a wide and growing variety of channels must be used to reach the public.”); *accord* Rick Wimberly, *New Age of Alerting Coming: Ubiquitous Alerts*, Government Technology (Feb. 9, 2016), <https://www.govtech.com/em/emergency-blogs/disaster-zone/new-age-of-alerting-coming--ubiquitous-alerts.html>; Advocacy Groups for the Blind Comments at 5 (“many people with disabilities, including children, use a wide array of mobile devices that best meet their individual access needs, and by mandating that all devices that are already required to be accessible for people with disabilities are . . . mobile devices [for the purpose of WEA] as well, the Commission may ensure that people with disabilities are able to receive wireless emergency alerts on a device that is the most accessible and usable to them”); Advocacy Groups for the Deaf and Hard of Hearing Comments at 3, 9; NYCEM Comments at 9 (“individuals with disabilities . . . may not be able to use smaller devices”).

¹⁰⁹ *See* NYCEM Comments at 9 (NYCEM “cautions that to ensure equity in the system, older devices must still be considered to include populations that may not have the resources to obtain a newer device”). Nothing about the definitions of “mobile device” or “WEA-capable mobile device” that we adopt today will prevent any older devices that were previously capable of receiving WEA alerts from continuing to receive them.

longer considered to be WEA-capable as a result of this regulatory change will continue to be able to receive WEAs on their mobile devices even though those devices do not support all WEA's features.¹¹⁰

26. Finally, we make conforming edits to reflect that Participating CMS Providers and equipment manufacturers may market mobile devices irrespective of their WEA capabilities, but they will be prohibited from marketing a mobile device as a "WEA-capable mobile device" unless it complies with the revised WEA mobile device equipment requirements, including the ability to support silent alerts.¹¹¹ Similarly included in this prohibition is marketing language that could mislead consumers into the mistaken belief that the device they are considering for purchase is compliant with the WEA rules (e.g., "Wireless Emergency Alert Compatible Devices,"¹¹² "alert-capable devices," or the identification of mobile device capabilities by version number, such as 1.0, 2.0, or 3.0).¹¹³

C. Compliance Timeframes

27. The deadline for compliance with the silent alert requirements will be 36 months from the publication of this *Seventh Report and Order* in the *Federal Register*. The record shows that compliance with these requirements would necessitate technically feasible changes to applicable standards and software.¹¹⁴ Specifically, support for this capability will require updates to alert origination software, FEMA's Integrated Public Alert and Warning System (IPAWS), Participating CMS Providers' WEA systems, and mobile devices.¹¹⁵ AT&T synthesizes as follows how the capability to send silent alerts would be implemented: "[i]t may be possible for Alert Originators to include an information element

¹¹⁰ AT&T Comments at 4, 28 ("Redefining "WEA-capable mobile devices" as only those devices that support all WEA features, as the Commission proposes, would lead to consumer confusion about devices that support some, but not all, features"); T-Mobile Comments at 12 ("for those consumers who factor WEA capabilities into purchasing decisions, rules that constantly change what constitutes a "WEA-capable device" will cause confusion . . . Consumers likely will be confused about whether they need to purchase a new device to receive WEA messages if their existing devices are no longer classified as WEA-capable"); Verizon Comments at 11 ("for purposes of informing consumers and alert originators, and measuring the WEA system's performance, the proposed 'WEA-capable' designation for handsets would not help, and could even result in customer confusion about device models' WEA capabilities").

¹¹¹ See, e.g., AT&T, *Find out about Wireless Emergency Alerts*, <https://www.att.com/support/article/wireless/KM1009041/> (last visited Nov. 13, 2024) (depicting a widely-used, trademarked logo that Participating CMS Providers include on packaging and instruction manuals to indicate that a mobile device is "Wireless Emergency Alerts Capable").

¹¹² Wireless Emergency Alert Compatible Devices, <https://www.verizon.com/support/wireless-emergency-alerts-compatible-devices/> (last visited on Nov. 1, 2024).

¹¹³ Devices Tested for WEA Functionality, <https://www.t-mobile.com/WEA> (last visited Nov. 1, 2024); AT&T, *Find out about Wireless Emergency Alerts*, <https://www.att.com/support/article/wireless/KM1009041/> (last visited Nov. 13, 2024).

¹¹⁴ Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 22 (rec. Jul. 21, 2023) (stating that this capability "could be technically supported but would require extensive design and development work").

¹¹⁵ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 16-17 (rec. Jul. 21, 2023); Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 17-18 (rec. Jul. 21, 2023); CTIA Comments, PS Docket Nos. 15-91, 15-94, at 19 (rec. Jul. 21, 2023). When a delay in the readiness of FEMA IPAWS to support new WEA capabilities has delayed the public availability of new WEA features beyond the date of required compliance, the Commission has extended the compliance deadline until FEMA IPAWS was ready to support the capability. See *New Enhancements to Wireless Emergency Alerts Will Be Available on December 13, 2019*, PS Docket Nos. 15-91, 15-94, Public Notice, 34 FCC Rcd 11042 (PSHSB 2019); see also *Public Safety and Homeland Security Bureau Announces New Enhancements to Wireless Emergency Alerts are Now Available*, PS Docket Nos. 15-91, Public Notice, 34 FCC Rcd 12332 (PSHSB 2019). Conversely, not all alert origination software must support this capability for it to be made publicly available or for the Commission to require compliance.

within a WEA message that would direct a user's device to suppress the alert signal while still displaying the WEA alert."¹¹⁶ To support the subscriber capability to override the alert originator's suppression of the common vibration cadence, mobile device manufacturers and operating system developers will need to determine how WEA-capable mobile devices display the option to override silent alerts.¹¹⁷ We agree with AT&T that these capabilities "would require extensive study, standards development, testing, and deployment, and the Commission would need to provide sufficient time for these steps to be completed."¹¹⁸ We provide sufficient time with the compliance deadline that we adopt today. ATIS, AT&T, and FEMA recommend study "of all potential use cases for the 'silent alert,' along with the pros/cons of a silent alert" to give alert originators an opportunity to prepare best practices and procedures that enable them to use this capability effectively.¹¹⁹ We encourage our federal partners, such as FEMA and the National Weather Service and alert originators along with their advocacy groups, such as the National Emergency Management Association and the International Association of Emergency Managers, to conduct this study. We disagree with ATIS, however, that this study must "be undertaken prior to any decision to move forward with design and implementation."¹²⁰ Rather, we agree with AT&T that it is sufficient for this study to be completed before the capability's implementation because the study pertains to alert originators' use of the capability, not the technical feasibility of its implementation.¹²¹ While the record in this proceeding did not specifically quantify the amount of time that compliance would require, based on our experience with adopting other WEA requirements that have entailed at least this much technical development, we anticipate that 30 months will permit ample time for industry to complete the standards and software development work required to support this functionality while alert originators focus on developing best practices and use cases.¹²² However, we acknowledge that industry is already in the process of implementing new WEA capabilities.¹²³ We acknowledge that the simultaneous adoption of several new WEA capabilities may potentially create resource constraints and cause delays to

¹¹⁶ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 16 (rec. Jul. 21, 2023).

¹¹⁷ *Id.* at 5.

¹¹⁸ *Id.* at 17.

¹¹⁹ Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 2 (rec. Jul. 21, 2023); Federal Emergency Management Agency, Integrated Public Alert and Warning System Program Management Office, PS Docket Nos. 15-91, 15-94, at 7 (rec. Jul. 19, 2023) ("FEMA encourages further investigation on if enabling additional options for how WEA messages are presented may impact unnecessary consumer opt-out . . ."); AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 16 (rec. Jul. 21, 2023).

¹²⁰ Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 2 (rec. Jul. 21, 2023).

¹²¹ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 16 (rec. Jul. 21, 2023) ("Public warning experts and Alert Originators, along with FEMA and the wireless industry, should identify all practical use cases and develop best practices for such attention signal suppression before implementing this capability.")

¹²² *See, e.g., 2016 WEA R&O and FNPRM*, 31 FCC Rcd at 11161, para. 79 (requiring compliance with requirements to support Spanish-language alerts, embedded references, 360-character maximum alerts, and other enhancements within 30 months, allowing 12 months for standards development, 12 months for software development, and six months to deploy this new technology to the field in the course of normal business cycles); *See Wireless Emergency Alerts; Amendment to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Third Report and Order, 38 FCC Rcd 10116, 10153, para. 74 (2023) (*WEA Accessibility R&O*) (requiring 30 months for compliance with additional language support); *Wireless Emergency Alerts; Amendment to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, Second Report and Order, 33 FCC Rcd 1320, 1331-32, para. 14 (finding that the urgent public safety benefits of enhanced geo-targeting necessitate an expedited compliance timeframe).

¹²³ *WEA Accessibility R&O*, 38 FCC Rcd at 10153, para. 74.

deployment, and therefore grant Participating CMS Providers an additional six months to implement silent alerts.¹²⁴

28. In adopting this 36-month compliance timeframe, we highlight that the date of required compliance marks the beginning, rather than the end, of the transition to full system support for this functionality. As AT&T and ATIS observe, at the outset there will be an “inherent mix of handsets that can and cannot support this feature,”¹²⁵ but we disagree with AT&T that this will prevent the feature from being used.¹²⁶ Rather, alert originators will determine the extent to which they will begin to use this feature on the date of required compliance in full knowledge of the limitations of handset support and with a reasonable expectation that handset support for the capability will mature over time. Our experience suggests that it will take about three years after the date of required compliance to reach 88% market penetration of mobile devices that support the capability to silence alerts.¹²⁷ Out of an abundance of caution, and to ensure the continued accessibility of WEA, we emphasize that any mobile devices that do not support silent alerts as of the date of required compliance must present the Attention Signal for all alerts, subject to the consumer control over the presentation of the Attention Signal that our rules otherwise provide.

29. We believe it is particularly important that we adopt a definition of a WEA-capable mobile device in this *Seventh Report and Order* because, to maintain the accessibility of silent alerts for individuals with disabilities, the capability to support silent alerts must be accompanied by the capability to override the suppression of the vibration cadence. Prohibiting Participating CMS Providers and equipment manufacturers from marketing as WEA-capable mobile devices that support one of these capabilities, but not the other, will avoid the possibility that the adoption of this requirement renders silent WEAs inaccessible. To ensure that the public is able to realize the benefits of regulatory clarity that these new definitions provide and enable Participating CMS Providers to make any necessary adjustments to their marketing, these rule revisions will become effective 180 days after the publication of this *Seventh Report and Order* in the *Federal Register*. We join FEMA in encouraging standards bodies and mobile device manufacturers to consider solutions for the silent alerting functionality that support backwards compatibility with older systems to hasten the deployment of this feature and increase the availability of WEA-capable mobile devices.¹²⁸

¹²⁴ See *Wireless Emergency Alerts; Amendment to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Third Report and Order, 38 FCC Rcd 10116, 10135-36, para. 33 (2023) (*WEA Accessibility R&O*) (allowing 36 months for compliance with support for embedded maps, although 30 months would be sufficient, to accommodate requirements to adopt several new WEA capabilities, which may create resource constraints and cause delays to deployment).

¹²⁵ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 17 (rec. Jul. 21, 2023); Alliance for Telecommunications Industry Solutions Comments, PS Docket Nos. 15-91, 15-94, at 18 (rec. Jul. 21, 2023).

¹²⁶ AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 17 (rec. Jul. 21, 2023).

¹²⁷ See, e.g., Letter from Amy Bender, CTIA, Vice President, Regulatory Affairs, to Debra Jordan, Chief, FCC, PSHSB (Jul 28, 2023) (stating that, as of Q1 2023, 83% of activate smartphones supported enhanced WEA geo-targeting, a requirement that became effective in December 2019); see also *Public Safety and Homeland Security Bureau Announces that FEMA's Integrated Public Alert and Warning System (IPAWS) is Ready to Support Certain Improvements to Wireless Emergency Alerts (WEA)*, PS Docket Nos. 15-91, 15-94, Public Notice, DA 19-1297 (PSHSB 2019).

¹²⁸ Federal Emergency Management Agency, Integrated Public Alert and Warning System Program Management Office, PS Docket Nos. 15-91, 15-94, at 7 (rec. Jul. 19, 2023) (“FEMA encourages that implementation of any changes or option for changing how WEA messages are presented be implemented uniformly across all phone types.”). In particular, we encourage lifeline providers to ensure this capability is supported by current models and that at least one device included in Lifeline bundles offers the capability as soon as practicable.

D. Analysis of Costs and Benefits

30. We find that the benefits of requiring compliance with this requirement exceed the anticipated costs. Commenters generally agree with our proposal that giving alert originators the ability to suppress presentation of the Attention Signal during active shooter situations could make WEA a more effective tool in that situation.¹²⁹ No commenter opposed our analysis that making WEA a better tool for active shooter scenarios could reduce casualties by discretely warning the public, which would yield substantial public safety benefits.¹³⁰ According to the Federal Bureau of Investigation, there were 61 active shooter incidents in 2021, resulting in 243 casualties, including 103 deaths and 140 injuries.¹³¹ These incidents continue. In 2023, the Federal Bureau of Investigation designated an additional 48 shootings as active shooter incidents with 244 casualties, including 105 killed and 139 injuries.¹³² Accordingly, we continue to find it reasonable that suppressing the audio attention signal and vibration cadence during active shooters scenarios could generate significant public safety benefits. This is even before considering that selective suppression could benefit the public by reducing consumer opt out, that defining a “mobile device” for the purpose of WEA could benefit the public by increasing the availability of WEA on tablets and wearables, and that defining a “WEA capable mobile device” will enhance the value of marketing disclosures.

31. We find that the value of those benefits would have to exceed \$37.7 million to exceed their anticipated cost. We find that premise is satisfied and that the cost estimates are valid. In the Further Notice of Proposed Rulemaking, the Commission reasoned that these costs comprise approximately \$814,000 to update applicable WEA standards¹³³ and approximately \$39.1 million to update applicable software.¹³⁴ We continue to rely on this methodology for assessing the cost of

¹²⁹ Federal Emergency Management Agency Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. May 22, 2024) (FEMA MEP Comments); AT&T Services, Inc. Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 21, 2023); DeMarcus Strange Comments, PS Docket Nos. 15-91, 15-94, at 1 (rec. Jun. 27, 2023); Language Accessibility in Alert and Warning Working Group Comments, PS Docket Nos. 15-91, 15-94, at 5 (rec. Jul. 20, 2023); County of San Diego Department of Emergency Services Comments, PS Docket Nos. 15-91, 15-94, at 3 (rec. Jul. 21, 2023); New York City Emergency Management Comments, PS Docket Nos. 15-91, 15-94, at 6 (rec. Jul. 20, 2023).

¹³⁰ 2023 WEA Accessibility FNPRM, 38 FCC Rcd at 3780, para. 87.

¹³¹ These figures exclude injuries or deaths of the shooters. Federal Bureau of Investigation (FBI), Active shooter incidents in the United States in 2021 at 4 (2022), <https://www.fbi.gov/file-repository/active-shooter-incidents-in-the-us-2021-052422.pdf/view>.

¹³² Federal Bureau of Investigation (FBI), Active shooter incidents in the United States in 2023 at 3 (2024), <https://www.fbi.gov/file-repository/2023-active-shooter-report-062124.pdf/view>.

¹³³ 2023 WEA Accessibility FNPRM, 38 FCC Rcd at 3782-83, para. 93. This is calculated as follows: 30 network engineers x (\$58 + \$29) per hour per network engineer x 26 hours per standard x 12 standards = \$814,320. We round this figure to \$814,000 to avoid the false appearance of precision in our estimate. See Bureau of Labor Statistics Employer Costs for Employee Compensation Summary, Computer Network Architect (May 2021), <https://www.bls.gov/oes/current/oes151241.htm> (last visited Aug. 25, 2022) (stating that the average base salary for a computer network architect is \$120,730/yr); Letter from Tom Goode, General Counsel, ATIS, to Marlene Dortch, Secretary, FCC, PS Docket No. 15-91, at 1 (filed Sep. 6, 2016) (stating that, when standards need to be modified for WEA, it would be common practice for groups of approximately 30 individuals with relevant technical expertise meet approximately bi-weekly for an hour to discuss the modifications); *Wireless Emergency Alerts; Amendments to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Second Report and Order and Second Order on Reconsideration, 33 FCC Rcd 1320, 1344-45, para. 33, n.154 (2018) (listing the 12 WEA standards).

¹³⁴ 2023 WEA Accessibility FNPRM, 38 FCC Rcd at 3782-83, para. 93. This is calculated as follows: (\$120,650 + \$60,325) annually per Participating CMS Provider x 10 months / 12 months per year x 76 Participating CMS Providers = \$11,461,750. 12 software developers x (\$120,650 + \$60,325) annually per Participating CMS Provider x 2 months / 12 months per year x 76 Participating CMS Providers = \$ 27,508,200. See Bureau of Labor Statistics Employer Costs for Employee Compensation Summary, Software Developers, (May 2021)

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compliance with this requirement, to which no commenter objected. On our own initiative, however, we update this analysis to account for changes in the wage rate of workers likely to be engaged in the process of compliance and to update our account of the number of CMS Providers that participate in WEA. We now estimate that the cost is slightly less than proposed: \$889,000 to update applicable standards¹³⁵ and \$36.8 million to update applicable software¹³⁶ for a total of \$37.7 million.¹³⁷

32. Since WEA's inception, the Commission has never recognized a cost to Participating CMS Providers or equipment manufacturers associated with the marketing of mobile devices or their WEA capabilities. No commenter in this proceeding suggests that they will incur any costs to comply with this requirement, so we do not diverge from that analysis here. We continue to decline to assign a dollar value to that activity for the purpose of this cost benefit analysis because marketing is purely voluntary commercial activity unnecessary to the provision of commercial mobile service or the sale of mobile devices. CMS Providers that market their mobile devices do so because they anticipate that the economic benefits of doing so will outweigh the costs. Insofar as Participating CMS Providers and equipment manufacturers market their mobile devices based on their WEA-capabilities, the definitions that we adopt today may implicate changes to those marketing materials. No Participating CMS Provider or equipment manufacturer will have to change their existing marketing materials as a result of this requirement, however, because the WEA capabilities that they support on devices that they sell are completely at their discretion, pursuant to the WARN Act. CMS Providers may continue to participate in WEA "in part" so long as one mobile device that they sell is a WEA-capable mobile device, as we define it today.

IV. FURTHER NOTICE OF PROPOSED RULEMAKING

33. In this *Eleventh Further Notice of Proposed Rulemaking*, we propose to allow alert originators greater flexibility to send WEAs using the Public Safety Message classification. Making this change would allow alert originators to send WEAs in a classification where the Commission's rules allow Participating CMS Providers to offer their subscribers greater flexibility in how they receive WEA messages. If Participating CMS Providers provide their subscribers with the ability to customize how they receive WEAs sent in the Public Safety Message classification, and subscribers take advantage of their ability to customize such WEAs, we believe it will reduce subscriber alert fatigue and opt out. We

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<https://www.bls.gov/oes/current/oes151252.htm> (last visited Aug. 25, 2022) (stating that the average base salary for a software developer is \$120,730/year, which results in total compensation of \$180,960 when benefits are included); Verizon, PS Docket No. 15-91, Comments, PS Docket No. 15-91, at 5 (Jan. 13, 2016) (stating that it takes manufacturers and vendors 12 months to incorporate WEA standards into their products and test them); FCC, Master WEA Registry, <https://www.fcc.gov/files/weamasterregistry112019.xls> (last visited Aug. 19, 2022) (reflecting that 76 CMS Providers participate in WEA either in whole or in part).

¹³⁵ This is calculated as follows: 30 network engineers x (\$65+ \$30) per hour per network engineer x 26 hours per standard x 12 standards = \$889,200. See Bureau of Labor Statistics, Occupational Employment and Wages, May 2023 (2023), <https://www.bls.gov/oes/current/oes151241.htm> (stating that the mean hourly wage of a computer network architect is \$64.39 based on a mean annual wage of \$133,930, and allowing 45% for benefits). We round this figure to \$889,000 to avoid the false appearance of precision in our estimate.

¹³⁶ This is calculated as follows: 1 software developer (\$138,110 + \$62,150) annually per Participating CMS Provider x 10 months / 12 months per year x 65 Participating CMS Providers = \$10,847,417. 12 software developers x (\$138,110 + \$62,150) annually per Participating CMS Provider x 2 months / 12 months per year x 65 Participating CMS Providers = \$26,033,800. The cost of software development (\$10,847,417) + the cost of software testing (\$26,033,800) = \$36,881,217, a figure we round to \$36.8 million to avoid to false appearance of precision in our estimate. See Bureau of Labor Statistics, Occupational Employment and Wages, May 2023 (2023), <https://www.bls.gov/oes/current/oes151252.htm> (stating that the mean annual wage of a software developer is \$138,110, and allowing 45% for benefits).

¹³⁷ Where \$889,000 + \$36.8 million = \$37,689,000, a figure we round to \$37.7 million to avoid to false appearance of precision in our estimate.

also seek comment on whether subscribers should be empowered to further customize their receipt of WEA messages and other steps we can take to reduce subscriber alert fatigue and opt out.

A. Improving Public Safety Messages

34. The rules define a Public Safety Message as “an essential public safety advisory that prescribes one or more actions likely to save lives and/or safeguard property during an emergency.”¹³⁸ The current rules limit the issuance of Public Safety Messages to circumstances “in connection with” a National Alert, Imminent Threat Alert, or AMBER Alert.¹³⁹ We propose to remove that limitation. When the Commission adopted the Public Safety Message classification, it understood that these messages were “intended to provide supplemental instructions about how to protect life or property during an AMBER Alert, Presidential Alert, or Imminent Threat Alert.”¹⁴⁰ We seek comment on whether broadening the scope of Public Safety Messages by removing the requirement that they “supplement” a prior alert would facilitate the use of WEA for situations where it can help keep people safe, such as MEP alerts, Blue Alerts, and boil water advisories. Conversely, could removing this limitation cause alert fatigue by increasing the number of WEAs that people receive about events that are less than the most urgent, severe, or certain to occur?

35. We seek comment on whether Public Safety Messages, as a class, increase consumer choice regarding whether they receive emergency alerts other than those that are the most urgent, severe, and certain to occur, as well as regarding the presentation of the Attention Signal along with such alerts. In 2016, the Commission allowed Participating CMS Providers to associate a unique pattern of sounds and vibrations with Public Safety Messages, instead of the Attention Signal, and allowed Participating CMS Providers to provide subscribers with the ability to silence or turn off Public Safety Messages during certain hours.¹⁴¹ The Commission also allowed Participating CMS Providers to provide their subscribers with the option to specify how the Attention Signal should be presented when a WEA is received during an active voice or data session.¹⁴² Have any Participating CMS Providers associated unique haptic or auditory cues with Public Safety Messages? Have any Participating CMS Providers provided their subscribers with the ability to turn off Public Safety Messages during certain hours? Have any Participating CMS Providers provided their subscribers with the option to control how the Attention Signal is presented during an active voice or data sessions? If so, how have these functions worked in practice? Are there additional actions that we should take to give subscribers control over their receipt of Public Safety Messages, given that, our proposal, if adopted, would allow alert originators to use Public Safety Messages for events less urgent, severe, or certain to occur than Imminent Threat Alerts? We seek comment on whether a silent-by-default setting for Public Safety Messages, with an option for consumers to opt into receiving the attention signal and/or vibration cadence, would better align with consumer preferences or expectations and thereby help to mitigate alert fatigue and consumer opt-out.

B. Enhancing Subscriber Customization

36. We seek comment on whether WEA-capable devices should provide subscribers with additional options that let them decide how alerts are presented. For example, should subscribers have greater flexibility to silence the attention signal or vibration cadence for certain classes of alerts? Should subscribers be able to configure the attention signal or vibration cadence so that it is presented notwithstanding the device’s “do-not-disturb” settings? If so, how should these capabilities be implemented in practice? Should this option be available for all classes of alert message other than the

¹³⁸ 47 CFR § 10.400(d).

¹³⁹ 47 CFR § 10.400(d).

¹⁴⁰ 2016 WEA R&O and FNPRM, 31 FCC Rcd at 11128-29, para. 22.

¹⁴¹ *Id.* at 11129-30, para. 24.

¹⁴² *Id.* at 11152-53, para. 61.

National Alert, or only for certain classes (e.g., only for AMBER alerts and Public Safety Messages)? Should the presentation of the attention signal and vibration cadence be individually adjustable for each alert class, in the event that the subscribers want them to behave differently? Should subscribers have the option of adjusting the volume of the attention signal to make it quieter or louder independent of their mobile device volume setting? Should WEA-capable devices adjust the volume of the attention signal to a pre-specified level when headphones are connected? Should alert originators be empowered to override the subscribers' selected settings to a greater degree than we require in the accompanying Report and Order, and if so, under what circumstances would it be appropriate for alert originators to do so? We seek comment on the costs and benefits associated with providing subscribers with these and other options for enhanced flexibility. If adopted, what effect would these capabilities have on public safety? Could these capabilities confuse consumers or pose technical implementation challenges? How should we balance the goal of increased flexibility for alert originators and consumers with the goal of reducing complexity and confusion that could undermine confidence in and use of the WEA system? Will allowing additional flexibility improve public safety by causing fewer subscribers to opt out of receiving life-saving alerts? Or will it endanger public safety by reducing the likelihood that subscribers will receive adequate warnings during disasters? We seek comment on any additional ways in which subscribers should be permitted to customize the WEA alerts that they receive that would make those alerts more effective.

C. Other Ways to Reduce Subscriber Opt-Out

37. We seek comment on any additional ways in which we might reduce the rate at which subscribers opt out of receiving certain classes of WEA messages.¹⁴³ Our rules allow Participating CMS Providers to offer their subscribers the option to opt out of Child Abduction Emergency/AMBER Alert, Imminent Threat Alert, and Public Safety Message classes of WEA.¹⁴⁴ Our rules also state that "CMS providers shall provide their subscribers with a clear indication of what each option means, and provide examples of the types of messages the customer may not receive as a result of opting out."¹⁴⁵ We seek comment on how Participating CMS Providers offer their subscribers the ability to opt out of receiving certain WEA notifications. Do mobile devices' WEA notification settings encourage thoughtful consideration of whether to opt out? Should we take further action to ensure that, if consumers do choose to opt out of receiving some types of WEA notifications, they do so only after having given due consideration to the consequences of not receiving time-sensitive, potentially life-saving alerts?

38. What actions can mobile device equipment manufacturers or operating system developers take regarding WEA notification settings or the way in which users are prompted to review those settings to promote careful consideration of the options? To what extent do mobile device manufacturers' design decisions influence the rate of consumer opt out?¹⁴⁶ We seek comment on whether certain mobile device operating systems' implementation of the right to opt out of WEA messages increases the incidence of consumer opt out. For example, if mobile device user interfaces are designed to repeatedly and prominently present users with the option to opt out of WEA, or the receipt of every WEA is associated with the presentation of the option to opt out, could that increase the likelihood that subscribers opt out of WEA? Do these user interface designs promote informed consumer choice? If not, what changes could be made to increase the likelihood of informed consumer choice? We seek comment on factors that might explain the difference between opt out rates between users of mobile devices made by different

¹⁴³ 47 CFR § 10.280 (Subscribers' right to opt out of WEA notifications); *see also* WARN Act, § 1201(b)(2)(E).

¹⁴⁴ 47 CFR § 10.280(a).

¹⁴⁵ 47 CFR § 10.280(b).

¹⁴⁶ RAND Report at 68. The RAND Report finds that Apple iPhone owners reported generally higher opt-out rates, with odds of opting out among most other manufacturers being 74-80 percent those of Apple. *Id.* at 68. RAND attributes this higher rate of opt out to iOS' implementation of the WEA functionality that "make[s] opting our easy through a Settings button on the alert screen." *Id.* at 56-57, 69. Accordingly, RAND recommends that IPAWS and the FCC work with Apple on its implementation of the option to opt-out of receiving WEAs. *Id.* at 90.

device manufacturers. Do other types of mobile devices and/or operating system make it easier or harder to opt out of receiving WEA messages?

39. We seek comment on whether revising the Public Safety Message classification or prohibiting certain user interface designs that incent opt out would impose costs on mobile device equipment manufacturers or Participating CMS Providers. We do not believe that compliance with our proposals to change the definition of a Public Safety Message would present any costs because no changes would be needed to systems or software to facilitate compliance. We seek comment on this view. If compliance does present costs, we invite commenters to quantify those costs and recommend specific actions that we could take to minimize the burden of compliance on small entities.

40. Finally, we seek comment on what the Commission can do to improve the timeliness and accuracy of WEA alerts. The effectiveness of WEAs during emergency situations depends heavily on their timeliness and accuracy. When these alerts are delayed or contain inaccurate information, their value diminishes significantly, which can lead to subscribers losing trust and ultimately opting out. What steps can be taken to enhance coordination between local authorities and other WEA stakeholders, including vendors of alert origination software and Participating CMS Providers, to ensure more timely alerts during emergencies? What additional measures or best practices could be implemented to ensure that WEA alerts contain accurate information, particularly in fast-evolving situations like wildfires or severe weather events?

V. PROCEDURAL MATTERS

41. *Regulatory Flexibility Act.* The Regulatory Flexibility Act of 1980, as amended (RFA),¹⁴⁷ requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”¹⁴⁸ Accordingly, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of the rule changes contained in this *Seventh Report and Order* on small entities. The FRFA is set forth in Appendix B.

42. The Commission has also prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning the potential impact of the rule and policy changes contained in the *Eleventh Further Notice of Proposed Rulemaking*. The IRFA is set forth in Appendix C. 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 *Further Notice* indicated on the first page of this document and must have a separate and distinct heading designating them as responses to the IRFA.

43. *Congressional Review Act.* The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs, that this rule is non-major under the Congressional Review Act, 5 U.S.C. § 804(2). The Commission will send a copy of this *Seventh Report and Order* to Congress and the Government Accountability Office pursuant to 5 U.S.C. § 801(a)(1)(A).

44. *Providing Accountability Through Transparency Act.* Consistent with the Providing Accountability Through Transparency Act, Public Law 118-9, a summary of this *Eleventh Further Notice of Proposed Rulemaking* will be available on <https://www.fcc.gov/proposed-rulemakings>.

45. *Ex Parte Rules - Permit-But-Disclose.* This proceeding this Notice initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.¹⁴⁹

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

¹⁴⁸ 5 U.S.C. § 605(b).

¹⁴⁹ 47 CFR §§ 1.1200 *et seq.*

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

46. *Filing Requirements—Comments and Replies.* Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- 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 FCC'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.

47. *Paperwork Reduction Act.* This document does not contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. 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, Public Law 107-198, see 44 U.S.C. 3506(c)(4).

48. *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).

49. *Additional Information.* For additional information on this proceeding, contact David Kirschner, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau (202) 418-0695, or by email to David.Kirschner@fcc.gov.

VI. ORDERING CLAUSES

50. ACCORDINGLY IT IS ORDERED, pursuant to the authority contained in Sections 1, 2, 4(i), 4(n), 301, 303(b), 303(e), 303(g), 303(j), 303(r), 307, 309, 316, 403, and 706 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), 307, 309, 316, 403, and 606, as well as by sections 602(a), (b), (c), (f), 603, 604 and 606 of the Warning Alert and Response Network (WARN) Act, 47 U.S.C. §§ 1201(a), (b), (c), (f), 1203, 1204 and 1206, that this *Seventh Report and Order and Eleventh Further Notice of Proposed Rulemaking* IS hereby ADOPTED.

51. IT IS FURTHER ORDERED that part 10 of the Commission's rules IS AMENDED as specified in Appendix A. The definitions of a WEA-capable mobile device and a mobile device for the purpose of WEA (section 10.10(j)-(m)), along with conforming edits (to the introductory text of section 10.500, section 10.500(i)-(j), the introductory text of section 10.520, and the introductory text of section 10.530), WILL BECOME EFFECTIVE 180 days after the publication of this *Seventh Report and Order* in the *Federal Register*. The silent alert rules adopted herein (sections 10.490 and 10.530(d)) WILL BECOME EFFECTIVE thirty-six (36) months after publication of this *Seventh Report and Order* in the *Federal Register*.

52. IT IS FURTHER ORDERED that the Commission's Office of the Secretary SHALL SEND a copy of this *Seventh Report and Order and Eleventh Further Notice of Proposed Rulemaking*, including the Final and Initial Regulatory Flexibility Analyses, to the Chief Counsel for Advocacy of the Small Business Administration.

53. IT IS FURTHER ORDERED that the Office of the Managing Director, Performance & Program Management, SHALL SEND a copy of this *Seventh Report and Order* in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Final Rules

For the reasons discussed above, part 10 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 10 – WIRELESS EMERGENCY ALERTS

1. The authority citation for part 10 is revised to read as follows:

Authority: 47 U.S.C. 151, 152, 154(i), 154(n), 201, 301, 303(b), 303(e), 303(g), 303(j), 303(r), 307, 309, 316, 403, 544(g), 606, 1201, 1202, 1203, 1204, and 1206.

2. Effective 180 days after publication in the Federal Register, amend § 10.10 by revising paragraph (j), redesignating paragraph (k) as paragraph (l), redesignating paragraph (l) as paragraph (m), and adding a new paragraph (k) to read as follows:

§ 10.10 Definitions

* * *

(j) **Mobile Device.** For the purposes of this part, any customer equipment used to receive commercial mobile service.

(k) **WEA-capable Mobile Device.** A mobile device, as defined in paragraph (j) of this section, that complies with the part 10, subpart E equipment requirements.

(l) **CMS Provider participation “in whole.”** CMS Providers that have agreed to transmit WEA Alert Messages in a manner consistent with the technical standards, protocols, procedures, and other technical requirements implemented by the Commission in the entirety of their geographic service area, and when all mobile devices that the CMS Providers offer at the point of sale are WEA-capable.

(m) **CMS Provider participation “in part.”** CMS Providers that have agreed to transmit WEA Alert Messages in a manner consistent with the technical standards, protocols, procedures, and other technical requirements implemented by the Commission in some, but not in all of their geographic service areas, or CMS Providers that offer mobile devices at the point of sale that are not WEA-capable.

3. Effective 36 months after publication in the Federal Register, add § 10.490 to read as follows:

§ 10.490 Silent Alerts

A Participating CMS Provider must support an alert originator’s selection of whether an Alert Message will be presented without either the common audio attention signal (§ 10.520), the common vibration cadence (§ 10.530), or both.

4. Effective 180 days after publication in the Federal Register, amend § 10.500 by revising the introductory text, reserving paragraph (i), and adding a new paragraph (j) to read as follows:

§ 10.500 General requirements.

A mobile device marketed for public use under part 10 as a “WEA-capable mobile device” is required to perform the following functions:

* * * * *

(i) [Reserved]

(j) Support the Alert Message Requirements in subpart D of this part.

5. Amend § 10.520 by revising the introductory text to read as follows:

§ 10.520 Common audio attention signal.

A Participating CMS Provider and equipment manufacturers may only market a mobile device for public use under part 10 as a “WEA-capable mobile device” if the mobile device includes an audio attention signal that meets the requirements of this section.

* * * * *

6. Effective 180 days after publication in the Federal Register, amend § 10.530 by revising the introductory text to read as follows:

§ 10.530 Common vibration cadence.

A Participating CMS Provider and equipment manufacturers may only market a mobile device for public use under part 10 as a “WEA-capable mobile device” if the mobile device includes a vibration cadence capability that meets the requirements of this section.

* * * * *

7. Effective 36 months after publication in the Federal Register, further amend § 10.530 by adding paragraph (d) to read as follows:

§ 10.530 [Amended]

* * * * *

(d) A device must include the option to enable the presentation of the common vibration cadence for all Alert Messages. If selected, that option overrides the alert originator’s selection to present an Alert Message without the common vibration cadence.

APPENDIX B**Proposed Rules**

For the reasons discussed above, part 10 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 10 – WIRELESS EMERGENCY ALERTS

1. The authority citation for part 10 continues to read as follows:

Authority: 47 U.S.C. 151, 152, 154(i), 154(n), 201, 301, 303(b), 303(e), 303(g), 303(j), 303(r), 307, 309, 316, 403, 544(g), 606, 1201, 1202, 1203, 1204, and 1206.

2. Amend § 10.400 by revising the introductory text and paragraph (d) to read as follows.

§ 10.400 Classification.

A Participating CMS Provider is required to receive and transmit four classes of Alert Messages: National Alert; Imminent Threat Alert; Child Abduction Emergency/AMBER Alert; and Public Safety Message.

* * * * *

(d) **Public Safety Message.** A Public Safety Message is an essential public safety advisory that prescribes one or more actions likely to save lives and/or safeguard property during an emergency.

APPENDIX C

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA)¹ the Federal Communications Commission (Commission) incorporated an Initial Regulatory Flexibility Analysis (IRFA) in the *Wireless Emergency Alerts, Amendments to Part 11 of the Commission's Rules Regarding the Emergency Alert System, Further Notice of Proposed Rulemaking (2023 WEA FNPRM)* released in April 2023.² The Commission sought written public comments on the proposals in the *2023 WEA FNPRM*, including comments on the IRFA. No comments were filed addressing the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

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

2. In the *Seventh Report and Order*, the Commission adopts rules to empower alert originators to enhance the utility of Wireless Emergency Alerts (WEA) as an alerting tool, minimizing the potential drawbacks of using WEA for AMBER, Blue, and MEP alerts sent either statewide or overnight and follow-up messaging to indicate actions that can be taken to protect life and property, such as alert fatigue and consumer opt out. The new rules will also make WEA a more effective tool for active shooter scenarios by allowing people in hiding to stay safe, as well as for other types of situations. Specifically, we require commercial mobile service providers that participate in WEA (Participating CMS Providers) to support silent alerts at the discretion of the alert originator and to allow wireless subscribers to override the alert originator's suppression of the common vibration cadence for accessibility purposes. This action will give alert originators the flexibility that they need to send WEAs during situations where lives and property are at risk while using the Attention Signal in a manner that people perceive as commensurate with the need for their immediate attention. This action will also give people with disabilities the option to ensure that the Attention Signal is always presented along with their WEA messages, irrespective of the alert originator's selection, which will draw their attention to the arrival of a WEA. To make as clear as possible to the public, including people with disabilities, the extent to which this and other WEA-capabilities are available on devices marketed by Participating CMS Providers and equipment manufacturers, we also adopt our proposed definitions of a "mobile device" for the purpose of WEA and of a "WEA-capable mobile device." In light of the significant public safety benefits, which include the capacity to save lives, as well as to mitigate and prevent injuries, the Commission believes that the actions taken in the *Seventh Report and Order* further the public interest.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

3. Although no comments were filed in response to the IRFA, three commenters filed comments regarding the impact of, and concerns about the proposals and policies discussed in *2023 WEA FNPRM* on small entities. The Competitive Carriers Association (CCA) argued that flexibility of implementing the adopted rules would promote participation in WEA by smaller and regional carriers.⁴ CCA also argued that the "supply chain and level of support for handsets for smaller and regional carriers generally lags behind the nationwide carriers, and this should also be a consideration."⁵ Further, CCA stated the additional requirements would disproportionately burden smaller and regional carriers because

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

² See *Wireless Emergency Alerts, Amendments to Part 11 of the Commission's Rules Regarding the Emergency Alert System, Further Notice of Proposed Rulemaking*, PS Docket Nos. 15-91, 15-94, Further Notice of Proposed Rulemaking, FCC 23-30, Appx. B., Initial Regulatory Flexibility Analysis (Apr. 21, 2023) (*2023 WEA FNPRM*).

³ 5 U.S.C. § 604.

⁴ Competitive Carriers Association, Comments, PS Docket Nos. 15-91 and 15-94, at 7 (rec. Jul. 21, 2023) (CCA Comments).

⁵ *Id.*

of the raised difficulty and costs to administer WEA, and because the cumulative costs of complying with the Commission's other requirements and proposals more broadly, including within public safety, burdens small teams and limited resources of many smaller carriers.⁶ In addition, CCA commented, "many smaller and rural carriers face challenges in prioritizing personnel and similar technical resources, accessing vendor assistance and support, scheduling and funding projects, accessing mobile devices with the latest functionalities, etc.," and suggests increased time for compliance for non-nationwide carriers relative to the proposed 30-month timeframe.⁷

4. Southern Communications Services, Inc. d/b/a Southern Linc (Southern Linc) raised concerns similar to those raised by CCA, namely, that the Commission should account for the disproportionate impact that the proposed requirements in the *2023 WEA FNPRM* would have on smaller and regional carriers and the Commission should provide small and medium-sized mobile service providers additional time to comply.⁸

5. CTIA – The Wireless Association (CTIA) argued that to the extent the proposals made in the *2023 WEA FNPRM* other than the proposals adopted in this *Seventh Report and Order* would require a complete overhaul of the WEA System, that "[s]ubstantial changes to the WEA system also may disproportionately impact regional and smaller, rural carriers, who often rely on third-party vendors to implement WEA functions and may not be able to bear the additional technical and financial burdens, rendering their ongoing voluntary participation in WEA infeasible."⁹

6. The Commission considered the potential impact of the rules proposed in the *2023 WEA FNPRM* on small entities and concluded that the mandates requiring Participating CMS Providers to support silent alerts, and enable wireless subscribers to override an alert originator's suppression of the common vibration cadence for accessibility purposes afford Participating CMS Providers with a sufficient measure of flexibility to account for any technical and/or cost-related concerns by allowing 36 months to comply with the silent alert requirement, which should be ample time for all Participating CMS Providers irrespective of their size. We have determined that implementing these improvements to WEA are technically feasible for small entities and other Participating CMS Providers and the cost of implementation that we discuss in the *2023 WEA FNPRM* is reasonable. As we indicate below in section E, our updated cost estimate is somewhat less than the estimate included with the proposed rules.

7. Although commenters advocate for a longer compliance window for smaller and rural Participating CMS Providers, to help facilitate compliance with the requirements in the *Seventh Report and Order*, the Commission adopted a compliance timeframe that is longer than the timeframe necessary to complete the requirements based on the record.¹⁰ Our adopted timeframe is also longer than compliance timeframes for previously adopted rules for WEA which should help facilitate compliance by smaller providers. We believe that the public interest benefits of expanding the reach and accessibility of WEA significantly outweigh the costs that small and other Participating CMS Providers will incur to implement the requirements adopted in the *Seventh Report and Order*.

⁶ *Id.* at 10.

⁷ *Id.* at 12.

⁸ Southern Communications Services, Inc. d/b/a Southern Linc, Reply, PS Docket Nos. 15-91 and 15-94, at 6-8 (rec. Aug. 21, 2023) ("Southern Linc Reply").

⁹ CTIA, Comments, PS Docket Nos. 15-91 and 15-94, at 10 (rec. Jul 21, 2023) ("CTIA Comments").

¹⁰ The requirement for compliance within 36 months of the publication in the *Federal Register* is based on the record-supported analysis the Commission has previously relied upon. See *Wireless Emergency Alerts; Amendment to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Third Report and Order, 38 FCC Rcd 10116, 10153, para. 74 (2023) (*WEA Accessibility R&O*) (allowing 36 months for compliance with support for embedded maps due to increased technical complexity).

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

8. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA) and to provide a detailed statement of any change made to the proposed rules as a result of those comments.¹¹ The Chief Counsel did not file comments in response to the proposed rules in this proceeding.

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

9. 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 rules adopted herein.¹² The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹³ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁴ 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.¹⁵

10. *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, at the outset, three broad groups of small entities that could be directly affected herein.¹⁶ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.¹⁷ These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million businesses.¹⁸

11. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹⁹ The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations.²⁰ Nationwide, for tax year 2022, there

¹¹ 5 U.S.C. § 604(a)(3).

¹² 5 U.S.C. § 604(a)(4).

¹³ 5 U.S.C. § 601(6).

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

¹⁵ 15 U.S.C. § 632.

¹⁶ 5 U.S.C. § 601(3)-(6).

¹⁷ See SBA, Office of Advocacy, “What’s New With Small Business?,” <https://advocacy.sba.gov/wp-content/uploads/2023/03/Whats-New-Infographic-March-2023-508c.pdf> (Mar. 2023).

¹⁸ *Id.*

¹⁹ 5 U.S.C. § 601(4).

²⁰ The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number of small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations – Form 990-N (e-Postcard), “Who must file,” <https://www.irs.gov/charities-non-profits/annual->

(continued....)

were approximately 530,109 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.²¹

12. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”²² U.S. Census Bureau data from the 2022 Census of Governments²³ indicate there were 90,837 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.²⁴ Of this number, there were 36,845 general purpose governments (county,²⁵ municipal, and town or township²⁶) with populations of less than 50,000 and 11,879 special purpose governments (independent school districts²⁷) with enrollment populations of less than 50,000.²⁸ Accordingly, based on the 2022 U.S. Census of Governments data, we estimate that at least 48,724 entities fall into the category of “small governmental jurisdictions.”²⁹

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[electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard](#). We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

²¹ See Exempt Organizations Business Master File Extract (EO BMF), “CSV Files by Region,” <https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf>. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2022 with revenue less than or equal to \$50,000 for Region 1-Northeast Area (71,897), Region 2-Mid-Atlantic and Great Lakes Areas (197,296), and Region 3-Gulf Coast and Pacific Coast Areas (260,447) that includes the continental U.S., Alaska, and Hawaii. This data includes information for Puerto Rico (469).

²² 5 U.S.C. § 601(5).

²³ 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Census of Governments, <https://www.census.gov/programs-surveys/economic-census/year/2022/about.html>.

²⁴ See U.S. Census Bureau, 2022 Census of Governments – Organization Table 2. Local Governments by Type and State: 2022 [CG2200ORG02], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also tbl.2. CG2200ORG02 Table Notes_Local Governments by Type and State_2022.

²⁵ See *id.* at tbl.5. County Governments by Population-Size Group and State: 2022 [CG2200ORG05], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. There were 2,097 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

²⁶ See *id.* at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2022 [CG2200ORG06], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. There were 18,693 municipal and 16,055 town and township governments with populations less than 50,000.

²⁷ See *id.* at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2022 [CG2200ORG10], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. There were 11,879 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2022 [CG2200ORG04], CG2200ORG04 Table Notes_Special Purpose Local Governments by State_Census Years 1942 to 2022.

²⁸ While the special purpose governments category also includes local special district governments, the 2022 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

²⁹ This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,845) and the number of special purpose governments -

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13. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves.³⁰ 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.³¹ The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.³² U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.³³ Of that number, 2,837 firms employed fewer than 250 employees.³⁴ 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 wireless services.³⁵ Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees.³⁶ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

14. *Broadband Personal Communications Service*. The broadband personal communications services (PCS) spectrum encompasses services in the 1850-1910 and 1930-1990 MHz bands.³⁷ The closest industry with a SBA small business size standard applicable to these services is *Wireless Telecommunications Carriers (except Satellite)*.³⁸ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.³⁹ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁴⁰ Of this number, 2,837 firms employed fewer than 250 employees.⁴¹ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

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independent school districts with enrollment populations of less than 50,000 (11,879), from the 2022 Census of Governments - Organizations tbls. 5, 6 & 10.

³⁰ 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>.

³¹ *Id.*

³² See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

³³ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFFIRM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

³⁴ *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.

³⁵ 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>.

³⁶ *Id.*

³⁷ See 47 CFR § 24.200.

³⁸ 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>.

³⁹ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁴⁰ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFFIRM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁴¹ *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.

15. Based on Commission data as of November 2021, there were approximately 5,060 active licenses in the Broadband PCS service.⁴² 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.⁴³ Winning bidders claiming small business credits won Broadband PCS licenses in C, D, E, and F Blocks.⁴⁴

16. 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 standard.

17. *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.⁴⁵ 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.⁴⁶ Wireless Telecommunications Carriers (*except Satellite*)⁴⁷ 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.⁴⁸ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁴⁹ Of this number, 2,837 firms employed fewer than 250 employees.⁵⁰ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

⁴² Based on a 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.

⁴³ See 47 CFR § 24.720(b).

⁴⁴ 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>.

⁴⁵ See 47 CFR § 24.5.

⁴⁶ *Id.*

⁴⁷ 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>.

⁴⁸ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁴⁹ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁵⁰ *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.

18. According to Commission data as of December 2021, there were approximately 4,211 active *Narrowband PCS* licenses.⁵¹ 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.⁵² 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.⁵³ Pursuant to these definitions, 7 winning bidders claiming small and very small bidding credits won approximately 359 licenses.⁵⁴ One of the winning bidders claiming a small business status classification in these *Narrowband PCS* license auctions had an active license as of December 2021.⁵⁵

19. 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.

20. *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.⁵⁶ Wireless Telecommunications Carriers (*except* Satellite)⁵⁷ 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.⁵⁸ U.S. Census Bureau data for 2017 show that there were 2,893 firms that

⁵¹ Based on a 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.

⁵² See 47 CFR § 24.321(a)(1)-(2).

⁵³ *Id.*

⁵⁴ 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>.

⁵⁵ Based on a 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.

⁵⁶ See 47 CFR §§ 27.1 – 27.1607.

⁵⁷ 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>.

⁵⁸ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

operated in this industry for the entire year.⁵⁹ Of this number, 2,837 firms employed fewer than 250 employees.⁶⁰ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

21. 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.⁶¹

22. 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.

23. *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)⁶² 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.⁶³ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁶⁴ Of this number, 2,837 firms employed fewer than 250 employees.⁶⁵ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

24. According to Commission data as of December 2021, there were approximately 224 active 700 MHz Guard Band licenses.⁶⁶ The Commission's small business size standards with respect to

⁵⁹ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. 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.

⁶¹ 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.

⁶² 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>.

⁶³ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁶⁴ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁶⁵ *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.

⁶⁶ Based on a FCC Universal Licensing System search on December 14, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match (continued....)"

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.⁶⁷ 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.⁶⁸ 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 2021.⁶⁹

25. 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.

26. *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.⁷⁰ Wireless Telecommunications Carriers (*except* Satellite)⁷¹ 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.⁷² U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁷³ Of this number, 2,837 firms employed fewer than 250 employees.⁷⁴ Thus under the SBA

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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.

⁶⁷ See 47 CFR § 27.502(a).

⁶⁸ 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>.

⁶⁹ Based on a 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.

⁷⁰ 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/factsheet>, <https://www.fcc.gov/auction/49/factsheet>, <https://www.fcc.gov/auction/60/factsheet>.

⁷¹ 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>.

⁷² See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁷³ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312,

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size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

27. According to Commission data as of December 2021, there were approximately 2,824 active Lower 700 MHz Band licenses.⁷⁵ 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.⁷⁶ In auctions for Lower 700 MHz Band licenses seventy-two winning bidders claiming a small business classification won 329 licenses,⁷⁷ twenty-six winning bidders claiming a small business classification won 214 licenses,⁷⁸ and three winning bidders claiming a small business classification won all five auctioned licenses.⁷⁹

28. 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.

29. *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.⁸⁰ Permissible operations in these bands include flexible fixed, mobile, and broadcast uses, including mobile and other digital new broadcast operation; fixed and mobile

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<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.

⁷⁴ *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.

⁷⁵ Based on a 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.

⁷⁶ See 47 CFR § 27.702(a)(1)-(3).

⁷⁷ 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>.

⁷⁸ 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>.

⁷⁹ 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>.

⁸⁰ See 47 CFR § 27.4.

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.⁸¹ Wireless Telecommunications Carriers (*except* Satellite)⁸² 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.⁸³ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁸⁴ Of that number, 2,837 firms employed fewer than 250 employees.⁸⁵ Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

30. According to Commission data as of December 2021, there were approximately 152 active Upper 700 MHz Band licenses.⁸⁶ The Commission's small business size standards with respect to 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.⁸⁷ Pursuant to these definitions, three winning bidders claiming very small business status won five of the twelve available licenses.⁸⁸

31. 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.

⁸¹ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 73: 700 MHz Band, Fact Sheet, Permissible Operations, <https://www.fcc.gov/auction/73/factsheet>. 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.

⁸² 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>.

⁸³ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁸⁴ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFFIRM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁸⁵ *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.

⁸⁶ Based on a 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 that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

⁸⁷ See 47 CFR § 27.502(a).

⁸⁸ 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.

32. 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.⁸⁹ Wireless Telecommunications Carriers (except Satellite)⁹⁰ 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.⁹¹ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁹² Of this number, 2,837 firms employed fewer than 250 employees.⁹³ Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

33. According to Commission data as of December 2021, there were approximately 4,472 active AWS licenses.⁹⁴ The Commission’s small business size standards with respect to AWS involve 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.⁹⁵ Pursuant to these definitions, 57 winning bidders claiming status as small or very small businesses won 215 of 1,087 licenses.⁹⁶ In the most recent auction of AWS licenses 15 of 37 bidders qualifying for status as small or very small businesses won licenses.⁹⁷

34. 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

⁸⁹ See 47 CFR § 27.1(b).

⁹⁰ 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>.

⁹¹ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁹² See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁹³ *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.

⁹⁴ Based on a 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.

⁹⁵ See 47 CFR §§ 27.1002, 27.1102, 27.1104, 27.1106.

⁹⁶ 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>.

⁹⁷ 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).

estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

35. *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,"⁹⁸ 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)).⁹⁹ 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.¹⁰⁰

36. 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).¹⁰¹ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁰² U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁰³ Of this number, 2,837 firms employed fewer than 250 employees.¹⁰⁴ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

37. According to Commission data as of December 2021, there were approximately 5,869 active BRS and EBS licenses.¹⁰⁵ 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,

⁹⁸ The use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

⁹⁹ 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).

¹⁰⁰ 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 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.

¹⁰¹ 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>.

¹⁰² See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

¹⁰³ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFFIRM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

¹⁰⁴ *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.

¹⁰⁵ Based on a 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.

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.¹⁰⁶ 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.¹⁰⁷ One of the winning bidders claiming a small business status classification in the BRS license auction has an active licenses as of December 2021.¹⁰⁸

38. 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, 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.¹⁰⁹ 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.

39. *The Educational Broadcasting Services.* Cable-based educational broadcasting services fall under the broad category of the Wired Telecommunications Carriers industry.¹¹⁰ The Wired Telecommunications Carriers industry 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.¹¹¹ Transmission facilities may be based on a single technology or a combination of technologies.¹¹² Establishments in this industry use the wired telecommunications network facilities that they operate to

¹⁰⁶ See 47 CFR § 27.1218(a).

¹⁰⁷ 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>.

¹⁰⁸ Based on a 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.

¹⁰⁹ See 47 CFR § 27.1219(a).

¹¹⁰ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>. Examples of this category 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 owner operated wired telecommunications infrastructure; direct-to-home satellite system (DTH) services; telecommunications carriers (wired); satellite television distribution systems; and multichannel multipoint distribution services (MMDS).

¹¹¹ *Id.*

¹¹² *Id.*

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.”¹¹³

40. The SBA small business size standard for this industry classifies businesses having 1,500 or fewer employees as small.¹¹⁴ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.¹¹⁵ Of this total, 2,964 firms operated with fewer than 250 employees.¹¹⁶ Thus, under this size standard, the majority of firms in this industry can be considered small. Additionally, according to Commission data as of December 2021, there were 4,477 active EBS licenses.¹¹⁷ The Commission estimates that the majority of these licenses are held by non-profit educational institutions and school districts and are likely small entities.

41. *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.¹¹⁸ 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.¹¹⁹ The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small.¹²⁰ U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year.¹²¹ Of this number, 624 firms had fewer than 250 employees.¹²² Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

42. *Software Publishers.* This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction.¹²³ Establishments in this industry carry out

¹¹³ *Id.*

¹¹⁴ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

¹¹⁵ 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: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

¹¹⁶ *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.

¹¹⁷ Based on a 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.

¹¹⁸ 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>.

¹¹⁹ *Id.*

¹²⁰ See 13 CFR § 121.201, NAICS Code 334220.

¹²¹ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 334220, <https://data.census.gov/cedsci/table?y=2017&n=334220&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

¹²² *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.

¹²³ See U.S. Census Bureau, *2017 NAICS Definition*, “511210 Software Publishers,” <https://www.census.gov/naics/?input=511210&year=2017&details=511210>.

operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation, and providing support services to software purchasers.¹²⁴ These establishments may design, develop, and publish, or publish only.¹²⁵ The SBA small business size standard for this industry classifies businesses having annual receipts of \$47 million or less as small.¹²⁶ U.S. Census Bureau data for 2017 indicate that 7,842 firms in this industry operated for the entire year.¹²⁷ Of this number 7,226 firms had revenue of less than \$25 million.¹²⁸ Based on this data, we conclude that a majority of firms in this industry are small.

43. *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.

44. The SBA small business size standards and U.S. Census Bureau data classify radio stations¹²⁹ and television broadcasting¹³⁰ 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.¹³¹ 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.¹³² 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

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ See 13 CFR § 121.201, NAICS Code 511210 (as of 10/1/22 NAICS Code 513210).

¹²⁷ 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.

¹²⁸ *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.

¹²⁹ See U.S. Census Bureau, *2017 NAICS Definition, "515112 Radio Stations,"* <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

¹³⁰ See U.S. Census Bureau, *2017 NAICS Definition, "515120 Television Broadcasting,"* <https://www.census.gov/naics/?input=515120&year=2017&details=515120>.

¹³¹ 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).

¹³² 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 than 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.

per year.¹³³ 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.

45. According to Commission data as of December 31, 2024, there were 4,859 licensed noncommercial educational radio and television stations.¹³⁴ In addition, the Commission estimates as of December 31, 2024, there were 382 licensed noncommercial educational (NCE) television stations, 381 Class A TV stations, 1,801 LPTV stations and 3,091 TV translator stations.¹³⁵ 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.

46. *Radio Stations.* This industry is comprised of “establishments primarily engaged in broadcasting aural programs by radio to the public.”¹³⁶ Programming may originate in their own studio, from an affiliated network, or from external sources.¹³⁷ The SBA small business size standard for this industry classifies firms having \$47 million or less in annual receipts as small.¹³⁸ U.S. Census Bureau data for 2017 show that 2,963 firms operated in this industry during that year.¹³⁹ Of this number, 1,879 firms operated with revenue of less than \$25 million per year.¹⁴⁰ Based on this data and the SBA’s small business size standard, we estimate a majority of such entities are small entities.

47. The Commission estimates that as of December 31, 2024, there were 4,383 licensed commercial AM radio stations and 6,625 licensed commercial FM radio stations, for a combined total of

¹³³ 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.

¹³⁴ *Broadcast Station Totals as of December 31, 2024*, Public Notice, DA 25-11 (rel. Jan. 7, 2025) (*January 2025 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-25-11A1.pdf>.

¹³⁵ *Id.*

¹³⁶ See U.S. Census Bureau, *2017 NAICS Definition, “515112 Radio Stations,”* <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

¹³⁷ *Id.*

¹³⁸ See 13 CFR § 121.201, NAICS Code 515112 (as of 10/1/22 NAICS Code 516110).

¹³⁹ 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.

¹⁴⁰ *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 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.

11,008 commercial radio stations.¹⁴¹ Of this total, 11,007 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 January 7, 2025, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of December 31, 2024, there were 4,477 licensed noncommercial (NCE) FM radio stations, 1,968 low power FM (LPFM) stations, and 8,880 FM translators and boosters.¹⁴² 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.

48. We note, however, that in assessing whether a business concern qualifies as “small” under the above definition, business (control) affiliations¹⁴³ 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.

49. *FM Translator Stations and Low Power FM Stations.* FM translators and Low Power FM Stations are classified in the industry for Radio Stations.¹⁴⁴ The Radio Stations industry comprises establishments primarily engaged in broadcasting aural programs by radio to the public.¹⁴⁵ Programming may originate in their own studio, from an affiliated network, or from external sources.¹⁴⁶ The SBA small business size standard for this industry classifies firms having \$47 million or less in annual receipts as small.¹⁴⁷ U.S. Census Bureau data for 2017 show that 2,963 firms operated during that year.¹⁴⁸ Of that number, 1,879 firms operated with revenue of less than \$25 million per year.¹⁴⁹ Therefore, based on the

¹⁴¹ *Broadcast Station Totals as of December 31, 2024*, Public Notice, DA 25-11 (rel. Jan. 7, 2025) (*January 2025 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-25-11A1.pdf>.

¹⁴² *Id.*

¹⁴³ “[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).

¹⁴⁴ See U.S. Census Bureau, *2017 NAICS Definition, “515112 Radio Stations,”* <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ See 13 CFR § 121.201, NAICS Code 515112 (as of 10/1/22 NAICS Code 516110).

¹⁴⁸ 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.

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 December 31, 2024, there were 8,880 FM Translator Stations and 1,968 Low Power FM licensed broadcast stations.¹⁵⁰ 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.

50. *Television Broadcasting.* This industry is comprised of “establishments primarily engaged in broadcasting images together with sound.”¹⁵¹ These establishments operate television broadcast studios and facilities for the programming and transmission of programs to the public.¹⁵² 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.¹⁵³ 2017 U.S. Census Bureau data indicate that 744 firms in this industry operated for the entire year.¹⁵⁴ Of that number, 657 firms had revenue of less than \$25 million per year.¹⁵⁵ Based on this data we estimate that the majority of television broadcasters are small entities under the SBA small business size standard.

51. As of December 31, 2024, there were 1,385 licensed commercial television stations.¹⁵⁶ Of this total, 1,308 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 January 7, 2025, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates as of December 31, 2024, there were 382 licensed noncommercial educational (NCE) television stations, 381 Class A TV stations, 1,801 LPTV stations and 3,091 TV translator stations.¹⁵⁷ The Commission, however, does not compile and otherwise does not have access to financial

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¹⁴⁹ *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 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.

¹⁵⁰ *Broadcast Station Totals as of December 31, 2024*, Public Notice, DA 25-11 (rel. Jan. 7, 2025) (*January 2025 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-25-11A1.pdf>.

¹⁵¹ See U.S. Census Bureau, *2017 NAICS Definition*, “515120 Television Broadcasting,” <https://www.census.gov/naics/?input=515120&year=2017&details=515120>.

¹⁵² *Id.*

¹⁵³ See 13 CFR § 121.201, NAICS Code 515120 (as of 10/1/22 NAICS Code 516120).

¹⁵⁴ 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.

¹⁵⁵ *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.

¹⁵⁶ *Broadcast Station Totals as of December 31, 2024*, Public Notice, DA 25-11 (rel. Jan. 7, 2025) (*January 2025 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-25-11A1.pdf>.

¹⁵⁷ *Id.*

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.

52. *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.¹⁵⁸ 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.¹⁵⁹ The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.¹⁶⁰ The SBA small business size standard for this industry classifies firms with annual receipts less than \$47 million as small.¹⁶¹ Based on U.S. Census Bureau data for 2017, 378 firms operated in this industry during that year.¹⁶² 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.¹⁶³ Based on this data, the Commission estimates that a majority of firms in this industry are small.

53. *Cable System Operators (Rate Regulation Standard).* 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.¹⁶⁴ Based on industry data, there are about 420 cable companies in the U.S.¹⁶⁵ Of these, only seven have more than 400,000 subscribers.¹⁶⁶ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.¹⁶⁷ Based on industry data, there are about 4,139 cable systems (headends) in

¹⁵⁸ 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>.

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ See 13 CFR § 121.201, NAICS Code 515210 (as of 10/1/22, NAICS Code 516210).

¹⁶² 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).

¹⁶³ *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.

¹⁶⁴ 47 CFR § 76.901(d).

¹⁶⁵ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited September 15, 2023).

¹⁶⁶ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited September 15, 2023); S&P Global Market Intelligence, *Multichannel Video Subscriptions, Top 10* (April 2022).

¹⁶⁷ 47 CFR § 76.901(c).

the U.S.¹⁶⁸ Of these, about 639 have more than 15,000 subscribers.¹⁶⁹ Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.

54. *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.”¹⁷⁰ 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.¹⁷¹ Based on industry data, only six cable system operators have more than 498,000 subscribers.¹⁷² 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.¹⁷³ 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.

55. *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.”¹⁷⁴ 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.¹⁷⁵ U.S. Census Bureau data for 2017 show that 275 firms in this industry operated for the entire year.¹⁷⁶ Of this number, 242 firms had revenue of less than

¹⁶⁸ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited September 15, 2023).

¹⁶⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited September 15, 2023).

¹⁷⁰ 47 U.S.C. § 543(m)(2).

¹⁷¹ *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).

¹⁷² 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).

¹⁷³ 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).

¹⁷⁴ See U.S. Census Bureau, *2017 NAICS Definition, “517410 Satellite Telecommunications,”* <https://www.census.gov/naics/?input=517410&year=2017&details=517410>.

¹⁷⁵ See 13 CFR § 121.201, NAICS Code 517410.

¹⁷⁶ 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.

\$25 million.¹⁷⁷ Consequently, using the SBA's small business size standard most satellite telecommunications service providers can be considered small entities. The Commission notes however, 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.

56. *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.¹⁷⁸ 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.¹⁷⁹ 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.¹⁸⁰ The SBA small business size standard for this industry classifies firms with annual receipts of \$40 million or less as small.¹⁸¹ U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.¹⁸² Of those firms, 1,039 had revenue of less than \$25 million.¹⁸³ Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

57. *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.¹⁸⁴ Transmission facilities may be based on a single technology or combination of technologies.¹⁸⁵ 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

¹⁷⁷ *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.

¹⁷⁸ See U.S. Census Bureau, *2017 NAICS Definition*, "517919 All Other Telecommunications," <https://www.census.gov/naics/?input=517919&year=2017&details=517919>.

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ See 13 CFR § 121.201, NAICS Code 517919 (as of 10/1/22, NAICS Code 517810).

¹⁸² 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.

¹⁸³ *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.

¹⁸⁴ See U.S. Census Bureau, *2017 NAICS Definition*, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

¹⁸⁵ *Id.*

wired broadband Internet services.¹⁸⁶ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.¹⁸⁷

58. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.¹⁸⁸ U.S. Census Bureau data for 2017 show that 3,054 firms operated in this industry for the entire year.¹⁸⁹ Of this number, 2,964 firms operated with fewer than 250 employees.¹⁹⁰ 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.¹⁹¹ DIRECTV and DISH Network both exceed the SBA size standard for 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.

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

59. The *Seventh Report and Order* does not adopt reporting or recordkeeping requirements for small or other Participating CMS Providers but does impose compliance obligations on these providers to implement the changes we adopt to improve WEA. We note that the Commission reduces the estimated industry-wide compliance costs of approximately \$814,000 to update the applicable WEA standards, and approximately \$39.1 million to update the applicable software included in the *2023 WEA FNPRM* to an estimate of \$889,000 to update applicable standards¹⁹² and \$36.8 million to update applicable software¹⁹³ for an industry-wide cost of \$37.7 million.¹⁹⁴ We also note that while the record

¹⁸⁶ 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).

¹⁸⁷ *Id.*

¹⁸⁸ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

¹⁸⁹ 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: EC1700SIZEEMPFI, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFI&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

¹⁹⁰ *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.

¹⁹¹ 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).

¹⁹² This is calculated as follows: 30 network engineers x (\$65+ \$30) per hour per network engineer x 26 hours per standard x 12 standards = \$889,200. See Bureau of Labor Statistics, Occupational Employment and Wages, May 2023 (2023), <https://www.bls.gov/oes/current/oes151241.htm> (stating that the mean hourly wage of a computer network architect is \$64.39 based on a mean annual wage of \$133,930, and allowing 45% for benefits). We round this figure to \$889,000 to avoid the false appearance of precision in our estimate.

¹⁹³ This is calculated as follows: 1 software developer (\$138,110 + \$62,150) annually per Participating CMS Provider x 10 months / 12 months per year x 65 Participating CMS Providers = \$10,847,417. 12 software developers x (\$138,110 + \$62,150) annually per Participating CMS Provider x 2 months / 12 months per year x 65 Participating CMS Providers = \$26,033,800. The cost of software development (\$10,847,417) + the cost of software testing (\$26,033,800) = \$36,881,217, a figure we round to \$36.8 million to avoid to false appearance of precision in our estimate. See Bureau of Labor Statistics, Occupational Employment and Wages, May 2023 (2023), <https://www.bls.gov/oes/current/oes151252.htm> (stating that the mean annual wage of a software developer is \$138,110, and allowing 45% for benefits).

does not include sufficient information to allow the Commission to quantify the costs of compliance for small Participating CMS Providers, consistent with our cost estimate for the industry, small entities will require, and may have to hire a software developer and network engineer to implement the requirements we adopt in the *Seventh Report and Order*. Further, based on the record in this proceeding, we have determined that the changes to standards and software necessary to comply with the requirements we adopt are technically feasible for small and other affected entities. The Commission anticipates that 30 months will provide sufficient time for small and other entities in the industry to complete the standards and software development work required and permit alert originators to concentrate on developing best practices and use cases.¹⁹⁵ To acknowledge that the simultaneous adoption of several new WEA capabilities may potentially create resource constraints and cause delays to deployment, and the Commission grants Participating CMS Providers an additional six months to implement silent alerts, setting a compliance deadline of 36 months from publication of the rules in the *Federal Register*

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

60. The RFA requires an agency to provide, “a description of the steps the agency has taken to minimize the significant economic impact on small entities...including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.”¹⁹⁶

61. The Commission continues to adopt measures to improve WEA and continues to meet its obligation to develop the nation’s emergency preparedness and response infrastructure by allowing alert originators to deliver silent alerts and allowing subscribers to override the alert originator’s selection for accessibility purposes. While doing so, the Commission is mindful that small entities may incur cost. We weighed these costs against the public interest benefits of the new obligations and determined the benefits outweigh the costs. The specific steps the Commission has taken to minimize costs and reduce the economic impact for small entities and alternatives considered are discussed below.

62. In adopting the rule to enable alerting authorities to send silent alerts, we declined to adopt our proposal in the *2023 WEA FNPRM* that Participating CMS Providers offer subscribers an option to receive silent alerts by default, in addition to their current binary choice to opt in or opt out of receiving WEAs. Declining to adopt this proposal the Commission spares small and other entities in the wireless industry the cost of updating mobile devices and mobile device behavior specifications to implement this functionality. We considered but also decline New York City Emergency Management’s request that we constrain alert originators’ discretion to use silent alerts to certain alert message classifications, which would have added additional complexity to the standards and software modifications needed to facilitate compliance resulting in increased compliance costs for small and other Participating CMS Providers. Further, as discussed above in sections B and E in response to commenters’ requests, the Commission considered but declined to carve out a longer compliance timeframe for small and rural Participating CMS Providers in light of our experiences adopting WEA requirements that have required similar technical development and the timeframes adopted in those

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¹⁹⁴ Where $\$918,000 + \$36.8 \text{ million} = \$37,718,000$, a figure we round to $\$37.8 \text{ million}$ to avoid to false appearance of precision in our estimate.

¹⁹⁵ See *Wireless Emergency Alerts; Amendment to Part 11 of the Commission’s Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Third Report and Order, 38 FCC Rcd 10116, 10153, para. 74 (2023) (WEA Accessibility R&O) (allowing 36 months for compliance with support for embedded maps due to increased technical complexity).

¹⁹⁶ 5 U.S.C. § 604(a)(6).

proceedings.¹⁹⁷ However, the Commission did grant six additional months of implementation time to all Participating CMS Providers to address potential resource constraints and delays to deployment that may be caused by the implementation of multiple new WEA capabilities simultaneously.

G. Report to Congress

63. The Commission will send a copy of the *Seventh Report and Order*, including this FRFA, in a report to Congress pursuant to the Congressional Review Act.¹⁹⁸ In addition, the Commission will send a copy of the *Seventh Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Seventh Report and Order* and FRFA (or summaries thereof) will also be published in the *Federal Register*.¹⁹⁹

¹⁹⁷ See, e.g., 2016 WEA R&O and FNPRM, 31 FCC Rcd at 11161, para. 79 (requiring compliance with requirements to support Spanish-language alerts, embedded references, 360-character maximum alerts, and other enhancements within 30 months, allowing 12 months for standards development, 12 months for software development, and six months to deploy this new technology to the field in the course of normal business cycles); See *Wireless Emergency Alerts; Amendment to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Third Report and Order, 38 FCC Rcd 10116, 10153, para. 74 (2023) (WEA Accessibility R&O) (requiring 30 months for compliance with additional language support); *Wireless Emergency Alerts; Amendment to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, Second Report and Order, 33 FCC Rcd 1320, 1331-32, para. 14 (finding that the urgent public safety benefits of enhanced geo-targeting necessitate an expedited compliance timeframe).

¹⁹⁸ 5 U.S.C. § 801(a)(1)(A).

¹⁹⁹ *Id.* § 604(b).

APPENDIX D

Initial Regulatory Flexibility Analysis

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

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

2. The performance and accessibility of the nation's alert and warning systems is essential to helping safeguard the lives and property of all people. To ensure that Wireless Emergency Alerts (WEA) remain strong, the Commission must act proactively in its oversight of stakeholders associated with this system. The Commission has previously engaged with stakeholders assess actions that it could take to allow alert originators to make the best use of Public Safety Messages and to minimize the potential for unnecessary consumer opt out. We believe that we should take action to broaden the scope of emergencies for which a WEA may be sent. In the *Further Notice of Proposed Rulemaking*, the Commission acts to remove the requirement that Public Safety Messages be delivered "in connection with" a National Alert, Imminent Threat Alert, or AMBER Alert and allow them to instead be sent for any essential public safety advisory that prescribes one or more actions likely to save lives and/or safeguard property during an emergency. We also examine whether subscribers should be empowered to further customize their receipt of WEA messages and how equipment manufacturers and operating system providers are implementing subscribers' right to opt out of WEA messages to ensure that the manner in which that option is presented is not prompting unnecessary consumer opt out.

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), 307, 309, 316, 403, and 706 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), 307, 309, 316, 403, and 606, as well as by sections 602(a), (b), (c), (f), 603, 604 and 606 of the Warning Alert and Response Network (WARN) Act, 47 U.S.C. §§ 1201(a), (b), (c), (f), 1203, 1204, and 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.⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."⁵ In addition, the term "small business" has the

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

² See 5 U.S.C. § 603(a).

³ See *id.*

⁴ See *id.* § 603(b)(3).

⁵ See *id.* § 601(6).

same meaning as the term “small business concern” under the Small Business Act.⁶ 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.⁷

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, at the outset, three broad groups of small entities that could be directly affected herein.⁸ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.⁹ These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million businesses.¹⁰

6. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹¹ The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations.¹² Nationwide, for tax year 2022, there were approximately 530,109 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.¹³

7. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”¹⁴ U.S. Census Bureau data from the 2022 Census

⁶ See *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.”

⁷ 15 U.S.C. § 632.

⁸ 5 U.S.C. § 601(3)-(6).

⁹ See SBA, Office of Advocacy, “What’s New With Small Business?,” <https://advocacy.sba.gov/wp-content/uploads/2023/03/Whats-New-Infographic-March-2023-508c.pdf> (Mar. 2023).

¹⁰ *Id.*

¹¹ 5 U.S.C. § 601(4).

¹² The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number of small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations – Form 990-N (e-Postcard), “Who must file,” <https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard>. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

¹³ See Exempt Organizations Business Master File Extract (EO BMF), “CSV Files by Region,” <https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-ao-bmf>. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2022 with revenue less than or equal to \$50,000 for Region 1-Northeast Area (71,897), Region 2-Mid-Atlantic and Great Lakes Areas (197,296), and Region 3-Gulf Coast and Pacific Coast Areas (260,447) that includes the continental U.S., Alaska, and Hawaii. This data includes information for Puerto Rico (469).

¹⁴ 5 U.S.C. § 601(5).

of Governments¹⁵ indicate there were 90,837 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.¹⁶ Of this number, there were 36,845 general purpose governments (county,¹⁷ municipal, and town or township¹⁸) with populations of less than 50,000 and 11,879 special purpose governments (independent school districts¹⁹) with enrollment populations of less than 50,000.²⁰ Accordingly, based on the 2022 U.S. Census of Governments data, we estimate that at least 48,724 entities fall into the category of “small governmental jurisdictions.”²¹

8. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves.²² 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.²³ The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.²⁴ U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.²⁵ Of that number, 2,837 firms employed fewer than 250

¹⁵ 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Census of Governments, <https://www.census.gov/programs-surveys/economic-census/year/2022/about.html>.

¹⁶ See U.S. Census Bureau, 2022 Census of Governments – Organization Table 2. Local Governments by Type and State: 2022 [CG2200ORG02], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also tbl.2. CG2200ORG02 Table Notes_Local Governments by Type and State_2022.

¹⁷ See *id.* at tbl.5. County Governments by Population-Size Group and State: 2022 [CG2200ORG05], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. There were 2,097 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

¹⁸ See *id.* at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2022 [CG2200ORG06], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. There were 18,693 municipal and 16,055 town and township governments with populations less than 50,000.

¹⁹ See *id.* at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2022 [CG2200ORG10], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. There were 11,879 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2022 [CG2200ORG04], CG2200ORG04 Table Notes_Special Purpose Local Governments by State_Census Years 1942 to 2022.

²⁰ While the special purpose governments category also includes local special district governments, the 2022 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

²¹ This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,845) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (11,879), from the 2022 Census of Governments - Organizations tbls. 5, 6 & 10.

²² 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>.

²³ *Id.*

²⁴ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

²⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312,

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employees.²⁶ 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 wireless services.²⁷ Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees.²⁸ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

9. *Broadband Personal Communications Service.* The broadband personal communications services (PCS) spectrum encompasses services in the 1850-1910 and 1930-1990 MHz bands.²⁹ The closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (except Satellite).³⁰ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.³¹ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.³² Of this number, 2,837 firms employed fewer than 250 employees.³³ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

10. Based on Commission data as of November 2021, there were approximately 5,060 active licenses in the Broadband PCS service.³⁴ 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.³⁵ Winning bidders claiming small business credits won Broadband PCS

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<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.

²⁶ *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.

²⁷ 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>.

²⁸ *Id.*

²⁹ See 47 CFR § 24.200.

³⁰ 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>.

³¹ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

³² 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.

³³ *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.

³⁴ Based on a 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.

³⁵ See 47 CFR § 24.720(b).

licenses in C, D, E, and F Blocks.³⁶

11. 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 standard.

12. *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.³⁷ 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.³⁸ Wireless Telecommunications Carriers (*except Satellite*)³⁹ 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.⁴⁰ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁴¹ Of this number, 2,837 firms employed fewer than 250 employees.⁴² Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

13. According to Commission data as of December 2021, there were approximately 4,211 active *Narrowband PCS* licenses.⁴³ 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.⁴⁴ 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.⁴⁵ Pursuant to these definitions, 7 winning bidders claiming small and very

³⁶ 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>.

³⁷ See 47 CFR § 24.5.

³⁸ *Id.*

³⁹ 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>.

⁴⁰ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁴¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁴² *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.

⁴³ Based on a 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.

⁴⁴ See 47 CFR § 24.321(a)(1)-(2).

small bidding credits won approximately 359 licenses.⁴⁶ One of the winning bidders claiming a small business status classification in these *Narrowband PCS* license auctions had an active license as of December 2021.⁴⁷

14. 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.

15. *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.⁴⁸ Wireless Telecommunications Carriers (*except Satellite*)⁴⁹ 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.⁵⁰ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁵¹ Of this number, 2,837 firms employed fewer than 250 employees.⁵² Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

16. 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

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⁴⁵ *Id.*

⁴⁶ 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>.

⁴⁷ Based on a 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.

⁴⁸ See 47 CFR §§ 27.1 – 27.1607.

⁴⁹ 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>.

⁵⁰ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁵¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312,

<https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁵² *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.

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.⁵³

17. 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.

18. *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)⁵⁴ 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.⁵⁵ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁵⁶ Of this number, 2,837 firms employed fewer than 250 employees.⁵⁷ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

19. According to Commission data as of December 2021, there were approximately 224 active 700 MHz Guard Band licenses.⁵⁸ 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.⁵⁹ 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.⁶⁰ None of the winning bidders claiming a small business status classification in these 700 MHz

⁵³ 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.

⁵⁴ 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>.

⁵⁵ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁵⁶ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁵⁷ *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.

⁵⁸ Based on a 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.

⁵⁹ See 47 CFR § 27.502(a).

⁶⁰ 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

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Guard Band license auctions had an active license as of December 2021.⁶¹

20. 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.

21. *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.⁶² Wireless Telecommunications Carriers (*except* Satellite)⁶³ 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.⁶⁴ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁶⁵ Of this number, 2,837 firms employed fewer than 250 employees.⁶⁶ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

22. According to Commission data as of December 2021, there were approximately 2,824 active Lower 700 MHz Band licenses.⁶⁷ 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

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Bands, Summary, Closing Charts, Licenses by Bidder,

<https://www.fcc.gov/sites/default/files/wireless/auctions/38/charts/38cls2.pdf>.

⁶¹ Based on a 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.

⁶² 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/factsheet>, <https://www.fcc.gov/auction/49/factsheet>, <https://www.fcc.gov/auction/60/factsheet>.

⁶³ 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>.

⁶⁴ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁶⁵ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&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.

⁶⁷ Based on a 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.

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.⁶⁸ In auctions for Lower 700 MHz Band licenses seventy-two winning bidders claiming a small business classification won 329 licenses,⁶⁹ twenty-six winning bidders claiming a small business classification won 214 licenses,⁷⁰ and three winning bidders claiming a small business classification won all five auctioned licenses.⁷¹

23. 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.

24. *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.⁷² 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.⁷³ Wireless Telecommunications Carriers (*except* Satellite)⁷⁴ 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.⁷⁵ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁷⁶ Of that number, 2,837 firms employed fewer than 250 employees.⁷⁷ Thus,

⁶⁸ See 47 CFR § 27.702(a)(1)-(3).

⁶⁹ 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>.

⁷⁰ 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>.

⁷¹ 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>.

⁷² See 47 CFR § 27.4.

⁷³ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 73: 700 MHz Band, Fact Sheet, Permissible Operations, <https://www.fcc.gov/auction/73/factsheet>. 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.

⁷⁴ 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>.

⁷⁵ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁷⁶ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312,

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under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

25. According to Commission data as of December 2021, there were approximately 152 active Upper 700 MHz Band licenses.⁷⁸ The Commission's small business size standards with respect to 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.⁷⁹ Pursuant to these definitions, three winning bidders claiming very small business status won five of the twelve available licenses.⁸⁰

26. 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.

27. 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.⁸¹ Wireless Telecommunications Carriers (except Satellite)⁸² 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.⁸³ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁸⁴ Of this number,

(Continued from previous page) <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.

⁷⁷ *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.

⁷⁸ Based on a 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 that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

⁷⁹ See 47 CFR § 27.502(a).

⁸⁰ 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.

⁸¹ See 47 CFR § 27.1(b).

⁸² 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>.

⁸³ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁸⁴ 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,

(continued....)

2,837 firms employed fewer than 250 employees.⁸⁵ Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

28. According to Commission data as of December 2021, there were approximately 4,472 active AWS licenses.⁸⁶ The Commission's small business size standards with respect to AWS involve 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.⁸⁷ Pursuant to these definitions, 57 winning bidders claiming status as small or very small businesses won 215 of 1,087 licenses.⁸⁸ In the most recent auction of AWS licenses 15 of 37 bidders qualifying for status as small or very small businesses won licenses.⁸⁹

29. 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.

30. *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,"⁹⁰ 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)).⁹¹ Wireless cable operators that use spectrum in the BRS often supplemented with leased channels from the EBS, provide a competitive alternative to wired cable

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<https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>

⁸⁵ *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.

⁸⁶ Based on a 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.

⁸⁷ See 47 CFR §§ 27.1002, 27.1102, 27.1104, 27.1106.

⁸⁸ 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>.

⁸⁹ 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).

⁹⁰ The use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

⁹¹ 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).

and other multichannel video programming distributors. Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels.⁹²

31. 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).⁹³ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.⁹⁴ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁹⁵ Of this number, 2,837 firms employed fewer than 250 employees.⁹⁶ 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 5,869 active BRS and EBS licenses.⁹⁷ 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.⁹⁸ 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.⁹⁹ One of the winning bidders claiming a small business status classification in the BRS license auction has an active licenses as of December 2021.¹⁰⁰

⁹² 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 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.

⁹³ 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>.

⁹⁴ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁹⁵ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁹⁶ *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.

⁹⁷ Based on a 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.

⁹⁸ See 47 CFR § 27.1218(a).

⁹⁹ 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>.

¹⁰⁰ Based on a FCC Universal Licensing System search on December 10, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match (continued....)

33. 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, 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.¹⁰¹ 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. *The Educational Broadcasting Services.* Cable-based educational broadcasting services fall under the broad category of the Wired Telecommunications Carriers industry.¹⁰² The Wired Telecommunications Carriers industry 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.¹⁰³ Transmission facilities may be based on a single technology or a combination of technologies.¹⁰⁴ 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.¹⁰⁵

35. The SBA small business size standard for this industry classifies businesses having 1,500 or fewer employees as small.¹⁰⁶ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.¹⁰⁷ Of this total, 2,964 firms operated with fewer than 250 employees.¹⁰⁸ Thus, under this size standard, the majority of firms in this industry can be considered small. Additionally, according to Commission data as of December 2021, there were 4,477 active EBS

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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.

¹⁰¹ See 47 CFR § 27.1219(a).

¹⁰² See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>. Examples of this category 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 owner operated wired telecommunications infrastructure; direct-to-home satellite system (DTH) services; telecommunications carriers (wired); satellite television distribution systems; and multichannel multipoint distribution services (MMDS).

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

¹⁰⁷ 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: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

¹⁰⁸ *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.

licenses.¹⁰⁹ The Commission estimates that the majority of these licenses are held by non-profit educational institutions and school districts and are likely small entities.

36. *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.¹¹⁰ 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.¹¹¹ The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small.¹¹² U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year.¹¹³ Of this number, 624 firms had fewer than 250 employees.¹¹⁴ Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

37. *Software Publishers.* This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction.¹¹⁵ 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.¹¹⁶ These establishments may design, develop, and publish, or publish only.¹¹⁷ The SBA small business size standard for this industry classifies businesses having annual receipts of \$47 million or less as small.¹¹⁸ U.S. Census Bureau data for 2017 indicate that 7,842 firms in this industry operated for the entire year.¹¹⁹

¹⁰⁹ Based on a 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.

¹¹⁰ 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>.

¹¹¹ *Id.*

¹¹² See 13 CFR § 121.201, NAICS Code 334220.

¹¹³ 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.

¹¹⁴ *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.

¹¹⁵ See U.S. Census Bureau, *2017 NAICS Definition*, “511210 Software Publishers,”

<https://www.census.gov/naics/?input=511210&year=2017&details=511210>.

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ See 13 CFR § 121.201, NAICS Code 511210 (as of 10/1/22 NAICS Code 513210).

¹¹⁹ 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.¹²⁰ Based on this data, we conclude that a majority of firms in this industry are small.

38. *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.

39. The SBA small business size standards and U.S. Census Bureau data classify radio stations¹²¹ and television broadcasting¹²² 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.¹²³ 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.¹²⁴ 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.¹²⁵ 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.

¹²⁰ *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.

¹²¹ See U.S. Census Bureau, *2017 NAICS Definition, "515112 Radio Stations,"* <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

¹²² See U.S. Census Bureau, *2017 NAICS Definition, "515120 Television Broadcasting,"* <https://www.census.gov/naics/?input=515120&year=2017&details=515120>.

¹²³ 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).

¹²⁴ 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 than 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.

¹²⁵ 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.

40. According to Commission data as of December 31, 2024, there were 4,859 licensed noncommercial educational radio and television stations¹²⁶ In addition, the Commission estimates as December 31, 2024, there were 382 licensed noncommercial educational (NCE) television stations, 381 Class A TV stations, 1,801 LPTV stations and 3,091 TV translator stations.¹²⁷ 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.

41. *Radio Stations.* This industry is comprised of “establishments primarily engaged in broadcasting aural programs by radio to the public.”¹²⁸ Programming may originate in their own studio, from an affiliated network, or from external sources.¹²⁹ The SBA small business size standard for this industry classifies firms having \$47 million or less in annual receipts as small.¹³⁰ U.S. Census Bureau data for 2017 show that 2,963 firms operated in this industry during that year.¹³¹ Of this number, 1,879 firms operated with revenue of less than \$25 million per year.¹³² Based on this data and the SBA’s small business size standard, we estimate a majority of such entities are small entities.

42. The Commission estimates that as of December 31, 2024, there were 4,383 licensed commercial AM radio stations and 6,625 licensed commercial FM radio stations, for a combined total of 11,008 commercial radio stations.¹³³ Of this total, 11,007 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 January 7, 2025, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of December 31, 2024, there were 4,477 licensed noncommercial (NCE) FM radio stations, 1,968 low power FM (LPFM) stations, and 8,880 FM translators and boosters.¹³⁴ In addition, the Commission estimates that as of September 30, 2024, there were 4,377 licensed noncommercial (NCE) FM radio stations, 1,967 low power FM (LPFM) stations, and

¹²⁶ *Broadcast Station Totals as of December 31, 2024*, Public Notice, DA 25-11 (rel. Jan. 7, 2025) (*January 2025 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-25-11A1.pdf>.

¹²⁷ *Id.*

¹²⁸ See U.S. Census Bureau, *2017 NAICS Definition, “515112 Radio Stations,”* <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

¹²⁹ *Id.*

¹³⁰ See 13 CFR § 121.201, NAICS Code 515112 (as of 10/1/22 NAICS Code 516110).

¹³¹ 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.

¹³² *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 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.

¹³³ *Broadcast Station Totals as of December 31, 2024*, Public Notice, DA 25-11 (rel. Jan. 7, 2025) (*January 2025 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-25-11A1.pdf>.

¹³⁴ *Id.*

8,894 FM translators and boosters.¹³⁵ 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.

43. We note, however, that in assessing whether a business concern qualifies as "small" under the above definition, business (control) affiliations¹³⁶ 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.

44. *FM Translator Stations and Low Power FM Stations.* FM translators and Low Power FM Stations are classified in the industry for Radio Stations.¹³⁷ The Radio Stations industry comprises establishments primarily engaged in broadcasting aural programs by radio to the public.¹³⁸ Programming may originate in their own studio, from an affiliated network, or from external sources.¹³⁹ The SBA small business size standard for this industry classifies firms having \$47 million or less in annual receipts as small.¹⁴⁰ U.S. Census Bureau data for 2017 show that 2,963 firms operated during that year.¹⁴¹ Of that number, 1,879 firms operated with revenue of less than \$25 million per year.¹⁴² Therefore, based on the SBA's size standard we conclude that the majority of FM Translator stations and Low Power FM Stations

¹³⁵ *Id.*

¹³⁶ "[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).

¹³⁷ See U.S. Census Bureau, *2017 NAICS Definition, "515112 Radio Stations,"* <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ See 13 CFR § 121.201, NAICS Code 515112 (as of 10/1/22 NAICS Code 516110).

¹⁴¹ 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.

¹⁴² *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 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.

are small. Additionally, according to Commission data, as of December 31, 2024, there were 8,880 FM Translator Stations and 1,968 Low Power FM licensed broadcast stations.¹⁴³ 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.

45. *Television Broadcasting.* This industry is comprised of “establishments primarily engaged in broadcasting images together with sound.”¹⁴⁴ These establishments operate television broadcast studios and facilities for the programming and transmission of programs to the public.¹⁴⁵ 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.¹⁴⁶ 2017 U.S. Census Bureau data indicate that 744 firms in this industry operated for the entire year.¹⁴⁷ Of that number, 657 firms had revenue of less than \$25 million per year.¹⁴⁸ Based on this data we estimate that the majority of television broadcasters are small entities under the SBA small business size standard.

46. As of December 31, 2024, there were 1,385 licensed commercial television stations.¹⁴⁹ Of this total, 1,308 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 January 7, 2025, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates as of December 31, 2024, there were 382 licensed noncommercial educational (NCE) television stations, 381 Class A TV stations, 1,801 LPTV stations and 3,091 TV translator stations.¹⁵⁰ 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.

47. *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

¹⁴³ *Broadcast Station Totals as of December 31, 2024*, Public Notice, DA 25-11 (rel. Jan. 7, 2025) (*January 2025 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-25-11A1.pdf>.

¹⁴⁴ See U.S. Census Bureau, *2017 NAICS Definition*, “515120 Television Broadcasting,” <https://www.census.gov/naics/?input=515120&year=2017&details=515120>.

¹⁴⁵ *Id.*

¹⁴⁶ See 13 CFR § 121.201, NAICS Code 515120 (as of 10/1/22 NAICS Code 516120).

¹⁴⁷ 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.

¹⁴⁸ *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.

¹⁴⁹ *Broadcast Station Totals as of December 31, 2024*, Public Notice, DA 25-11 (rel. Jan. 7, 2025) (*January 2025 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-25-11A1.pdf>.

¹⁵⁰ *Id.*

programs on a subscription or fee basis.¹⁵¹ 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.¹⁵² The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.¹⁵³ The SBA small business size standard for this industry classifies firms with annual receipts less than \$47 million as small.¹⁵⁴ Based on U.S. Census Bureau data for 2017, 378 firms operated in this industry during that year.¹⁵⁵ 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.¹⁵⁶ Based on this data, the Commission estimates that a majority of firms in this industry are small.

48. *Cable System Operators (Rate Regulation Standard)*. 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.¹⁵⁷ Based on industry data, there are about 420 cable companies in the U.S.¹⁵⁸ Of these, only seven have more than 400,000 subscribers.¹⁵⁹ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.¹⁶⁰ Based on industry data, there are about 4,139 cable systems (headends) in the U.S.¹⁶¹ Of these, about 639 have more than 15,000 subscribers.¹⁶² Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.

49. *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

¹⁵¹ 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>.

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ See 13 CFR § 121.201, NAICS Code 515210 (as of 10/1/22, NAICS Code 516210).

¹⁵⁵ 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).

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. 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.

¹⁵⁷ 47 CFR § 76.901(d).

¹⁵⁸ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited September 15, 2023).

¹⁵⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited September 15, 2023); S&P Global Market Intelligence, *Multichannel Video Subscriptions, Top 10* (April 2022).

¹⁶⁰ 47 CFR § 76.901(c).

¹⁶¹ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited September 15, 2023).

¹⁶² S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited September 15, 2023).

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.”¹⁶³ 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.¹⁶⁴ Based on industry data, only six cable system operators have more than 498,000 subscribers.¹⁶⁵ 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.¹⁶⁶ 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.

50. *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.”¹⁶⁷ 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.¹⁶⁸ U.S. Census Bureau data for 2017 show that 275 firms in this industry operated for the entire year.¹⁶⁹ Of this number, 242 firms had revenue of less than \$25 million.¹⁷⁰ Consequently, using the SBA’s small business size standard most satellite telecommunications service providers can be considered small entities. The Commission notes however, 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.

¹⁶³ 47 U.S.C. § 543(m)(2).

¹⁶⁴ *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).

¹⁶⁵ 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).

¹⁶⁶ 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).

¹⁶⁷ See U.S. Census Bureau, *2017 NAICS Definition, “517410 Satellite Telecommunications,”* <https://www.census.gov/naics/?input=517410&year=2017&details=517410>.

¹⁶⁸ See 13 CFR § 121.201, NAICS Code 517410.

¹⁶⁹ 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.

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. 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.

51. *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.¹⁷¹ 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.¹⁷² 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.¹⁷³ The SBA small business size standard for this industry classifies firms with annual receipts of \$40 million or less as small.¹⁷⁴ U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.¹⁷⁵ Of those firms, 1,039 had revenue of less than \$25 million.¹⁷⁶ Based on this data, the Commission estimates that the majority of “All Other Telecommunications” firms can be considered small.

52. *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.¹⁷⁷ Transmission facilities may be based on a single technology or combination of technologies.¹⁷⁸ 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.¹⁷⁹ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.¹⁸⁰

53. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.¹⁸¹ U.S. Census Bureau data for 2017 show that 3,054

¹⁷¹ See U.S. Census Bureau, *2017 NAICS Definition*, “517919 All Other Telecommunications,” <https://www.census.gov/naics/?input=517919&year=2017&details=517919>.

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ See 13 CFR § 121.201, NAICS Code 517919 (as of 10/1/22, NAICS Code 517810).

¹⁷⁵ 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.

¹⁷⁶ *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.

¹⁷⁷ See U.S. Census Bureau, *2017 NAICS Definition*, “517311 Wired Telecommunications Carriers,” <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

¹⁷⁸ *Id.*

¹⁷⁹ 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).

¹⁸⁰ *Id.*

¹⁸¹ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

firms operated in this industry for the entire year.¹⁸² Of this number, 2,964 firms operated with fewer than 250 employees.¹⁸³ 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.¹⁸⁴ DIRECTV and DISH Network both exceed the SBA size standard for 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.

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

54. The Commission does not expect the actions proposed in the *Further Notice* to impose additional reporting or recordkeeping requirements for small entities. However, small and other Participating CMS providers could be subject to compliance obligations based on the Commission's inquiries in the *Further Notice*. The Commission explores and inquires whether to require Participating CMS Providers to offer their subscribers the option to receive Public Safety Messages silently by default, or to receive them silently only during certain hours of the day. We also explore whether Public Safety Messages should be associated with a unique attention signal that is different from the attention signal associated with other types of WEA messages. We specifically ask whether there are Participating CMS Providers that have associated a unique attention signal or vibration cadence with Public Safety Messages in light of the flexibility the Commission gave Participating CMS Providers in 2016 to customize how their subscribers receive Public Safety Messages. The Commission also seeks comment on whether subscribers should be empowered to further customize their receipt of WEA messages, such as by silencing the attention signal or vibration cadence for other alert classes.

55. The Commission also asks what actions can be taken by Participating CMS Providers, mobile device equipment manufacturers, or operating system developers regarding mobile device WEA settings, or the way in which users are prompted to review those settings to promote careful consideration of the options, and seeks information on how Participating CMS Providers are implementing our requirement that they provide their subscribers with a clear indication of what each opt out decision means as required in 47 CFR § 10.280(b) of our rules. Further, we inquire whether revising the Public Safety Message classification or prohibiting certain user interface designs that incent thoughtless opt out would impose costs on mobile device equipment manufacturers or Participating CMS Providers, and what actions can be taken to minimize any compliance burdens that may occur for small entities.

56. At this time the record does not include sufficient information to allow the Commission to quantify the costs of compliance for small entities, including whether it will be necessary for small entities to hire professionals to comply with the proposals and matters upon which we seek comment in the *Further Notice*. The Commission does not believe that our proposed modification to the definition of a Public Safety Message should impose costs for small and other entities since such a change would not require changes to any systems or software to enable compliance. However, we seek comment on, quantification of, and recommendations minimizing for small entities any costs related to the discussions in the *Further Notice*.

¹⁸² 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: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

¹⁸³ *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.

¹⁸⁴ 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).

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

57. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance 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.”¹⁸⁵

58. The Commission’s proposal to broaden the scope of acceptable use cases for the Public Safety Message classification of WEA to reduce the rate at which consumers opt out of WEA in the *Further Notice* includes consideration of whether to amend the definition of a Public Safety Message to incorporate criteria for urgency, severity, and certainty, similar to the approach with Imminent Threat Alerts. In the alternative, we inquire whether to remove most or all limitations on the use of the Public Safety Message WEA classification. Consistent with our statement about the posture of alert originators in the *Seventh Report and Order* with this *Further Notice*, the Commission further considers whether alert originators best positioned to make the difficult choices about the use of WEA in a given certain circumstance, and whether it is important for alert originators to have “maximum flexibility” about the scope of events for which WEA is an appropriate tool. Additionally, we consider whether implementation of the right to opt out of WEA messages with certain mobile device operating systems’ increases the incidence of consumer opt out, and whether the likelihood that subscribers opt out of WEA is increase when mobile device user interfaces are designed to repeatedly and prominently present users with the option to opt out of WEA, or whenever a WEA is received it includes an option to opt out.

59. The Commission has taken steps to minimize the impact of the proposals in the *Further Notice* as a general matter, and specifically targeting small entities. Moreover, we believe that the proposals to improve and enhance WEA in the *Further Notice*, are the most efficient and least burdensome approach. In our efforts to reduce the consumer opt out rate of WEA and thereby increase the effectiveness WEA we are mindful that small and other Participating CMRS providers could incur costs with certain matters discussed in the *Further Notice* such as revising the Public Safety Message classification or prohibiting certain user interface designs that may facilitate consumer opt out WEA with relatively little consideration. We mention above in section D that no systems or software changes would be required should we adopt our proposal to revise the definition a Public Safety Message, therefore there should not be an economic impact or compliance cost for small entities. Nevertheless, the Commission seeks comment and compliance cost information on this proposal, including recommendations to reduce any compliance burdens for small entities.

60. The Commission expects to consider more fully the economic impact on small entities following its review of comments filed in response to the *Further Notice*, including costs analysis information. The Commission’s evaluation of the comments filed in this proceeding will shape the final alternatives we consider, the final conclusions we reach, and any final actions we ultimately take to minimize the economic impact and burdens that small entities may incur from any rules we adopt in this proceeding.

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

61. None.

¹⁸⁵ 5 U.S.C. § 603(c)(1)-(4).

APPENDIX E

List of Commenters

Comments

Alliance for Telecommunications Industry Solutions (ATIS)
American Foundation for the Blind, American Council of the Blind, National Disability Rights Network (Advocacy Groups for the Blind)
Association of Public-Safety Communications Officials International, Inc. (APCO)
AT&T Services, Inc. (AT&T)
Competitive Carriers Association (CCA)
County of San Diego Department of Emergency Services
County of Sonoma, California Department of Emergency Management and the City of Santa Rosa, California Fire Department.
DeMarcus Strange
Disability and Communications Access Board (DCAB)
Federal Emergency Management Agency, Integrated Public Alert and Warning System Program Office (FEMA IPAWS)
Franklin W. Bell
Jeanette Sutton
King County Emergency Management
Language and Accessibility in Alert and Warning Workgroup (LAAWW)
Larimer Emergency Telephone Authority, Jefferson County Emergency Communications Authority, Boulder Office of Disaster Management, Boulder County Communications, Boulder County Sheriff's Office, Arapahoe County Office of Emergency Management, Arapahoe, County 911 Authority, Adams County E-911 Emergency Telephone Service Authority (Colorado Alerting Authorities)
Letitia James, New York State Attorney General, Philip J. Weiser, Colorado Attorney General, William Tong, Connecticut Attorney General, Brian L. Schwalb, District of Columbia Attorney General, Kwame Raoul, Illinois Attorney General, Anthony G. Brown, Maryland Attorney General, Andrea Joy Campbell, Massachusetts Attorney General, Keith Ellison, Minnesota Attorney General, Aaron D. Ford, Nevada Attorney General, Matthew J. Platkin, New Jersey Attorney General, Raúl Torrez, New Mexico Attorney General, Ellen F. Rosenblum, Oregon Attorney General, Peter Neronha, Rhode Island Attorney General, Charity R. Clark, Vermont Attorney General, Bob Ferguson, Washington Attorney General, Joshua L. Kaul, Wisconsin Attorney General, Hon. Sylvia O. Hinds-Radix, New York City Corporation Counsel (Attorneys General)
Lilt, Inc.
Michigan State Police Emergency Management and Homeland Security Division's Operations Management Section (Michigan State Police OMS)
Multimedia Telecommunications and Internet Council
The National Oceanic and Atmospheric Administration's National Weather Service (NOAA NWS)
New York State Division of Homeland Security and Emergency Services (NYS DHSES)
NYC Emergency Management (NYCEM)
Regional Disaster Preparedness Organization of the Portland-Vancouver Metro Region (Portland Regional Disaster Preparedness Organization or PRDPO)
State of Oregon's OR-Alert Governance Committee
Telecommunications for the Deaf and Hard of Hearing, Inc., Communication Service for the Deaf, Hearing Loss Association of America, National Association of the Deaf, Coalition on Inclusive Emergency Planning, Rehabilitation Engineering Research Center on Technology for the Deaf and

Hard of Hearing, Gallaudet University (Accessibility Groups and Academics)
The Cellular Telecommunications and Internet Association (CTIA)
The National Oceanic and Atmospheric Administration's National Weather Service (NOAA NWS)
T-Mobile USA, Inc.
United States Geological Survey (USGS)
Verizon

Replies

Apple, Inc.
ATIS
CTIA
Electronic Frontier Foundation
New York State Public Service Commission (NYSPSC)
Southern Communications Services, Inc. d/b/a Southern Linc
Telecommunications for the Deaf and Hard of Hearing, Inc., Communication Service for the Deaf, Hearing Loss Association of America, National Association of the Deaf, Coalition on Inclusive Emergency Planning, Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing, Gallaudet University (Accessibility Organizations and Academics)
The National Oceanic and Atmospheric Administration's National Weather Service (NOAA NWS)
T-Mobile USA, Inc.
Twin Cities Public Television, Inc.
Verizon

**STATEMENT OF
CHAIRMAN BRENDAN CARR**

Re: *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, Seventh Report and Order and Eleventh Further Notice of Proposed Rulemaking (Feb. 27, 2025).

Trout, Louisiana is a town of just about a hundred people. It's located right in the heart of the state. Just a few years ago, that's where Jamie Munson was at home with her family. It was almost midnight when a wireless emergency alert suddenly sounded from her mobile phone. It was a tornado warning. Jamie quickly got up and got her family out of the area. About ten minutes later, an EF-2 Tornado ripped through her neighborhood. The next morning when Jamie went back, she found that her home had been flipped upside down and completely destroyed. The decision by local officials to send that audible WEA message in the middle of the night saved lives.

Flash forward a few years and a few states down the Gulf of America to Florida. That's when residents were startled awake at 4:45 AM by the jarring sound of another wireless emergency alert. But there was no danger. Local officials intended to send out a test message but instead they woke up a lot of people that were not quite ready to start their day. The sudden wake-up call frustrated residents leading many to ask how they could opt out of receiving emergency alerts altogether.

There's no question that wireless emergency alerts are a life-saving tool. And by now, most consumers are familiar with the buzz of these alerts. They are unexpected and unmistakable. The alerts, after all, are meant to grab someone's attention.

But the attention-grabbing sound can have unintended consequences. It is not just an inadvertent wake-up call, either. There are some emergencies—like an active shooter—where local public safety officials might want to send out an alert without the loud noises that could identify the location of someone seeking shelter.

So today, we take action to ensure that alert originators have more choices when they decide to send out alerts. Specifically, today's decision lets alert originators and emergency managers on the ground decide whether to send an alert with or without a loud signal, depending on their judgment and expertise. In addition, today's item gives consumers more choice and flexibility over the way they receive the alerts, which will reduce consumer opt-out and increase public safety by ensuring that consumers continue to receive them.

I would like to thank Steven Carpenter, Leon Kenworthy, David Kirschner, Zenji Nakazawa, Austin Randazzo, Bradley Rosen, and James Wiley for their work on this item as well as staff from the Consumer and Governmental Affairs Bureau, Enforcement Bureau, Office of Economics and Analytics, Wireless Telecommunications Bureau, and the Office of General Counsel.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *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, Seventh Report and Order and Eleventh Further Notice of Proposed Rulemaking (Feb. 27, 2025).

Wireless Emergency Alerts (WEA) are instrumental in disseminating life-saving information. Whether it's providing real-time updates to thousands of people during a natural disaster, guiding people to evacuate by sending timely alerts about changing conditions, or simply keeping people informed about the status of a threat, these alerts play a critical role in keeping the public safe during emergencies.

But we have seen signs for some time now about alert fatigue, diluting the effectiveness of alerts and even leading consumers to opt out of receiving them. We hear you, and so today I am pleased to approve this item that will require wireless providers participating in WEA to support the ability of alert originators to send silent alerts. This is not only a strategic response to the consumer's concerns, but also an effective solution for sending emergency alerts in situations where an audio signal can actually cause harm.

Unfortunately, this country knows all too well the prevalence of active shooter environments. From 2019 to 2023, the FBI reported 229 active shooter incidents in the United States.¹ That is 89% more than the previous five years.² This is, of course, a broader issue but I hold out hope that the Commission's action today will help increase the safety of people who find themselves in these dangerous situations without drawing attention to themselves.

Additionally, I am pleased that we maintain the accessibility of these alerts by allowing consumers to override the silent alert feature by enabling the common vibration cadence to ensure that people with disabilities do not miss urgent alerts. Thank you to the Chair for working with me to ensure we recognize and address the needs of people with disabilities, particularly by not presuming they are aware of all their mobile device settings.

Today we also finally define what it means for a device to be a "WEA-capable device." Consumers will now have the clarity and transparency they need to know whether their device has the capability to deliver life-saving alerts in a way that is accessible to them.

Earlier this month, I was able to join local public safety officials for a tour of areas impacted by the LA wildfires. What I saw was devastating; entire neighborhoods leveled, leaving thousands of families displaced. In most of the areas we toured, I could still smell smoke.

On our tour, I was joined by Chief Zagaris or Chief Z as most know him from the Western Fire Chiefs Association as well as Cal Fire Battalion Chief Jared Lees, Fire Captain Trinidad Rodriguez, and AT&T FirstNet's Lily Campbell. Taken together, these public safety professionals had decades of experience and were instrumental in containing the fires.

¹ FBI, *FBI Releases 2023 Active Shooter Incidents in the United States Report* (June 24, 2024), <https://www.fbi.gov/news/press-releases/fbi-releases-2023-active-shooter-incidents-in-the-united-states-report>.

² *Id.*

We began at the Will Rogers State Park Incident Command Post. This critical operations hub served as the nerve center for the coordinated response. While networks were down, the Command Post orchestrated deployable asset placement to provide connectivity where it was needed most. Leveraging a mixture of cell on wheels, satellite connectivity and fixed wireless links, first responders were able to restore connectivity to areas where the networks had been destroyed.

One of our first stops on the tour was the Palisades neighborhood. Before the fire there were approximately 10,000 homes; virtually all of them have been destroyed. Over the course of a few hours, the fires progressed from small blazes to engulfing full blocks in minutes.

Overall, the LA fires swept through over 47,000 acres, damaging and destroying over 16,000 structures, resulting in over 29 deaths.³ There are simply no words in language to convey the devastation that I saw. And of course I only saw a certain piece. And while there is no replacing the lives lost or the homes destroyed, it's impossible to overstate the value of WEA in life-threatening situations, helping people make life-saving decisions. I want to take this time to thank FEMA and the local agencies for their collaborative efforts in facilitating WEA during such an unprecedented time. I also want to thank the courageous fire fighters who risked their lives to combat the fires and the dedicated network restoration teams who worked tirelessly to restore communication services.

I am looking forward to seeing the record develop from the Further Notice, specifically on how we can improve the way we communicate in emergencies to reduce consumer opt-out and alert-fatigue, while also maintaining inclusivity and accessibility for all. I want to particularly thank the Chair's office for incorporating my edits to include key questions in the Further Notice that address how the Commission can improve the timeliness and accuracy of WEA alerts, especially in light of the issues revealed during the LA fires. Thank you to the Public Safety and Homeland Security Bureau for your work on this item.

³ Antonio Pequeño IV, *California Fires: Here's The Data Behind The Historic Blazes That Have Burned Through 40,000 Acres*, Forbes (Jan. 21, 2025), <https://www.forbes.com/sites/antoniopequenoiv/2025/01/21/california-fires-heres-the-data-behind-the-historic-blazes-that-have-burned-through-40000-acres/>. Tim Stelloh, et al., *California wildfires: What we know about L.A.-area fires, what caused them, who is affected and more*, NBC News (Jan. 17, 2025), <https://www.nbcnews.com/news/us-news/california-wildfires-what-we-know-palisades-eaton-los-angeles-rcna188239>. See also California Department of Forestry and Fire Protection, *Current Emergency Incidents*, <https://www.fire.ca.gov/incidents> (last visited Feb. 21, 2025).

**STATEMENT OF
COMMISSIONER ANNA M. GOMEZ**

Re: *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, Seventh Report and Order and Eleventh Further Notice of Proposed Rulemaking (Feb. 27, 2025).

I am happy to see we are acting on an issue that will directly impact the lives of many Americans and has strong, bipartisan support. I want to thank the Public Safety Bureau for their work on this matter, and the Office of the Chairman for working with my office and Commissioner Starks to ensure that consumers are aware of the changes that are coming to devices marketed as "WEA-capable" so we can minimize confusion that may lead some consumers to believe will not have the ability to receive alerts without a new device.

And I also want to thank the Chairman for helping us highlight, in Footnote 95, that this new definition will not only include Spanish-language alerts but soon will also support the multilingual alert templates that we adopted on a bipartisan basis earlier this year, expanding alert access to 12 additional languages and American Sign Language.⁵³⁷ I am looking forward to more of this kind of work at the Commission.

⁵³⁷ *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, Report and Order, DA-25-12 (2025).