

FCC FACT SHEET*
Implementation of the National Suicide Hotline Act of 2018
Second Further Notice of Proposed Rulemaking – WC Docket No. 18-336

Background: The 988 Suicide & Crisis Lifeline (988 Lifeline or Lifeline) is a vital component of the nationwide response to the ongoing suicide and mental health crisis in the United States. Over the last several years, the FCC has acted to improve access to the 988 Lifeline’s critical life-saving services by designating 988 as the 3-digit dialing number for callers to reach the Lifeline and by requiring covered text providers to route texts to 988 to the Lifeline. Mental health and crisis counselors highlight the importance of connecting callers to local crisis counselors. However, based on the original design of the 988 Lifeline system, callers may not receive support from local crisis centers.

The 988 Lifeline system currently routes calls to crisis centers based on a caller’s area code and exchange, which presents challenges for calls to the 988 Lifeline that originate from wireless phones, and many callers use phones with area codes that do not match their physical locations. This *Second Further Notice of Proposed Rulemaking*, if adopted, would propose to require the implementation of one or more georouting solutions for wireless calls to the 988 Lifeline to ensure that calls are routed based on the geographic location for the origin of the call, rather than the area code and exchange associated with a wireless phone.

What the *Second Further Notice of Proposed Rulemaking* Would Do:

- Propose to adopt rules requiring wireless carriers to implement a georouting solution for calls to the 988 Lifeline.
- Seek comment on georouting solutions that could fall within the scope of a georouting mandate and identify any work remaining to implement a georouting solution in a timely manner.
- Seek comment on any technical specifications and limitations, required routing data and transmission methods, necessary infrastructure and system changes or upgrades, testing requirements, costs and benefits, and timelines for deploying a georouting solution.
- Seek comment on routing challenges and any potential or needed georouting solutions for non-wireless calls and texts to the 988 Lifeline.
- Seek comment on the FCC’s authority to adopt rules requiring wireless carriers to implement one or more georouting solutions for calls to the 988 Lifeline.

* This document is being released as part of a “permit-but-disclose” proceeding. Any presentations or views on the subject expressed to the Commission or its staff, including by email, must be filed in WC Docket No. 18-336, which may be accessed via the Electronic Comment Filing System (<http://www.fcc.gov/ecfs>). Before filing, participants should familiarize themselves with the Commission’s ex parte rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission’s Meeting. See 47 CFR § 1.1200 et seq.

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

In the Matter of)
Implementation of the National Suicide Hotline) WC Docket No. 18-336
Act of 2018)

SECOND FURTHER NOTICE OF PROPOSED RULEMAKING*

Adopted: []

Released: []

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

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

By the Commission:

TABLE OF CONTENTS

I. INTRODUCTION..... 1
II. BACKGROUND..... 5
A. How Calls to 988 are Currently Routed..... 7
B. Initial Efforts to Improve Routing for Calls to 988 From Wireless Phones 8
III. DISCUSSION 13
A. Need to Mandate Georouting for Wireless Calls to the 988 Lifeline 14
B. Potential Georouting Solutions for Wireless Calls to the 988 Lifeline..... 16
C. Legal Authority..... 32
IV. PROCEDURAL MATTERS..... 36
V. ORDERING CLAUSES..... 45
APPENDIX A – INITIAL REGULATORY FLEXIBILITY ANALYSIS

I. INTRODUCTION

1. Today, we take an important step toward improving access to the critical, life-saving services provided by the 988 Suicide & Crisis Lifeline (988 Lifeline). We continue to face a suicide and mental health crisis that profoundly impacts many people living throughout the United States. According to the Centers for Disease Control and Prevention (CDC), suicide was a leading cause of death in the

* This document has been circulated for tentative consideration by the Commission at its April open meeting. The issues referenced in this document and the Commission’s ultimate resolution of those issues remain under consideration and subject to change. This document does not constitute any official action by the Commission. However, the Chairwoman has determined that, in the interest of promoting the public’s ability to understand the nature and scope of issues under consideration, the public interest would be served by making this document publicly available. The FCC’s ex parte rules apply and presentations are subject to “permit-but-disclose” ex parte rules. See, e.g., 47 C.F.R. §§ 1.1206, 1.1200(a). Participants in this proceeding should familiarize themselves with the Commission’s ex parte rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission’s meeting. See 47 CFR §§ 1.1200(a), 1.1203.

United States in 2021, resulting in over 48,000 deaths.¹ The National Institute of Mental Health estimated that one in five U.S. adults experienced mental illnesses that ranged in severity in 2021.² Over the last several years, the Commission has acted to make it easier for those in crisis to get help by designating and implementing 988 as the easy-to-remember, 3-digit dialing number for the 988 Lifeline.³ Since 2022, those in need of support can call or text 988 and be connected with trained counselors to get the help they need.

2. Based on the original design of the 988 Lifeline system, that help may not, however, be local. Currently, when a caller dials 988, the call is routed to a crisis center based on the caller's area code and exchange.⁴ When the 988 Lifeline was originally established as a ten-digit toll free number in 2005,⁵ most Americans still had landlines.⁶ Trends have since shifted, with more Americans relying on wireless phones to place calls.⁷ This presents a challenge for the 988 Lifeline's area code-based routing system when a caller using a wireless phone dials 988 from outside the area code associated with that phone. For example, if the wireless caller has a Virginia 703 area code, but lives or is temporarily located in California, the caller will be routed to a crisis center in Virginia rather than California. Mental health and crisis counseling experts have opined that connecting callers in crisis with local crisis centers is important to connect life-saving services to those in need of public health and safety resources and enable them to speak with local counselors who may be more familiar with cultural issues or community

¹ See Centers for Disease Control and Prevention, *Suicide Data and Statistics* (Nov. 29, 2023), <https://www.cdc.gov/suicide/suicide-data-statistics.html>. According to the CDC, provisional data from 2022 also shows that deaths from suicide increased by 2.6% between 2021 to 2022. *Id.*

² See National Institute of Mental Health, *Mental Illness* (Mar. 2023), <https://www.nimh.nih.gov/health/statistics/mental-illness> (citing data from Substance Abuse Mental Health Services Administration, Key Substance Use and Mental Health Indicators in the United States: Results from the 2021 National Survey on Drug Use and Health, <https://www.samhsa.gov/data/sites/default/files/reports/rpt39443/2021NSDUHFFRRev010323.pdf>).

³ *Implementation of the National Suicide Hotline Improvement Act of 2018*, WC Docket No. 18-336, Report and Order, 35 FCC Rcd 7373, 7385-92, 7395-97, paras. 28-36 and 41-45 (2020) (*988 Report and Order*); *Implementation of the National Suicide Hotline Improvement Act of 2018*, WC Docket No. 18-336, Second Report and Order, 36 FCC Rcd 16901, 16903, para. 2 (2021) (*Text to 988 Second Report and Order*).

⁴ See Substance Abuse and Mental Health Services Administration (SAMHSA), *988 Frequently Asked Questions, FAQs About Privacy, Call Routing, and Network Functioning*, <https://www.samhsa.gov/find-help/988/faqs> (last visited Mar. 6, 2024).

⁵ 988 Suicide & Crisis Lifeline, *The Lifeline's History*, <https://www.samhsa.gov/sites/default/files/988-timeline.pdf> (last visited Mar. 7, 2024) (noting that the National Suicide Prevention Lifeline launched with the number 1-800-273-8255 (TALK) in 2005).

⁶ See *Wireline Competition Bureau and Wireless Telecommunications Bureau Seek Comment on Facilitating Access to 211 Via Wi-Fi Calling*, CC Docket No. 92-105, WC Docket Nos. 18-336 and 21-180, Public Notice, 36 FCC Rcd 7460, 7461 (WCB 2021) (*Wi-Fi Calling Public Notice*) (“[W]hen the Commission designated 211 for nationwide community information and referral services more than 20 years ago, most American consumers called 211 over traditional landline telephones and reached their local 211 call centers over circuit-switched networks. Today, however, more consumers have cell phones than landline telephones, so many consumers attempt to reach 211 services with mobile devices over either their wireless provider's cellular network or a public or private Wi-Fi network.”).

⁷ CTIA estimates that the total number of wireless subscriber connections increased from approximately 207 million in 2005 to 523 million in 2022. See CTIA, *Summary of CTIA's Annual Wireless Industry Survey*, <https://api.ctia.org/wp-content/uploads/2022/09/Summary-of-CTIAs-Wireless-Industry-Survey-2022.pdf> (last visited Mar. 6, 2024) (noting the estimated number of wireless connections for 2005); CTIA, *The Wireless Industry, Industry Data, Number of Wireless Connections*, <https://www.ctia.org/the-wireless-industry/infographics-library> (last visited Mar. 6, 2024) (noting the estimated number of wireless connections for 2022). See also Pew Research Center, *Mobile Fact Sheet* (Jan. 31, 2024), <https://www.pewresearch.org/internet/fact-sheet/mobile/> (noting “[t]he vast majority of Americans – 97% – now own a cellphone of some kind”).

stressors in the caller's area.⁸ This has highlighted a need to improve the routing of wireless calls to 988 so callers are connected to crisis centers based on the caller's location—a process known as georouting⁹—irrespective of the area code associated with the wireless phone.¹⁰

3. This past summer, the Substance Abuse and Mental Health Services Administration (SAMHSA), as well as the administrator of the 988 Lifeline, Vibrant Emotional Health (Vibrant or Lifeline Administrator), and other industry partners, successfully completed a proof of concept trial of a potential solution for routing wireless calls to geographically appropriate crisis centers.¹¹ The proof of concept was conducted using calls in a testing environment,¹² and successfully routed calls from wireless handsets to the nearest crisis call center based on the location of the cell tower that originates the call.¹³ Based on the success of this proof of concept, Federal Communications Commission (Commission) Chairwoman Rosenworcel issued letters to the wireless industry encouraging them to take steps to identify and develop a georouting solution for the 988 Lifeline that could be deployed on wireless networks within a reasonable time.¹⁴

4. In this *Second Further Notice of Proposed Rulemaking*, we continue the Commission's work to provide meaningful access to the 988 Lifeline by proposing that we adopt rules requiring wireless carriers to implement a georouting solution for calls to the 988 Lifeline. We acknowledge and commend the work that SAMHSA and the Lifeline Administrator have done to date to explore and test solutions, and seek to build on that effort by developing a record that will clarify the georouting solutions that have been proposed, establish the work that remains for a solution to be deployed on wireless networks, and

⁸ See *infra* para. 14.

⁹ Georouting is distinct from geolocation, and does not involve the transmission of precise location information with calls. The distinctions between georouting and geolocation are discussed in Section II.B, below.

¹⁰ See, e.g., American Foundation for Suicide Prevention Comments, WC Docket No. 18-336, at 1-2 (rec. Dec. 28, 2020) (American Foundation for Suicide Prevention 988 Geolocation Comments); Crisis Response Network Comments, WC Docket No. 18-336, at 1 (rec. Dec. 15, 2020) (Crisis Response Network 988 Geolocation Comments); Mental Health America Comments, WC Docket No. 18-336, at 1 (rec. Dec. 18, 2020) (Mental Health America 988 Geolocation Comments); Vibrant Emotional Health Comments, WC Docket No. 18-336, at 1-2 (rec. Dec. 21, 2020) (Vibrant 988 Geolocation Comments); see also Steve Scauzillo, *Bill would fix 988 suicide lifeline by connecting callers to resources closer to them*, Los Angeles Daily News (Aug. 14, 2023), <https://www.dailynews.com/2023/08/12/calling-988-to-talk-to-someone-about-suicide-the-connection-could-be-way-off/> (expressing concern that 988 calls are routed based on area code, which may result in a caller speaking with a counselor “thousands of miles away who is unaware of the caller’s local mental health crisis services”).

¹¹ See Press Release, Intrado Life & Safety, Intrado’s 988 Innovation Ensures Callers in Crisis Reach Local Mental Health Support (Oct. 18, 2023), <https://www.intrado.com/news-releases/intrados-988-innovation-ensures-callers-in-crisis-reach-local-mental-health-support> (Intrado Life & Safety Press Release); SAMHSA, *988 Frequently Asked Questions, What work is being done on georouting?*, <https://www.samhsa.gov/find-help/988/faqs> (last visited Mar. 6, 2024) (SAMHSA Georouting FAQ).

¹² See Letter from Jessica Rosenworcel, Chairwoman, FCC, to John Stankey, Chief Executive Officer, AT&T, Inc., et al. (Sept. 28, 2023); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Tim Donovan, President & CEO, Competitive Carriers Association, et al. (Sept. 28, 2023); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Meredith Attwell Baker, President and CEO, CTIA, et al. (Sept. 28, 2023); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Jake Baldwin, President, Rural Wireless Association, et al. (Sept. 28, 2023); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Mike Sievert, President and Chief Executive Officer, T-Mobile, et al. (Sept. 28, 2023); Letter from Jessica Rosenworcel, Chairwoman, FCC, to Hans Vestberg, Chairman and Chief Executive Officer, Verizon, et al. (Sept. 28, 2023) (hereinafter *Chairwoman’s September 28, 2023 Letters*). See also Intrado Life & Safety Press Release; SAMHSA Georouting FAQ.

¹³ See Intrado Life & Safety Press Release; SAMHSA Georouting FAQ.

¹⁴ See Press Release, FCC, Chairwoman Calls on Wireless Industry and Related Associations to Explore 988 Routing Solutions (Sept. 28, 2023), <https://docs.fcc.gov/public/attachments/DOC-397339A1.pdf>.

help us consider how to proceed towards requiring wireless carriers to implement one or more solutions. In so doing, we acknowledge that any georouting solution for 988 will require cooperation between the wireless carriers¹⁵ originating calls and the Lifeline Administrator that controls the call routing platform that receives them to implement a complete end-to-end solution. We, therefore, undertake a holistic review to ensure that any georouting solution deployed is compatible with the needs and systems of the 988 Lifeline, as determined by SAMHSA, and successfully connects callers in crisis with the local support they need.

II. BACKGROUND

5. The 988 Suicide & Crisis Lifeline is a 24/7 hotline that can be accessed by dialing 9-8-8 or by directly dialing a toll free access number (1-800-273-TALK). The 988 Lifeline is overseen by SAMHSA, a public health agency housed in the U.S. Department of Health and Human Services.¹⁶ The 988 Lifeline is administered by Vibrant, a New York-based mental health non-profit, pursuant to the terms of a grant awarded by SAMHSA.¹⁷ The 988 Lifeline is “available to people in suicidal crisis or emotional distress at any time of the day or night.”¹⁸

6. Responding to a Congressional directive,¹⁹ the Commission adopted rules establishing 988 as the three-digit dialing code for the national suicide prevention and mental health crisis hotline and required all telecommunications carriers, interconnected Voice over Internet Protocol (VoIP) providers, and one-way VoIP providers (those that permit users generally to receive calls from, or terminate calls to, the public switched telephone network) to make any network changes necessary to ensure that people were able to dial 988 to reach the 988 Lifeline by July 16, 2022.²⁰ The Commission subsequently expanded the availability of critical mental health and crisis counseling resources by requiring covered text providers²¹ to allow callers to reach the 988 Lifeline by texting 988.²² Calls and covered text messages²³ to 988 are connected to trained counselors who “assess callers for suicidal risk, provide crisis counseling, crisis intervention, engage emergency services when necessary, and offer referrals to mental

¹⁵ In this *Second Further Notice of Proposed Rulemaking*, we use “wireless carrier” to mean Commercial Mobile Radio Service (CMRS) provider as defined in 47 CFR § 9.3.

¹⁶ See SAMHSA, *Frequently Asked Questions, Are 988/the Lifeline/the National Suicide Prevention Lifeline/Hotline the same?*, <https://www.samhsa.gov/find-help/988/faqs> (last visited Mar. 6, 2024).

¹⁷ See Press Release, SAMHSA Awards Vibrant Emotional Health the Grant to Administer 988 Dialing Code for the National Suicide Prevention Lifeline (rel. June 16, 2021), <https://www.samhsa.gov/newsroom/press-announcements/202106161430>; see also SAMHSA, *Cooperative Agreement for National Suicide Prevention and Disaster Helpline*, https://www.samhsa.gov/grants/grants-dashboard?f%5B0%5D=by_award_fy%3A2021&f%5B1%5D=by_nofo_number%3ASM-21-005#awards-tab (last visited Mar. 6, 2024).

¹⁸ See 988 Suicide & Crisis Lifeline, *Our Network*, <https://988lifeline.org/our-network/> (last visited Mar. 6, 2024) (explaining that the 988 Lifeline “is a national network of over 200 local crisis centers, allowing the Lifeline to provide local resources with innovative best practices and quality care across the United States”).

¹⁹ See National Suicide Hotline Designation Act of 2020, Pub. L. No. 116-172, 134 Stat. 832 § 3 (2020) (adding subsection (e)(4) to section 251 of the Communications Act of 1934, as amended (the Act)).

²⁰ 47 CFR § 52.200; *988 Report and Order*, 35 FCC Rcd at 7385-92, 7395-97, paras. 28-36 and 41-45.

²¹ For purposes of the 988 rules, a covered text provider “includes all CMRS providers as well as all providers of interconnected text messaging services that enable consumers to send text messages to and receive text messages from all or substantially all text-capable U.S. telephone numbers, including through the use of applications downloaded or otherwise installed on mobile phones.” 47 CFR § 52.201(c)(3).

²² *Text to 988 Second Report and Order*, 36 FCC Rcd at 16903, para. 2; see also 47 CFR § 52.201.

²³ A “[c]overed 988 text message means a 988 text message in SMS format and any other format that the Wireline Competition Bureau has determined must be supported by covered text providers.” 47 CFR § 52.201(c)(2).

health and/or substance use services.”²⁴ The 988 Lifeline received over 23 million calls from people in distress looking for support between its inception in 2005 and 2021.²⁵ Since the nationwide transition to 988 in July 2022, the 988 Lifeline has received and routed 8.6 million calls, texts, and chats.²⁶ In December 2023 alone, 309,756 calls, 55,663 chats, and 80,026 texts (totaling 445,445 contacts) were routed to a 988 Lifeline crisis call center.²⁷

A. How Calls to 988 are Currently Routed

7. Under current Commission rules, calls to 988 must first be routed to the existing toll free ten-digit access number for the 988 Lifeline (1-800-273-8255).²⁸ When the Commission established 988, it found that such routing would be the most efficient means to enable 988 callers to reach the existing national suicide prevention hotline, and explained that routing to the 988 Lifeline’s toll free number provided “considerable benefits” both for covered providers and the 988 Lifeline itself, which would enable faster implementation, lower costs to maintain 988 routing, and better service.²⁹ Calls to the 988 Lifeline’s toll free access number are terminated to a single aggregation point, specifically, an interactive voice response (IVR) where callers are provided with a menu of connection options. Veterans, service members, and their families may connect to the Veterans Crisis Line operated by the Department of Veterans Affairs by pressing “1.”³⁰ Callers may also reach a Spanish language line by pressing “2” and specialized LGBTQI+ services by pressing “3.”³¹ All other calls are routed to one of over 200 regional crisis centers based on the area code and exchange of the caller’s telephone number supplied by the originating service provider.³² In the event that a center is unable to answer, the call is routed to the Lifeline’s national backup network.³³ Routing to the appropriate crisis call center is handled by a centralized routing system overseen by the Lifeline Administrator and supported by a grant from

²⁴ *The Substance Abuse and Mental Health Services Administration Report to the Federal Communications Commission*, WC Docket No. 18-336, CC Docket No. 92-105, at 5 (Feb. 7, 2019).

²⁵ 988 Suicide & Crisis Lifeline, *Suicide Prevention By the Numbers*, <https://988lifeline.org/by-the-numbers/> (last visited Mar. 11, 2024).

²⁶ See SAMHSA, *988 Lifeline Performance Metrics*, <https://www.samhsa.gov/find-help/988/performance-metrics> (last visited Mar. 6, 2024).

²⁷ *Id.*

²⁸ See 47 CFR § 52.200(b). The Commission’s rules also require covered 988 text messages to be routed to the 988 Lifeline’s current toll free ten-digit access number. 47 CFR § 52.201(a). The Wireline Competition Bureau granted a waiver to allow covered text providers to route covered 988 text messages to the 988 Lifeline using the short code protocol without translation to the Lifeline’s current toll free access number. This allows return texts from the 988 Lifeline to appear on consumer devices as coming from 988 rather than 1-800-273-TALK. *Implementation of the National Suicide Hotline Improvement Act of 2018*, WC Docket No. 18-336, Order, 37 FCC Rcd 6060 (WCB 2022).

²⁹ *988 Report and Order*, 35 FCC Rcd at 7395, para. 42.

³⁰ U.S. Dept. of Veterans Affairs, *Veterans Crisis Line*, <https://www.veteranscrisisline.net/> (last visited Mar. 6, 2024).

³¹ See SAMHSA, *988 Lifeline’s First Year: A Network of Hope* (July 13, 2023), <https://www.samhsa.gov/sites/default/files/988-one-year-anniversary-fact-sheet.pdf>; 988 Suicide & Crisis Lifeline, *LGBTQI+*, <https://988lifeline.org/help-yourself/lgbtq/> (last visited Mar. 6, 2024).

³² See Vibrant Emotional Health Reply Comments, WC Docket No. 18-336, at 1 (rec. Jan. 11, 2021) (Vibrant 988 Geolocation Reply). A U.S. telephone number consists of three basic parts (a three-digit Numbering Plan Area, known as the area code (NPA); a three-digit Central Office code (NXX); and a four-digit line number). See *988 Report and Order*, 35 FCC Rcd at 7384, para. 23.

³³ 988 Suicide & Crisis Lifeline, *How Our Calls Are Routed*, <https://988lifeline.org/wp-content/uploads/2022/09/HowOurCallsAreRouted-InfographicsRefresh-2.pdf> (last visited Mar. 6, 2024).

SAMHSA.³⁴

B. Initial Efforts to Improve Routing for Calls to 988 From Wireless Phones

8. On April 15, 2021, the Wireline Competition Bureau transmitted a report to Congress examining the feasibility and costs of including automatic dispatchable location in calls to 988,³⁵ as required by the National Suicide Designation Act of 2020.³⁶ While the statute required the Commission to focus on location information conveyed with a 988 call, regardless of the technological platform used,³⁷ the record developed for the preparation of the report evidenced an important distinction in how a caller's location can impact not only dispatchable location but also the routing path of the call to the most geographically appropriate crisis center (i.e., georouting).³⁸

9. Georouting refers to technical solutions for directing calls based on a geographic location for the origin of the call without transmitting information about the caller's precise location.³⁹ For example, calls to various N11 services, such as 211, 311, 511, and 811, are routed to call centers based on the geographic location of the cell tower that originates the call.⁴⁰ By contrast, geolocation involves creating systems for the transmission of precise location information (e.g., street address) of the caller that

³⁴ See Vibrant 988 Geolocation Reply at 1 (explaining that currently “the Lifeline handles all call routing to individual centers within the network utilizing Lifeline’s own routing database keyed on area code and exchange”); SAMHSA, 988 Suicide & Crisis Lifeline Geolocation Needs, 988 Geolocation Forum Presentation at 37 (May 24, 2022); Vibrant Emotional Health, Geolocation and 988: The Need for Location Routing and Rapid Response to Persons at Imminent Risk of Suicide, 988 Geolocation Forum Presentation at 42-43 (May 24, 2022); Vibrant Emotional Health, Lifeline Technology and Location Data Usage, 988 Geolocation Forum Presentation at 95-96 (May 24, 2022), <https://www.fcc.gov/sites/default/files/988-forum-event-05242022-presentation.pdf>. The Commission has had no role in establishing, maintaining, or operating the 988 Lifeline’s routing system or the facilities and systems that enable it, and is not a party to any agreement that the Lifeline Administrator and/or SAMHSA has entered to establish, structure, operate, govern, or fund the system.

³⁵ FCC, 988 Geolocation Report – National Suicide Hotline Designation Act of 2020 (2021), <https://docs.fcc.gov/public/attachments/DOC-371709A1.pdf> (988 Geolocation Report).

³⁶ National Suicide Hotline Designation Act of 2020 § 5(a).

³⁷ *Id.*

³⁸ See, e.g., Vibrant 988 Geolocation Comments at 3 (“It is important to note that only coarse location data (e.g. city, state or zip code) is required for routing purposes, and an exact position would only be required for dispatching emergency services.”).

³⁹ See SAMHSA, 988 Crisis Systems Response Training and Technical Assistance Center: Crisis Community Collaboration at 19-23 (Jan. 16, 2024), <https://www.samhsa.gov/sites/default/files/csr-ttac-988-3c-session-01162024.pdf> (“Geo-routing is a way of directing phone calls locally without including the precise location information in the transferred call data. If used, it would mean that when a person calls the 988 Lifeline, their call would be connected to a crisis center near their physical location. With geo-routing, the routing and service providers would not receive detailed information about the exact locations of callers.”); see also Vibrant 988 Geolocation Reply at 4 (stating that “‘coarse location’ [] could be used for routing calls to local centers by determining the nearest cell phone tower to the caller, and connecting them to the nearest center to the cell tower. This could be used routinely without divulging the caller’s precise location information and maintaining caller privacy.”).

⁴⁰ See Report and Recommendation on the Feasibility of Establishing a 3-Digit Dialing Code for a National Suicide Prevention and Mental Health Crisis Hotline from Travis Kavulla, Chair, North American Numbering Council, to Kris Anne Monteith, Chief, FCC Wireline Competition Bureau, WC Docket No. 18-336, CC Docket No. 92-105, at 31, 39-40 (May 10, 2019), <https://nanc-chair.org/archive.html> (NANC Report) (discussing possible use of existing N11 codes and noting that for 511, “service providers would need to program the 511 code for routing to a 10-digit number for the appropriate call center, based on the originating number or the cell site serving the originating number at the time the call is made”).

could be provided to first responders.⁴¹ As the Bureau’s report to Congress highlighted, transmitting precise location information with calls to the 988 Lifeline presents a variety of technical, legal, and privacy concerns⁴² that would require significant investigation and time to resolve.⁴³

10. On May 24, 2022, the Commission, in coordination with the U.S. Department of Health and Human Services and the U.S. Department of Veterans Affairs, convened a forum on the challenges and opportunities related to geolocation for calls to the 988 Lifeline.⁴⁴ During that forum, Intrado,⁴⁵ a provider of public safety-related software systems and services, proposed a cell-based georouting solution

⁴¹ See *988 Geolocation Report* at 14 (distinguishing the use of location information to route calls to the nearest crisis center from locating individuals for emergency dispatch); see also 47 CFR § 9.3 (defining “dispatchable location” as “[a] location delivered to the [Public Safety Answering Point (PSAP)] with a 911 call that consists of the validated street address of the calling party, plus additional information such as suite, apartment or similar information necessary to adequately identify the location of the calling party”).

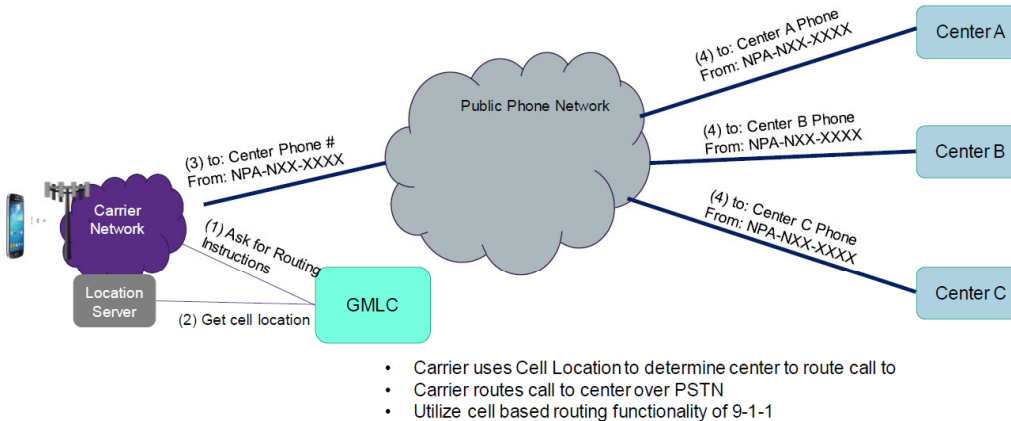
⁴² See, e.g., CTIA Comments, WC Docket No. 18-336, at 2 (rec. Dec. 21, 2020) (questioning the role of PSAPs in delivering dispatchable location information with a 988 call, as well as necessity of customer premise equipment (CPE) to accept location information); Intrado Comments, WC Docket No. 18-336, at 5 (rec. Dec. 21, 2020) (noting that 988 would need to be included in the current 911 “emergency mode” call flow that would require numerous changes); Mitel Cloud Services, Inc. Comments, WC Docket No. 18-336, at 3 (rec. Dec. 21, 2020) (stating it would be unable to use third-party vendors to transmit dispatchable location information with 988 calls); National Alliance on Mental Illness (NAMI) Comments, WC Docket No. 18-336, at 2 (rec. Dec. 21, 2020) (NAMI 988 Geolocation Comments) (emphasizing that “[f]ailure to ensure the privacy of callers may damage trust in 988 and discourage help-seeking”); USTelecom Comments, WC Docket No. 18-336, at 5-6, 8-9 (rec. Dec. 21, 2020) (describing technical challenges and privacy concerns related to enabling dispatchable location for 988 calls); NTCA Reply Comments, WC Docket No. 18-336, at 4 (rec. Jan. 11, 2021) (questioning whether public safety exemption to section 222 of the Communications Act, Privacy of Customer Information, would apply to 988). The 988 Geolocation Report states that “[t]he record lacks significant discussion of Commission legal authority to require transmission of dispatchable geolocation with 988 calls.” *988 Geolocation Report* at 13.

⁴³ For example, we recently adopted rules requiring CMRS providers to use device location information to route wireless 911 voice calls and real-time text (RTT) communications to 911, rather than the location of network elements such as cell cite or sector. See *Location-Based Routing for Wireless 911 Calls*, PS Docket No. 18-64, Report and Order, FCC 24-4, at 13, 35, paras. 21, 66-67 (Jan. 25, 2024). The legal, technical, and privacy considerations of using precise location to route wireless 911 calls differ from those in the 988 context. See FCC, 988 Geolocation Forum Combined Presentation Slides at 17 (May 24, 2022), <https://www.fcc.gov/sites/default/files/988-forum-event-05242022-presentation.pdf>; *988 Geolocation Report* at 11-17.

⁴⁴ See FCC, 988 Geolocation Forum (May 24, 2022), <https://www.fcc.gov/news-events/events/2022/05/forum-geolocation-988>.

⁴⁵ At the time of the May 2022 Forum, Intrado Corporation was a subsidiary of West Technology Group. Intrado Life & Safety, Inc. Reply Comments, PS Docket Nos. 23-5 and 15-80, WC Docket No. 18-336, at 1 & n.2 (rec. June 6, 2023) (Intrado Life & Safety 988 Outage Reply). West Technology Group was and remains the parent company of CX360, which provides voice and SMS-based services to the 988 Lifeline pursuant to a contract with the Lifeline Administrator. CX360 d/b/a Mosaix Comments, PS Docket Nos. 23-5 and 15-80, WC Docket No. 18-336, at 2 (rec. May 8, 2023); CX360 Reply Comments, PS Docket Nos. 23-5 and 15-80, WC Docket No. 18-336, at 6, n.11 (rec. June 6, 2023). Intrado Life & Safety, Inc. has reported that, as of January 31, 2023, it is a distinct entity from West Technology Group, LLC, but has retained the “Intrado” brand. Intrado Life & Safety 988 Outage Reply at 1 & n.2. For the purposes of this *Second Further Notice of Proposed Rulemaking*, references to “Intrado” refer to Intrado Corporation prior to January 31, 2023. References to “Intrado Life & Safety” refer to the entity that was involved in the proof of concept that occurred in 2023. See *supra* note 11. Intrado Life & Safety provides public safety-related software systems and services, including as a provider of 911 services for PSAPs and Originating Service Providers. See Intrado Life & Safety Press Release; Letter from Lauren Kravetz, Vice President, Government Affairs, Intrado Life & Safety, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 21-479 et al., at 1 (filed Jan. 4, 2024).

to connect calls to 988 with local crisis call centers irrespective of a wireless phone's area code.⁴⁶ The solution it presented would involve the creation of a database that would match the cell tower originating the call to 988 with a ten-digit phone number associated with the nearest crisis center. That ten-digit number would then be used to route the call to a geographically appropriate crisis center rather than the area code and exchange for the caller's wireless phone. Intrado provided the following graphic to illustrate this solution:⁴⁷



11. Following the forum, Commission staff, SAMHSA, and the Lifeline Administrator engaged in regular discussions regarding the proposed Intrado solution and other efforts that may lead to more accurate routing of wireless calls to the 988 Lifeline. In June 2023, SAMHSA, the Lifeline Administrator, Intrado Life & Safety, and a wireless carrier began a proof of concept to test a modified version of Intrado's original cell-based georouting solution in a lab environment, i.e., without using any actual caller data from live calls.⁴⁸ The modified solution also relied on cell tower information, but routed calls by "overlay[ing] static wire center boundaries to create a 'destination code' representing the nearest crisis call center."⁴⁹ Commission staff regularly received briefings concerning the proof of concept, provided technical assistance and guidance in response to questions asked during those briefings, and received progress reports.

12. The proof of concept was completed during the summer of 2023 and resulted in calls being successfully routed in the testing environment from wireless handsets to the nearest crisis center irrespective of the area code associated with the handset.⁵⁰ To build on that success, on September 28, 2023, the Chairwoman and HHS Assistant Secretary for Mental Health and Substance Use Dr. Miriam Delphin-Rittmon sent letters to AT&T, T-Mobile USA, Inc., Verizon, CTIA, Competitive Carriers

⁴⁶ Intrado, 988 Geolocation Forum Presentation at 103 (May 24, 2022), <https://www.fcc.gov/sites/default/files/988-forum-event-05242022-presentation.pdf>.

⁴⁷ *Id.*

⁴⁸ See SAMHSA Georouting FAQ (noting that testing "did not involve real-time calls"); Intrado Life & Safety Press Release.

⁴⁹ Intrado Life & Safety Press Release. We seek comment on the technical specifications of the solution tested by the proof of concept below.

⁵⁰ See SAMHSA, 988 Crisis Systems Response Training and Technical Assistance Center: Crisis Community Collaboration at 20 (Jan. 16, 2024), <https://www.samhsa.gov/sites/default/files/csr-ttac-988-3c-session-01162024.pdf>.

Association (CCA), and Rural Wireless Association (RWA) urging wireless carriers to take the necessary steps to identify and develop a 988 georouting solution that could be deployed in their wireless networks.⁵¹ Commission staff subsequently held meetings with each recipient of the letters to discuss what steps have been taken in response to the Chairwoman's letters as well as any identified concerns in implementing a georouting solution. Commission staff also inquired about possible timeframes and what the Commission could do to support or assist the wireless industry's efforts.

III. DISCUSSION

13. We seek to build on the progress made by all stakeholders to date to identify a georouting solution for the 988 Lifeline that will enhance the support and resources available to callers in crisis. Specifically, we propose to adopt a rule that would require wireless carriers to implement one or more georouting solutions for calls to the 988 Lifeline, and initiate this *Second Further Notice of Proposed Rulemaking* to thoroughly and transparently consider georouting solutions that could be within the scope of that mandate, the costs and benefits of mandating a georouting solution, and the work that remains to implement a georouting solution in a timely manner.⁵²

A. Need to Mandate Georouting for Wireless Calls to the 988 Lifeline

14. We believe that requiring wireless carriers to use a georouting solution for the 988 Lifeline is essential to ensure that Americans have access to critical suicide prevention and crisis services when reaching the 988 Lifeline with a wireless device. Indeed, the record developed for the preparation of the 988 Geolocation Report evidenced a need for more accurate routing of calls to the 988 Lifeline to account for the fact that the majority of calls placed to the 988 Lifeline are from wireless phones,⁵³ and the area codes of those phones often do not correspond to the location of the caller.⁵⁴ The broader 988 record also indicated that such discrepancies may be more prevalent among certain groups, such as college students⁵⁵ and individuals with ported numbers.⁵⁶ According to mental health and crisis

⁵¹ See Press Release, FCC, Chairwoman Calls on Wireless Industry and Related Associations to Explore 988 Routing Solutions (Sept. 28, 2023), <https://docs.fcc.gov/public/attachments/DOC-397339A1.pdf>; Chairwoman's September 28, 2023 Letters, *supra* note 12.

⁵² See e.g., Letter from Michael McMenamin, Counsel, Winning Strategies Washington, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-336, at 1-2 (filed Jan. 12, 2024) (NAMI *Ex Parte*) ("NAMI is incredibly hopeful that the FCC/SAMHSA will develop 988 georouting solutions sooner rather than later to provide routing certainty to calls from those individuals in crisis."). As discussed above, we reiterate that the proposals herein pertain to georouting solutions. We are not considering solutions to geolocation for the 988 Lifeline at this time. See *supra* para. 9 (distinguishing georouting from geolocation).

⁵³ The Lifeline Administrator estimates that 80% of calls placed to the 988 Lifeline are from wireless phones. Vibrant 988 Geolocation Comments at 2.

⁵⁴ See SAMHSA, *988 Frequently Asked Questions, How do calls to 988 get routed?*, <https://www.samhsa.gov/find-help/988/faqs> (last visited Mar. 6, 2024).

⁵⁵ See, e.g., Boulder Regional Emergency Telephone Service Authority (BRETSA) Comments, WC Docket No. 18-336, at 7 (rec. Dec. 21, 2020) (describing challenges associated with routing calls for college students attending school in a different state than their wireless phone's area code) (BRETSA 988 Geolocation Comments); see also Stephanie Hepburn, *The Latest 988 Network Updates – Dr. Tia Dole on the Unified 988 Platform, Subnetworks, Marketing and Geo-Routing*, Crisis Now (July 14, 2023), <https://talk.crisisnow.com/the-latest-988-network-updates-dr-tia-dole-on-the-unified-988-platform-subnetworks-marketing-and-geo-routing/> (expressing concerns about the 988 Lifeline's current routing method because many people, particularly students and young people, have mobile phones with area codes that do not correspond to their physical locations).

⁵⁶ See, e.g., Vibrant Emotional Health Comments, WC Docket No. 18-336 at 4-5 (rec. May. 8, 2023) (stating that "[n]early 40% of individuals live in a metropolitan statistical area that does not match their cell phone"); BRETSA Reply Comments, PS Docket Nos. 23-5 and. 15-80, WC Docket No. 18-336, at 2 (rec. June 6, 2023) ("[N]umber-portability enables people to keep their numbers when they move from the geographic area to which their area code is assigned."); see also Jennifer Brown, *Not all 988 mental health crisis calls are reaching Colorado, but they're*

(continued....)

counseling experts, ensuring that calls are routed to a crisis center that is geographically appropriate based on the caller's location (rather than the area code of their phone) is critical to the 988 Lifeline's objective of providing life-saving resources to those in need of public health and safety resources.⁵⁷ Routing individuals in crisis to local crisis centers also allows counselors to respond to regional cultural and economic factors as well as a community's unique stressors.⁵⁸ Moreover, local crisis centers have important connections to local care resources that, when used, can reduce the risk of suicidality and future crises, and avert unnecessary use of emergency services and law enforcement.⁵⁹

15. We, therefore, seek comment on our proposal to mandate the use of one or more georouting solutions by wireless carriers originating calls to the 988 Lifeline to achieve these benefits. Some major stakeholders have already been exploring georouting solutions with SAMHSA and the Lifeline Administrator,⁶⁰ and we support voluntary efforts by carriers and our federal partners to deploy solutions in wireless networks in the near term. Indeed, we would welcome insights from wireless carriers that voluntarily deploy georouting solutions in their networks, as such information would inform our decision-making. The launch of this proceeding reflects our belief that a rule requiring wireless carriers to implement a georouting solution for the 988 Lifeline is necessary to ensure that the critical benefits of georouting are realized nationwide and within a reasonable period of time. We seek comment on that view and whether there would be any negative impacts to mandating the use of georouting solutions to connect callers to the 988 Lifeline with local crisis centers.⁶¹ We ask that commenters address any policy considerations or facts we should consider to evaluate whether a rule establishing a georouting mandate is needed.

B. Potential Georouting Solutions for Wireless Calls to the 988 Lifeline

16. We seek comment on potential georouting solutions for the 988 Lifeline. As noted above, Intrado proposed one potential solution during the May 2022 Geolocation Forum.⁶² SAMHSA, the Lifeline Administrator, Intrado Life & Safety, and a wireless carrier subsequently tested a modified georouting solution during the proof of concept completed during the summer of 2023.⁶³ Since then, additional major carriers have voluntarily begun work to develop additional georouting solutions with

(Continued from previous page) _____
still getting answered, the Colorado Sun (July 31, 2023), <https://coloradosun.com/2023/07/31/988-hotline-mental-health/> (stating that routing calls to the 988 Lifeline based on area code poses challenges for Colorado due to "a high number of transplants who moved [to Colorado] with out-of-state area codes and a large military population").

⁵⁷ See, e.g., Vibrant 988 Geolocation Comments at 2; Crisis Response Network 988 Geolocation Comments at 1.

⁵⁸ See e.g., American Association of Suicidology Comments, WC Docket No. 18-336, at 2-3 (rec. Dec. 21, 2020); Crisis Response Network 988 Geolocation Comments at 1; NAMI 988 Geolocation Comments at 2.

⁵⁹ See, e.g., American Foundation for Suicide Prevention 988 Geolocation Comments at 1; BRETSA 988 Geolocation Comments at 17; Mental Health America 988 Geolocation Comments at 1 (emphasizing that access to local health resources for follow-up care "can help to reduce the risk of future crises"); Vibrant 988 Geolocation Comments at 3 ("Local centers are also able to provide connections to and knowledge of local resources and services, including follow-up care that reduces the risk of suicidality in individuals in crisis."); NAMI *Ex Parte* at 1 (stating that "georouting to the nearest 988 call center will provide expeditious care for those in crisis and ultimately save lives").

⁶⁰ See, e.g., Intrado Life & Safety Press Release.

⁶¹ As noted above, the benefits of implementing a georouting solution were explored in connection with the 988 *Geolocation Report* and were further explored at the May 2022 Geolocation Forum. The comments and documents submitted to the Commission in connection with these activities are available in the docket for this proceeding and will be considered when we evaluate the record developed in response to this *Second Further Notice of Proposed Rulemaking*.

⁶² See *supra* para. 10.

⁶³ See Intrado Life & Safety Press Release.

SAMHSA and the Lifeline Administrator that may take different approaches to routing calls to crisis centers. We seek comment from wireless carriers on the viability of these and any other solutions that have been proposed to date, and the work that still needs to be done to timely deploy one or more of the solutions on wireless networks. We also seek data, documents, and other information that provide details about the current status of all proposed georouting solutions. In so doing, we invite stakeholders to comment on whether georouting solutions that have been developed to date by major carriers would be viable for smaller carriers, and any distinctions that need to be considered for smaller carriers when mandating the use of a georouting solution for the 988 Lifeline.

17. *Technical Specifications.* We seek information on the technical specifications for all proposed solutions, documented or otherwise, and diagrams showing how each solution would route wireless calls to the 988 Lifeline and/or a description of the same. We also seek technical specifications and diagrams showing how wireless calls would be routed to geographically appropriate call centers once received by the routing platform administered by the Lifeline Administrator. Specifically, we seek comment on each functional step that would need to be completed to successfully route a call from a wireless carrier to a geographically appropriate crisis center, the specific entity that would or could perform each function, and the facilities and systems required to perform each function. For example, are there any parties beyond the wireless carriers originating the calls and the Lifeline Administrator responsible for terminating the calls that would need to perform any function, or provide any facility or service, for a call to be appropriately routed pursuant to a proposed solution? What specific functions would the Lifeline Administrator and/or its service providers need to perform to successfully terminate calls to geographically appropriate crisis centers once received by the 988 Lifeline’s centralized routing platform? What specific facilities and systems would be needed to perform those functions? We ask that commenters address whether the technical and functional requirements of a particular georouting solution present legal or other barriers that could limit the adoption of the solution by other entities, and whether there are means to surmount or minimize those barriers. For instance, do any of the functional steps of a georouting solution involve proprietary elements that would limit whether and how other wireless carriers could implement it (e.g., by requiring a service or licensing agreement and/or paying a fee)? Lastly, it is our understanding that when a caller to the 988 Lifeline selects a specialized service (e.g., “1” for Department of Veterans Affairs; “2” for a Spanish language line; or “3” for specialized LGBTQI+ services) when connected to the 988 Lifeline’s IVR, those calls will be directed to appropriate crisis centers based on those selections. We seek comment on whether georouting is necessary for these specialized services, and whether there are any unique considerations for routing calls that impact our proposals. Do the georouting solutions under development contemplate routing for such calls? Do stakeholders agree that georouting solutions are not needed when a caller to 988 selects a specialized service?

18. *Correlating the Caller’s Location with Call Centers.* We seek comment on how each proposed solution identifies the caller’s location and correlates that location with a geographically appropriate crisis call center. For instance, both the georouting solution originally proposed by Intrado at the May 2022 Forum and the modified Intrado Life & Safety solution tested by the proof of concept conducted during the summer of 2023 identified the location of the caller based on the cell tower that originated the call, and used the location of that cell tower to determine the closest crisis center.⁶⁴ As noted above, calls to certain N11 services (e.g., 211) are also routed to call centers based on the geographic location of the cell tower that originates the call.⁶⁵ We believe that a georouting solution that is based on cell tower information would best identify a caller’s location and thus enable routing the call to a geographically appropriate crisis call center, and we seek comment on this belief. If commenters support alternative methods of identifying the caller’s location, we ask that they specify those methods

⁶⁴ Intrado, 988 Geolocation Forum Presentation at 103 (May 24, 2022), <https://www.fcc.gov/sites/default/files/988-forum-event-05242022-presentation.pdf>; Intrado Life & Safety Press Release.

⁶⁵ See *supra* note 40.

and provide any technical information needed to understand how the alternate means of identifying a caller's location would function in a georouting solution. We also seek comment on whether any means of identifying a caller's location may be impacted by the wireless handset that a caller uses to dial 988.

19. Once the caller's location has been determined, to complete the georouting path that location must be matched with a nearby crisis center. What geographic boundaries would be applied by each proposed solution to do so? For instance, the Intrado Life & Safety solution tested during the proof of concept used wire centers as the geographic boundary for associating the cell tower that originated the call with the nearest call center.⁶⁶ We assume that other geographic boundaries could similarly be applied, e.g., determining the most geographically appropriate call center based on its proximity to the county in which the cell tower originating the call is located. We seek comment on the geographic boundaries that are utilized by the georouting solutions proposed to date, whether those boundaries comport with any requirements delineated by SAMHSA, the Lifeline Administrator, and state and territory 988 authorities for the network of 988 crisis centers, and whether the Commission should mandate the use of one or more particular geographic boundaries. Given that there are over 200 crisis call centers across the United States, we ask that commenters address whether certain geographic boundaries are sufficiently granular to achieve the goal of connecting callers with local resources during a time of crisis and whether there are any geographic boundaries that would be overbroad. For instance, would using a state-level boundary be too broad where there are multiple crisis centers within a particular state? How should we factor in the growing number of crisis centers and their impact on the geographic boundary adopted for a georouting solution? Our understanding is that the 988 Lifeline's crisis centers are independently owned and operated and select their own coverage area, which may be based on zip code, area code, county, or state.⁶⁷ How would a proposed georouting solution address established coverage areas for particular crisis centers (e.g., any crisis centers that must receive calls from specified counties)? We also seek comment on whether any geographic boundaries would be too granular in a manner that implicates privacy or other concerns.⁶⁸ If different georouting solutions propose to use different geographic boundaries (e.g., one solution uses wire center while another uses county), should we allow different wireless carriers to implement one of multiple technically feasible options? Or would permitting wireless carriers to implement a number of geographic boundaries impact public interest and the public's expectation of routing to a "geographically appropriate" crisis call center? What other issues, data, and documents should be considered to assess how a proposed solution identifies a caller's location and matches that location to a geographically appropriate crisis call center, and whether that match achieves the public and mental health needs served by the 988 Lifeline? Are there any other factors that should be considered in determining whether routing to a particular crisis center would be appropriate?

20. *Required Routing Data and Transmission.* We seek comment on the routing data required to effectuate each proposed solution and how it would be transmitted. SAMHSA, as the agency with oversight of the Lifeline Administrator, must ultimately determine the routing data that it will deem acceptable and that it will require the 988 Lifeline's systems to be configured to read. What specific data would the currently contemplated solutions require wireless carriers to transmit when originating calls to the 988 Lifeline (e.g., a Federal Information Processing Standard code for a solution utilizing county as a geographic boundary, a unique destination code for a solution using other parameters, any carrier-specific or other additional digits or data points) and how would wireless carriers pass that data through with the call? Would the routing information be entered into a particular field in the call header of a Session Initiation Protocol (SIP) message (e.g., in the Jurisdictional Identification Parameter, P-Asserted-Identity,

⁶⁶ See Intrado Life & Safety Press Release.

⁶⁷ 988 Suicide & Crisis Lifeline, *How Our Calls Are Routed*, <https://988lifeline.org/wp-content/uploads/2022/09/HowOurCallsAreRouted-InfographicsRefresh-2.pdf> (last visited Mar. 19, 2024).

⁶⁸ See, e.g., NAMI Geolocation Comments at 2 (expressing concern that "[f]ailure to ensure the privacy of callers may damage trust in 988 and discourage help-seeking"); Trevor Project Comments, WC Docket No. 18-336, at 2 (rec. Dec. 21, 2020) (emphasizing that the "privacy of crisis callers is vital").

or other field)? Would it be necessary to redefine an existing SIP header field or define a new one to transmit the data? Should a non-standardized field, such as an X-Header, be used to contain the data? Does any field used to transmit the routing data need to be identified as a mandatory SIP header field that is unchanged as the SIP message traverses security gateways from one network to another? Should solutions to support georouting avoid changes to the SIP header field by the Internet Engineering Task Force to avoid delays in deployment? We ask that commenters describe in detail the advantages and disadvantages of using a particular call header field to transmit any required routing information. We also ask that commenters address any privacy or other concerns implicated by the transmission of certain routing data with calls to the 988 Lifeline. For instance, what specific information would be received by the Lifeline Administrators and/or its service providers when the call is routed to the Lifeline's centralized routing platform and what, if anything, about the caller could be inferred from that data? Does the Lifeline Administrator have a preference for receiving certain routing data a certain way as the entity responsible for terminating calls to local crisis centers? If different wireless carriers wished to utilize different georouting solutions, transmitting different routing data via different call header fields, could the Lifeline Administrator accommodate that to perform the terminating end of each solution? If that were feasible, what would be the advantages and disadvantages of a multiple solution approach versus requiring all wireless carriers to transmit the same data with the same values in the same field?

21. *Technical Limitations.* We seek comment on the technological limitations of each solution that may prevent a call from being routed to a geographically appropriate crisis call center, if any. For instance, would a particular solution work if the caller is roaming or using Wi-Fi calling?⁶⁹ Could the routing information entered into the call header be stripped out if the call traverses a non-IP interconnection point? Does the impact of one or more intermediate providers affect the transmission of the call header to the Lifeline Administrator and/or its service providers? Are there different technical considerations for routing calls dialed directly to the 988 Lifeline's toll free access number and calls dialed to the 3-digit code? As wireless networks evolve and carriers retire older technologies, what impact, if any, would this have on the implementation of a georouting solution for the 988 Lifeline?⁷⁰ Are there any technical limitations of the 988 Lifeline's systems that would prevent the Lifeline Administrator from being able to effectively implement the terminating end of a particular solution? Does the wireless handset that a caller uses to dial 988 present any technical limitations or challenges? If a particular wireless call is out-of-scope for a georouting solution, or the routing data transmitted with a call is or becomes unreadable for any reason, what would occur? We recognize that SAMHSA and the Lifeline Administrator are best suited to ensure that calls are routed properly and ultimately answered by a call center. From the perspective of the originating wireless carrier and its customers, would an out-of-scope call or call with unreadable routing data default to the current routing by area code or be redirected to a national back-up? Is it possible that the call would be disconnected? While the benefits of improving

⁶⁹ The Commission recognized the importance of community information and referral services available through 211 and acknowledged and sought comment on the challenges callers have when seeking access to these services using Wi-Fi technologies. See *Wi-Fi Calling Public Notice* at 1-3. The Commission also sought comment on future availability of 988 over Wi-Fi calling generally. *Id.* at 2.

⁷⁰ Several nationwide wireless carriers and smaller carriers have retired their 3G networks. AT&T retired its 3G network in February 2022. See AT&T Community Forums, *What is happening with 3G?*, <https://forums.att.com/page/FAQ-Wireless-5G> (last visited Mar. 6, 2024). Verizon phased out its 3G network in December 2022. See Mike Haberman, *3G CDMA Network Shut Off Date Set for December 31, 2022*, Verizon (Dec. 20, 2022), <https://www.verizon.com/about/news/3g-cdma-network-shut-date-set-december-31-2022>. T-Mobile retired the former Sprint's 3G Code-Division Multiple Access (CDMA) network in March 2022, and T-Mobile's 3G Universal Mobile Telecommunications System (UMTS) network in July 2022. T-Mobile, *Network Evolution*, <https://www.t-mobile.com/support/coverage/t-mobile-network-evolution> (last visited Mar. 6, 2024). See also USCellular, *3G CDMA Network Shutdown*, <https://www.uscellular.com/3g-shutdown> (last visited Mar. 6, 2024) (noting that USCellular retired its 3G network on January 14, 2024); Cellcom, *2G/3G Shutdown, Upcoming Technology Change*, <https://www.cellcom.com/newsroom/2g3g-shutdown> (last visited Mar. 6, 2024) (noting that Cellcom retired its 3G network in 2023).

routing for 988 calls are clear, it is paramount that callers be connected with critical, life-saving help even if the closest crisis center cannot be identified or reached. We ask that commenters address the calls that would be successfully routed from originating wireless carriers to crisis centers pursuant to a proposed solution and those that may not be due to technological or other limitations, and explain how any calls that fall in the latter group will nonetheless be connected to an appropriate 988 crisis center. If there are states or territories that will be excluded from any georouting solution due to technical or facility limitations, in whole or in part, we ask that commenters identify those areas.

22. *Infrastructure and System Considerations.* We seek comment on any network infrastructure and system changes or upgrades that may be required at each step of the call path for wireless carriers to successfully implement the proposed georouting solutions. For example, would wireless carriers need to develop certain technologies to support the proposed solutions? Would any network upgrades or programming changes be necessary? Are any specific upgrades necessary to the 988 Lifeline's routing platform and other facilities and systems that could impact the availability of a georouting solution to originating wireless carriers and their customers? Would any additional entities have to upgrade their infrastructure, facilities, and systems to perform their roles in a georouting solution, enable callers to the 988 Lifeline to benefit from a georouting solution, or to continue providing services to the 988 Lifeline after the implementation of a georouting solution? Are there any other considerations that impact when, whether, and how any needed infrastructure or system changes are implemented, such as administrative challenges or contractual issues?

23. *Costs and Benefits.* We seek comment on the costs and benefits of deploying one or more of the proposed solutions. What specific costs would be incurred by the wireless carriers originating calls, any necessary intermediaries, and the Lifeline Administrator responsible for terminating the calls? Would significant costs need to be incurred for network or system changes or upgrades? Are there ways to minimize the costs, especially on non-nationwide or small providers? Are there contracting costs or costs associated with accessing proprietary functions? Do any of the proposed georouting solutions otherwise raise compensation issues between any of the participants involved in the solutions, including, but not limited to, charges to wireless carriers, intermediaries, and/or the Lifeline Administrator to access elements of a georouting solution, charges assessed by entities interested in marketing a georouting solution to carriers as a service,⁷¹ or interconnection fees? If so, how would or should compensation issues be addressed?

24. What are the benefits of utilizing a particular routing solution? In requiring calls and texts to 988 to be routed to the Lifeline, the Commission found that enabling more Americans to access the 988 Lifeline's life-saving suicide prevention and mental health crisis services far surpassed the cost of implementation.⁷² In this next phase of improving routing to 988, we seek comment on the ways in which a georouting solution might further reduce suicides and future crises beyond our initial estimates.⁷³ Is there a way of measuring or quantifying the impact that a georouting solution would have on the outcomes of calls to the 988 Lifeline? Are there any benefits that we have not identified that could be realized from a georouting solution? Do the public interest benefits of routing callers in crisis to geographically appropriate crisis call centers outweigh any potential costs? We seek comment on whether there are unique circumstances or factors with respect to routing that would change this analysis. We also seek comment on the costs and benefits of wireless carriers implementing multiple georouting solutions with different geographic parameters and technical requirements.

⁷¹ See Intrado Life & Safety, *988 Call Routing for Wireless Carriers, Improve 988 Routing Speed & Accuracy*, <https://www.intrado.com/carrier-solutions/988-call-routing> (last visited Mar. 6, 2024).

⁷² See *988 Report and Order*, at 35 FCC Rcd 7415-16, paras. 73-74; *Text to 988 Second Report and Order*, 36 FCC Rcd at 16934-35, para. 56.

⁷³ See *988 Report and Order*, at 35 FCC Rcd 7416, para. 74; *Text to 988 Second Report and Order*, 36 FCC Rcd at 16934-35, para. 56.

25. *Testing of Proposed Solutions.* We seek comment from wireless carriers on the testing that has been completed for proposed georouting solutions, the results of the tests, and any work that is in progress to address any implementation or other issues discovered as a result of the tests. The ultimate goal of the coordination between SAMHSA, the Lifeline Administrator, and the Commission is to identify one or more georouting solutions that are compatible with the 988 Lifeline's systems and achieves the policy objectives of connecting callers in crisis with local support. We ask that wireless carriers address how any testing conducted demonstrates that a proposed solution achieves these objectives. How many tests have been conducted to date and with which carriers or other entities? What georouting solutions were the subjects of those tests and how did participants propose to route calls to geographically appropriate crisis centers? What technical specifications, assumptions, or other parameters were applied to the tests? Were any problems or challenges identified in connection with those tests? How have those problems or challenges been resolved or what are the proposals for resolving them? Has any testing indicated that one solution is technologically superior and/or closer to deployment? Has any testing indicated that a particular solution could be implemented in the wireless networks of multiple carriers with only minor adjustments, if any? Has the testing established that both the originating end and the terminating end of the georouting solution are viable, or has the testing focused on limited aspects of the solution? Will wireless carriers participate in any traffic studies conducted to evaluate georouting solutions, and if so, what data would be required to conduct those studies, what entities would be required to provide the data, and what would stakeholders hope to learn from those studies?

26. *Timeline for Deployment.* We seek comment on timelines for the deployment of one or more georouting solutions. We ask that commenters specify the work that must still be completed by wireless carriers, SAMHSA, the Lifeline Administrator, and/or any third parties to implement a georouting solution for the 988 Lifeline and the timeline(s) for the completion of that work. We seek comment on whether both the originating functions that need to be performed by wireless carriers and the terminating functions that need to be performed by the Lifeline Administrator and its service providers will be deployed at the same time, and if not, when the two ends of the georouting solution in question will be in sync. We ask that commenters identify any technical, financial, operational, legal, or other factors that may influence the timeframe for deploying a particular solution. We also ask commenters to detail whether a particular georouting solution will be deployed immediately on a national basis or on an incremental basis (e.g., market-by-market), and in the case of the latter, the timeline for rolling out the solution to all states and territories.

27. *Alternative Georouting Solutions.* Finally, we seek comment on any alternative georouting solutions. We remind commenters, as noted above, that the United States continues to face a mental health crisis and reiterate our belief that implementing a georouting solution without delay to connect callers to 988 with geographically appropriate crisis call centers provides better care to those in crisis. Nevertheless, we seek comment on alternative georouting solutions that could be implemented by wireless carriers, including any concepts that have not yet been tested or developed. Are there solutions that build off the proof of concept or other proposals referenced herein that have not yet been presented to SAMHSA or the Lifeline Administrator? Are there ways to leverage existing routing technologies for 988 that have not been considered? If so, what are the functional steps and technical specifications for such solutions? Would it be more effective and efficient for a standards body, such as the Alliance for Telecommunications Industry Solutions, to examine the options for a georouting solution for the 988 Lifeline and issue standards that could be applied by wireless carriers? Should the work from other standards bodies, in addition to or in place of the Internet Engineering Task Force and Alliance for Telecommunications Industry Solutions, be used to support georouting? Would that expedite or slow the deployment of a solution? Would any delay resulting from review by a standards body be warranted if it resulted in a more broadly adopted standard? Rather than relying on the wireless industry to produce a standard, would it be more effective for the Lifeline Administrator and/or its service providers to produce written technical specifications for a georouting solution that SAMHSA has deemed acceptable for the 988 Lifeline, i.e., have the Lifeline Administrator specify the routing information that must be transmitted with calls terminated to the 988 Lifeline and the way it needs to receive that information, and let the

wireless carriers figure out how to comply? What information would need to be included in those technical specifications for wireless carriers to be able to develop a georouting solution that is compatible with the requirements set forth by the Lifeline Administrator?

28. *Form of Rules.* We seek comment on whether rules requiring wireless carriers to implement a georouting solution for the 988 Lifeline should specify one or more technical solutions that must be used or more generally require wireless carriers to implement a georouting solution within a certain period of time of the Lifeline Administrator announcing that it is: (a) prepared to implement the terminating function of one or more georouting solutions; and (b) able to provide technical specifications needed by wireless carriers to implement the originating functions. We seek comment on the merits of these two approaches or whether rules adopted by the Commission should take a different form.

29. We also seek comment on the interplay between a rule requiring wireless carriers to implement a georouting solution for the 988 Lifeline and the Commission's existing rules. Would our existing rules need to be modified, and if so how? For example, while the Commission's rules require originating service providers to route calls to the 988 Lifeline's current toll free access number,⁷⁴ would a particular georouting solution require us to modify our rules to allow calls to be routed directly to the Lifeline's individual crisis call centers?⁷⁵ We observe that the Commission's Wireline Competition Bureau granted a waiver to allow covered text providers to route covered 988 text messages to the 988 Lifeline using the short code protocol without translation to the Lifeline's current toll free access number, 1-800-273-8255 (TALK).⁷⁶ Would a rule change be necessary for us to require wireless carriers to implement a georouting solution?

30. *Non-Wireless Calls.* As explained above, this *Second Further Notice of Proposed Rulemaking* focuses on georouting solutions for wireless calls to the 988 Lifeline because of the established scenarios in which a caller's location may differ from the area code associated with the wireless phone, and the fact that the majority of calls placed to the 988 Lifeline are from wireless devices. We nevertheless invite comment on whether the 988 Lifeline's current method of routing calls by area code creates challenges for callers using other technologies, including but not limited to different variations of Voice over Internet-Protocol (VoIP) technology.⁷⁷ If so, have any georouting solutions been proposed for such calls? Are any unique challenges presented by the relevant technologies? We ask that commenters responding to this inquiry provide the same information and documents requested herein with respect to georouting solutions for wireless calls.

31. *Texts to 988.* Texting is an important mode of communication to the 988 Lifeline⁷⁸ and has increasingly become the preferred means of communicating among certain demographic groups, many of whom are at risk for mental health crises.⁷⁹ Pursuant to the Commission's rules, texts are

⁷⁴ 47 CFR § 52.200(b).

⁷⁵ See, e.g., Intrado, 988 Geolocation Forum Presentation at 104 (May 24, 2022), <https://www.fcc.gov/sites/default/files/988-forum-event-05242022-presentation.pdf> (proposing a cell-based routing solution to connect calls to the 988 Lifeline with local crisis call centers irrespective of a wireless phone's area code).

⁷⁶ *Implementation of the National Suicide Hotline Improvement Act of 2018*, WC Docket No. 18-336, Order, 37 FCC Rcd 6060 (WCB 2022).

⁷⁷ The Commission adopted rules requiring all covered providers, including interconnected VoIP providers and one-way VoIP providers, to make any network changes necessary "to implement the designation of the 988 dialing code by July 16, 2022." 47 CFR § 52.200(d), (e). One-way VoIP differs from interconnected VoIP in that one-way VoIP permits users generally to receive calls that originate on the public switched telephone network *or* to terminate calls to the public switched telephone network. See 47 CFR § 52.200(e)(2) (defining "one-way VoIP" for purposes of the 988 rules) (emphasis added); 47 CFR § 9.3 (defining interconnected VoIP).

⁷⁸ *Text to 988 Second Report and Order*, 36 FCC Rcd at 16901-16902, para. 1 & n.5.

⁷⁹ See, e.g., Kayla N. Anderson et al., *Emergency Department Visits Involving Mental Health Conditions, Suicide-Related Behaviors, and Drug Overdoses Among Adolescents – United States, January 2019 – February 2023*, 72

(continued....)

required to be routed to the 988 Lifeline’s ten-digit toll free access number like voice calls.⁸⁰ We seek comment on the impact of the georouting solutions discussed above on texting to 988 and whether additional improvements are needed to route texts to geographically appropriate 988 crisis centers. In general, what are the challenges for implementing a georouting solution for texts to 988 and how do wireless carriers and other stakeholders propose to address those challenges? Would all technologies used to send texts be compatible with a particular georouting solution? What are the costs of implementing a georouting solution for texts to the 988 Lifeline, including any network infrastructure or system changes or upgrades necessary to implement a solution? What are the benefits of implementing a georouting solution for texts, and do they outweigh the costs? How long would it take to develop and deploy a georouting solution for texts? We ask that commenters responding to these inquiries provide the same technical, logistical, operational, economic, and practical information requested above for the georouting of voice calls to 988, and identify any relevant considerations that are unique to georouting texts, as opposed to calls, to 988.

C. Legal Authority

32. We tentatively conclude that we have the authority to adopt rules requiring wireless carriers to implement one or more georouting solutions for calls to the 988 Lifeline under Title II and Title III of the Communications Act of 1934, as amended (Act), and section 104 of the Twenty-First Century Communications and Video Accessibility Act (CVAA), and we seek comment on this proposal.⁸¹ In particular, we seek comment on whether and to what extent the Commission’s Title III authority over wireless carriers confers authority for what we propose and seek comment on in this *Second Further Notice of Proposed Rulemaking*, including sections 301,⁸² 303,⁸³ 307,⁸⁴ 309,⁸⁵ and 316.⁸⁶ As the Supreme Court has long recognized, Title III grants the Commission a “comprehensive mandate” regarding regulation of spectrum usage, and courts have routinely found that Title III provides the Commission with

(Continued from previous page) _____

Ctrs. for Disease Control and Prevention Morbidity and Mortality Wkly. Rpt. 502 (May 12, 2023), <https://www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7219a1-H.pdf> (noting that the “U.S. adolescent mental and behavioral health crisis is ongoing” and that “poor mental and behavioral health remains a substantial public health problem, particularly among adolescent females”); Centers for Disease Control and Prevention, *Disparities in Suicide* (May 9, 2023), <https://www.cdc.gov/suicide/facts/disparities-in-suicide.html> (noting that suicide rates for youth and young adults ages 10-24 increased 52.2% between 2000 and 2021).

⁸⁰ *Text to 988 Second Report and Order* at 16921, para. 34; *Implementation of the National Suicide Hotline Improvement Act of 2018*, WC Docket No. 18-336, Order, DA 22-519 (WCB May 11, 2022).

⁸¹ 47 U.S.C. §§ 201, 218, 251(e), 301, 303, 307, 309, 316, and 332; Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), Pub. L. No. 111-260, 124 Stat. 2751 § 104 (2010) (codified at 47 U.S.C. §§ 617, 618, and 619).

⁸² 47 U.S.C. § 301 (“It is the purpose of this [Act], among other things, to maintain the control of the United States over all the channels of radio transmission; and to provide for the use of such channels, but not the ownership thereof, by persons for limited periods of time, under licenses granted by Federal authority.”).

⁸³ 47 U.S.C. § 303(b) (authorizing the FCC to “[p]rescribe the nature of the service to be rendered by each class of licensed stations and each station within any class”); 47 U.S.C. § 303(g) (the Commission shall “encourage the larger and more effective use of radio in the public interest”); 47 U.S.C. § 303(r) (the Commission may “prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this [Act]”).

⁸⁴ 47 U.S.C. § 307 (authorizing the FCC to grant station licenses).

⁸⁵ 47 U.S.C. § 309(a) (authorizing the Commission, in acting on certain license applications, to determine “whether the public interest, convenience, and necessity will be served by granting such application”).

⁸⁶ 47 U.S.C. § 316(a) (authorizing the FCC to modify existing licenses to impose new license conditions if, in the judgment of the Commission, such action will promote the public interest, convenience and necessity)

“broad authority to manage spectrum . . . in the public interest.”⁸⁷ As we explain above, we believe that requiring wireless carriers to implement a georouting solution for the 988 Lifeline will confer significant public interest benefits by connecting those experiencing a mental health crisis with local public safety and counseling resources that could save lives. We seek comment on this assessment.

33. We also seek comment on whether and to what extent our numbering authority under section 251(e) of the Act provides a source of authority for what we propose and seek comment on in this *Second Further Notice of Proposed Rulemaking*.⁸⁸ Section 251(e)(1) gives the Commission “exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States.”⁸⁹ The Commission’s exclusive jurisdiction over numbering policy enables the Commission to act flexibly and expeditiously on important numbering matters,⁹⁰ which pursuant to section 251(e)(4) of the Act, includes the designation of 988 as the universal telephone number for the 988 Lifeline.⁹¹ We seek comment on whether this authority would extend to adopting rules requiring wireless carriers to route calls to the 988 Lifeline in a manner that would help to ensure that all Americans can receive efficient, swift access to, and reap the benefits of, critical suicide prevention and crisis services offered through the 988 Lifeline.

34. We seek comment on any other sources of authority that would authorize the Commission to require wireless carriers to implement a georouting solution for calls to the 988 Lifeline, including whether the Commission could invoke its ancillary authority. To exercise ancillary jurisdiction “two conditions [must be] satisfied: (1) the Commission’s general jurisdictional grant under Title I [of the Communications Act] covers the regulated subject and (2) the regulations are reasonably ancillary to the Commission’s effective performance of its statutorily mandated responsibilities.”⁹² Routing calls to the 988 Lifeline involves communications by wire or radio and the use of equipment for purposes of facilitating transmission by wire or radio.⁹³ We believe that requiring the use of a georouting solution for

⁸⁷ See *Nat’l Broad. Co. v. United States*, 319 U.S. 190, 219 (1943); see also *Cellco Partnership v. FCC*, 700 F.3d 534, 537 (D.C. Cir. 2012) (upholding the FCC’s authority to rely on Title III provisions to impose data roaming rules).

⁸⁸ 47 U.S.C. § 251(e).

⁸⁹ *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 et al.*, CC Docket No. 96-98 et al., Second Report and Order and Memorandum Opinion and Order, 11 FCC Rcd 19392, 19512, para. 271 (1996).

⁹⁰ *Id.*

⁹¹ 47 U.S.C. § 251(e).

⁹² *Comcast Corp. v. FCC*, 600 F.3d 642, 646 (D.C. Cir. 2010) (quoting *Am. Library Assn. v. FCC*, 406 F.3d 689, 691-92 (D.C. Cir. 2005)); 47 U.S.C. § 154(i) (“The Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this chapter, as may be necessary in the execution of its functions.”).

⁹³ 47 U.S.C. § 153(4) (radio communication “means the transmission by radio of writing, signs, signals, pictures, and sounds of all kinds, including all instrumentalities, facilities, apparatus, and services (among other things, the receipt, forwarding, and delivery of communications) incidental to such transmission” (emphasis added)). Our focus is on the use of equipment specifically for purposes of enabling transmission of wire or radio communications, which is distinguishable from the facts of *Am. Library Ass’n*. See *Am. Library Ass’n*, 406 F.3d at 700 (holding that “the agency’s general jurisdictional grant does not encompass the regulation of consumer electronics products that can be used for receipt of wire or radio communications when those devices are not engaged in the process of radio or wire transmission”). The Commission previously found that imposing outage reporting requirements on covered 988 service providers was reasonably ancillary to our responsibility to ensure that the 988 Lifeline operates effectively. *Ensuring the Reliability and Resiliency of the 988 Suicide & Crisis Lifeline, Amendments to Part 4 of the Commission’s Rules Concerning Disruptions to Communications, Implementation of the National Suicide Hotline Improvement Act of 2018*, PS Docket Nos. 23-5 and 15-80, WC Docket No. 18-336, Report and Order, FCC 23-57, at 30, para. 51 (adopted July 20, 2023).

the 988 Lifeline is necessary to carry out our responsibility for the proper functioning of the 988 Lifeline services under section 251(e)(4),⁹⁴ and seek comment on whether doing so falls within the scope of the Commission's ancillary authority.

35. *Digital Equity.* The Commission, as part of its continuing effort to advance digital equity for all,⁹⁵ including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality, invites comments on any equity-related considerations⁹⁶ and benefits (if any) that may be associated with the proposals and issues discussed herein. Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well as the scope of the Commission's relevant legal authority.

IV. PROCEDURAL MATTERS

36. *Ex Parte Rules.* This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.⁹⁷ 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).⁹⁸ Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

37. *Comment Filing Procedures.* Pursuant to sections 1.415 and 1.419 of the Commission's rules,⁹⁹ 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 ECFS:

⁹⁴ 47 U.S.C. § 251(e)(4).

⁹⁵ Section 1 of the Communications Act of 1934 as amended provides that the FCC "regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex." 47 U.S.C. § 151.

⁹⁶ We define the term "equity" consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *See* Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (Jan. 20, 2021).

⁹⁷ 47 CFR § 1.1200(a).

⁹⁸ 47 CFR § 1.1206(b).

⁹⁹ 47 CFR §§ 1.415, 1.419.

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 commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, DC 20554.
 - Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.¹⁰⁰

38. *Availability of Documents.* Comments, reply comments, and *ex parte* submissions will be publicly available online via ECFS. These documents will also be available for public inspection during regular business hours in the FCC Reference Information Center, when FCC Headquarters reopens to the public.

39. *Confidentiality.* Some information and materials requested by this *Second Further Notice of Proposed Rulemaking* may be confidential and proprietary. Individuals and entities may request that confidential and proprietary information submitted to the Commission be withheld from public inspection consistent with section 0.459 of the Commission’s rules.¹⁰¹

40. *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 and Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY).

41. *Regulatory Flexibility Act.* The Regulatory Flexibility Act of 1980, as amended (RFA),¹⁰² 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.”¹⁰³ Accordingly, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning the possible impact of the potential rule and policy changes contained in this *Second Further Notice of Proposed Rulemaking*. The IRFA is set forth in Appendix A. The Commission invites the general public, particularly small businesses, to comment on the IRFA. Comments must be filed by the deadlines for comments on the *Second Further Notice of Proposed Rulemaking* indicated on the first page of this document and must have a separate and distinct heading designating them as responses to the IRFA.

42. *Paperwork Reduction Act.* This document may contain proposed new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on any information collection requirements contained in this document, as required by the

¹⁰⁰ See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

¹⁰¹ 47 CFR § 0.459.

¹⁰² See 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601–612, was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

¹⁰³ *Id.*

Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

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

44. *Contact Person.* For additional information on this proceeding, contact Merry Wulff, Wireline Competition Bureau, Competition Policy Division, at Merry.Wulff@fcc.gov or (202) 418-1084.

V. ORDERING CLAUSES

45. Accordingly, IT IS ORDERED, pursuant to Sections 1, 4(i), 4(j), 201, 218, 251(e), 301, 303, 307, 309(a), 316, 332, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 154(j), 201, 218, 251(e), 301, 303, 307, 309(a), 316, 332, and 403, that this *Second Further Notice of Proposed Rulemaking* IS ADOPTED.

46. IT IS FURTHER ORDERED that, pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415 and 1.419, interested parties may file comments on the *Second Further Notice of Proposed Rulemaking* on or before 30 days following publication in the Federal Register, and reply comments on or before 60 days following publication in the Federal Register.

47. IT IS FURTHER ORDERED that the Office of the Secretary, Reference Information Center SHALL SEND a copy of this *Second Further Notice of Proposed Rulemaking*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

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 small entities by the policies and rules proposed in the *Second Further Notice of Proposed Rulemaking (Second FNPRM)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided in the *Second FNPRM*. The Commission will send a copy of the *Second FNPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the *Second FNPRM* and IRFA (or summaries thereof) will be published in the Federal Register.³

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

2. The *Second FNPRM* seeks to facilitate access to critical suicide prevention and crisis services by improving routing of wireless calls to the 988 Suicide & Crisis Lifeline (988 Lifeline). The 988 Lifeline is currently designed to route wireless calls to crisis centers based on a caller's area code and exchange.⁴ As a result, however, the 988 Lifeline may not route a wireless call to a crisis center nearest to the caller's physical location. This is particularly concerning given the increased prevalence of calls to the 988 Lifeline originating from wireless phones⁵ and the importance of providing help-seekers access to local resources.⁶

3. The *Second FNPRM* proposes to adopt a rule that would require wireless carriers to implement one or more georouting solutions for calls to the 988 Lifeline, and seeks comment to thoroughly and transparently consider georouting solutions that could fall within the scope of that mandate and to identify any remaining work to implement a georouting solution. The *Second FNPRM* seeks comment on whether mandating the use of one or more georouting solutions by wireless carriers originating calls to the 988 Lifeline will achieve the benefits of enhancing access to critical support and resources. The *Second FNPRM* inquires about the viability of any potential georouting solutions proposed to date, including those proposed to SAMHSA and the Lifeline Administrator, and also seeks comment on any alternative georouting solutions. The Commission believes that a georouting solution based on cell tower information would best identify a caller's location and thus enable routing the call to a geographically appropriate crisis call center. The *Second FNPRM* seeks comment on this belief and on any other alternatives for identifying a caller's location and correlating that location with a geographically appropriate crisis call center. The *Second FNPRM* also seeks comment on the geographic boundaries

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

² 5 U.S.C. § 603(a).

³ *Id.*

⁴ *See* Substance Abuse and Mental Health Services Administration (SAMHSA), *988 Frequently Asked Questions, FAQs About Privacy, Call Routing, and Network Functioning*, <https://www.samhsa.gov/find-help/988/faqs> (last visited Mar. 6, 2024).

⁵ The Lifeline Administrator estimates that 80% of calls placed to the 988 Lifeline are from wireless phones. Vibrant 988 Geolocation Comments at 2.

⁶ According to mental health and crisis counseling experts, local crisis call center counselors are more knowledgeable about available local resources and are more well-suited to respond to unique community stressors and regional cultural and economic factors. *See e.g.*, American Association of Suicidology Comments at 2-3; American Foundation for Suicide Prevention 988 Geolocation Comments at 1; BRETSA 988 Geolocation Comments at 17; Crisis Response Network 988 Geolocation Comments at 1; Mental Health America 988 Geolocation Comments at 1; Vibrant 988 Geolocation Comments at 3; NAMI 988 Geolocation Comments at 2.

used for any proposed georouting solution and asks whether the Commission should mandate the use of one or more particular geographic boundaries. For any georouting solutions, the *Second FNPRM* inquires about the technical specifications and limitations, required routing data and transmission methods, necessary infrastructure and system changes or upgrades, testing requirements, costs and benefits, and timelines for deployment. Additionally, the *Second FNPRM* seeks comment on any routing challenges and potential georouting solutions for non-wireless calls. The *Second FNPRM* also seeks comment on the impact of georouting solutions on texting to the 988 Lifeline and asks whether additional improvements are needed to route texts to geographically appropriate 988 crisis centers. Lastly, the *Second FNPRM* requests comment on the form of rules requiring wireless carriers to implement a georouting solution for the 988 Lifeline and on the Commission's authority to adopt such rules.

B. Legal Basis

4. The legal basis for any action that may be taken pursuant to this *Second FNPRM* is contained in sections 1, 4(i), 4(j), 201, 218, 251(e), 301, 303, 307, 309(a), 316, 332, and 403 of the Communications Act of 1934, as amended.⁷

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

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

6. *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.¹² First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration's (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.¹³ These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million businesses.¹⁴

⁷ 47 U.S.C. §§ 151, 154(i), 154(j), 201, 218, 251(e), 301, 303, 307, 309(a), 316, 332, and 403.

⁸ *Id.* at § 603(b)(3).

⁹ *Id.* at § 601(6).

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

¹¹ See 15 U.S.C. § 632.

¹² 5 U.S.C. § 601(3)-(6).

¹³ 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).

¹⁴ *Id.*

7. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹⁵ 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.¹⁶ 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.¹⁷

8. 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.”¹⁸ U.S. Census Bureau data from the 2022 Census of Governments¹⁹ indicate there were 90,837 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.²⁰ Of this number, there were 36,845 general purpose governments (county,²¹ municipal, and town or township²²) with populations of less than 50,000 and 11,879 special purpose governments (independent school districts²³) with enrollment

¹⁵ 5 U.S.C. § 601(4).

¹⁶ 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.

¹⁷ 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).

¹⁸ 5 U.S.C. § 601(5).

¹⁹ 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>.

²⁰ 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.

²¹ 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.

²² 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.

²³ 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.

populations of less than 50,000.²⁴ 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.”²⁵

9. *Wired Telecommunications Carriers.* The U.S. Census Bureau defines this industry as establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks.²⁶ Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband Internet services.²⁷ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.²⁸ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.²⁹

10. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.³⁰ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.³¹ Of this number, 2,964 firms operated with fewer than 250 employees.³² Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were engaged in the provision of fixed local services.³³ Of these providers, the Commission estimates that 4,146

²⁴ 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.

²⁵ 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.

²⁶ See U.S. Census Bureau, *2017 NAICS Definition, “517311 Wired Telecommunications Carriers,”* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

²⁷ *Id.*

²⁸ *Id.*

²⁹ Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.

³⁰ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

³¹ 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>.

³² *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.

³³ 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>. <https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf>

providers have 1,500 or fewer employees.³⁴ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities

11. *Local Exchange Carriers (LECs)*. Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include both incumbent and competitive local exchange service providers. Wired Telecommunications Carriers³⁵ is the closest industry with an SBA small business size standard.³⁶ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.³⁷ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.³⁸ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.³⁹ Of this number, 2,964 firms operated with fewer than 250 employees.⁴⁰ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were fixed local exchange service providers.⁴¹ Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees.⁴² Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

12. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers⁴³ is the closest industry with an SBA small business size standard.⁴⁴ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁴⁵ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁴⁶ Of this number, 2,964 firms operated with fewer than

³⁴ *Id.*

³⁵ See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

³⁶ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

³⁷ Fixed Local Exchange Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

³⁸ *Id.*

³⁹ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false>.

⁴⁰ *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.

⁴¹ 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>.

⁴² *Id.*

⁴³ See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁴⁴ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁴⁵ *Id.*

⁴⁶ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311,

(continued....)

250 employees.⁴⁷ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 1,212 providers that reported they were incumbent local exchange service providers.⁴⁸ Of these providers, the Commission estimates that 916 providers have 1,500 or fewer employees.⁴⁹ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

13. *Competitive Local Exchange Carriers (Competitive LECs)*. Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers.⁵⁰ Wired Telecommunications Carriers⁵¹ is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁵² U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁵³ Of this number, 2,964 firms operated with fewer than 250 employees.⁵⁴ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 3,378 providers that reported they were competitive local exchange service providers.⁵⁵ Of these providers, the Commission estimates that 3,230 providers have 1,500 or fewer employees.⁵⁶ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

14. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for Interexchange Carriers. Wired Telecommunications Carriers⁵⁷ is the closest industry with a SBA small business size standard.⁵⁸ The SBA small business size

(Continued from previous page)

<https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>.

⁴⁷ *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.

⁴⁸ 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>.

⁴⁹ *Id.*

⁵⁰ Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

⁵¹ See U.S. Census Bureau, *2017 NAICS Definition*, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁵² See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁵³ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPfirm, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>.

⁵⁴ *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.

⁵⁵ 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>.

⁵⁶ *Id.*

⁵⁷ See U.S. Census Bureau, *2017 NAICS Definition*, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁵⁹ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁶⁰ Of this number, 2,964 firms operated with fewer than 250 employees.⁶¹ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 127 providers that reported they were engaged in the provision of interexchange services. Of these providers, the Commission estimates that 109 providers have 1,500 or fewer employees.⁶² Consequently, using the SBA's small business size standard, the Commission estimates that the majority of providers in this industry can be considered small entities.

15. *Local Resellers.* Neither the Commission nor the SBA have developed a small business size standard specifically for Local Resellers. Telecommunications Resellers is the closest industry with a SBA small business size standard.⁶³ The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households.⁶⁴ Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.⁶⁵ Mobile virtual network operators (MVNOs) are included in this industry.⁶⁶ The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.⁶⁷ U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.⁶⁸ Of that number, 1,375 firms operated with fewer than 250 employees.⁶⁹ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 207 providers that reported they were engaged in the provision of local resale services.⁷⁰ Of these providers, the Commission

(Continued from previous page) _____

⁵⁸ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁵⁹ *Id.*

⁶⁰ 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>.

⁶¹ *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.

⁶² 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>.

⁶³ See U.S. Census Bureau, *2017 NAICS Definition, "517911 Telecommunications Resellers,"* <https://www.census.gov/naics/?input=517911&year=2017&details=517911>.

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

⁶⁸ 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 517911, <https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFI&hidePreview=false>.

⁶⁹ *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.

⁷⁰ 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>.

estimates that 202 providers have 1,500 or fewer employees.⁷¹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

16. *Toll Resellers.* Neither the Commission nor the SBA have developed a small business size standard specifically for Toll Resellers. Telecommunications Resellers⁷² is the closest industry with a SBA small business size standard. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.⁷³ Mobile virtual network operators (MVNOs) are included in this industry.⁷⁴ The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.⁷⁵ U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.⁷⁶ Of that number, 1,375 firms operated with fewer than 250 employees.⁷⁷ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 457 providers that reported they were engaged in the provision of toll services.⁷⁸ Of these providers, the Commission estimates that 438 providers have 1,500 or fewer employees.⁷⁹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

17. *Other Toll Carriers.* Neither the Commission nor the SBA has developed a definition for small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. Wired Telecommunications Carriers⁸⁰ is the closest industry with a SBA small business size standard.⁸¹ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁸² U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁸³

⁷¹ *Id.*

⁷² See U.S. Census Bureau, *2017 NAICS Definition*, "517911 Telecommunications Resellers," <https://www.census.gov/naics/?input=517911&year=2017&details=517911>.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

⁷⁶ U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPfirm, NAICS Code 517911, <https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>.

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 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>.

⁷⁹ *Id.*

⁸⁰ See U.S. Census Bureau, *2017 NAICS Definition*, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁸¹ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁸² *Id.*

⁸³ U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPfirm, NAICS Code 517311,

(continued....)

Of this number, 2,964 firms operated with fewer than 250 employees.⁸⁴ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 90 providers that reported they were engaged in the provision of other toll services.⁸⁵ Of these providers, the Commission estimates that 87 providers have 1,500 or fewer employees.⁸⁶ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

18. *Wireless Carriers and Service Providers.* Wireless Telecommunications Carriers (*except Satellite*) is the closest industry with a SBA small business size standard applicable to these service providers.⁸⁷ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.⁸⁸ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁸⁹ Of this number, 2,837 firms employed fewer than 250 employees.⁹⁰ 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.⁹¹ Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees.⁹² Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

19. *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.⁹³ Wireless Telecommunications Carriers (*except Satellite*)⁹⁴ 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.⁹⁵ U.S. Census Bureau data for 2017 show that there were 2,893 firms that

(Continued from previous page) _____

<https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>.

⁸⁴ *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.

⁸⁵ 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>. <https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf>.

⁸⁶ *Id.*

⁸⁷ 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>.

⁸⁸ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁸⁹ 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>.

⁹⁰ *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.

⁹¹ 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>.

⁹² *Id.*

⁹³ See 47 CFR §§ 27.1 – 27.1607.

⁹⁴ 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>.

⁹⁵ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

operated in this industry for the entire year.⁹⁶ Of this number, 2,837 firms employed fewer than 250 employees.⁹⁷ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

20. 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.⁹⁸

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

22. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. The closest applicable industry with an SBA small business size standard is Wireless Telecommunications Carriers (except Satellite).⁹⁹ The size standard for this industry under SBA rules is that a business is small if it has 1,500 or fewer employees.¹⁰⁰ For this industry, U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated for the entire year.¹⁰¹ Of this number, 2,837 firms employed fewer than 250 employees.¹⁰² Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 331 providers that reported they were engaged in the provision of cellular, personal communications services, and specialized mobile radio services.¹⁰³ Of these providers, the Commission estimates that 255

⁹⁶ 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>.

⁹⁷ *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.

⁹⁸ 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.

⁹⁹ 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>.

¹⁰⁰ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

¹⁰¹ 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>.

¹⁰² *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.

¹⁰³ 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>.

providers have 1,500 or fewer employees.¹⁰⁴ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

23. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves.¹⁰⁵ 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.¹⁰⁶ The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁰⁷ U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.¹⁰⁸ Of that number, 2,837 firms employed fewer than 250 employees.¹⁰⁹ 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.¹¹⁰ Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees.¹¹¹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

24. *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.¹¹² 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.¹¹³ The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.¹¹⁴ The SBA small business size standard for this industry classifies firms with annual receipts less than \$41.5 million as small.¹¹⁵ Based on U.S. Census Bureau data for 2017, 378 firms operated in this industry during that year.¹¹⁶ Of that number, 149 firms operated with revenue of less than

¹⁰⁴ *Id.*

¹⁰⁵ 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>.

¹⁰⁶ *Id.*

¹⁰⁷ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

¹⁰⁸ 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&hidePrevious=false>.

¹⁰⁹ *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.

¹¹⁰ 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>.

¹¹¹ *Id.*

¹¹² 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>.

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ See 13 CFR § 121.201, NAICS Code 515210 (as of 10/1/22, NAICS Code 516210).

¹¹⁶ 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&hidePrevious=false>.

(continued...)

\$25 million a year and 44 firms operated with revenue of \$25 million or more.¹¹⁷ Based on this data, the Commission estimates that a majority of firms in the industry are small.

25. *Cable Companies and Systems (Rate Regulation)*. The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.¹¹⁸ Based on industry data, there are about 420 cable companies in the U.S.¹¹⁹ Of these, only seven have more than 400,000 subscribers.¹²⁰ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.¹²¹ Based on industry data, there are about 4,139 cable systems (headends) in the U.S.¹²² Of these, about 639 have more than 15,000 subscribers.¹²³ Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.

26. *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."¹²⁴ 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.¹²⁵ Based on industry data, only six cable system operators have more than 498,000 subscribers.¹²⁶ 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

(Continued from previous page) _____

[w=false](#). 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).

¹¹⁷ *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.

¹¹⁸ 47 CFR § 76.901(d).

¹¹⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

¹²⁰ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022); S&P Global Market Intelligence, *Multichannel Video Subscriptions, Top 10* (April 2022).

¹²¹ 47 CFR § 76.901(c).

¹²² S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

¹²³ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022).

¹²⁴ 47 U.S.C. § 543(m)(2).

¹²⁵ *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).

¹²⁶ 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).

gross annual revenues exceed \$250 million.¹²⁷ 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.

27. *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.”¹²⁸ Satellite telecommunications service providers include satellite and earth station operators. The SBA small business size standard for this industry classifies a business with \$38.5 million or less in annual receipts as small.¹²⁹ U.S. Census Bureau data for 2017 show that 275 firms in this industry operated for the entire year.¹³⁰ Of this number, 242 firms had revenue of less than \$25 million.¹³¹ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 65 providers that reported they were engaged in the provision of satellite telecommunications services.¹³² Of these providers, the Commission estimates that approximately 42 providers have 1,500 or fewer employees.¹³³ Consequently, using the SBA’s small business size standard, a little more than half of these providers can be considered small entities.

28. *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.¹³⁴ 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.¹³⁵ 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.¹³⁶ The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small.¹³⁷ U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry

¹²⁷ 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).

¹²⁸ See U.S. Census Bureau, *2017 NAICS Definition*, “517410 Satellite Telecommunications,” <https://www.census.gov/naics/?input=517410&year=2017&details=517410>.

¹²⁹ See 13 CFR § 121.201, NAICS Code 517410.

¹³⁰ 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>.

¹³¹ *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.

¹³² 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>.

¹³³ *Id.*

¹³⁴ See U.S. Census Bureau, *2017 NAICS Definition*, “517919 All Other Telecommunications,” <https://www.census.gov/naics/?input=517919&year=2017&details=517919>.

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ See 13 CFR § 121.201, NAICS Code 517919 (as of 10/1/22, NAICS Code 517810).

that operated for the entire year.¹³⁸ Of those firms, 1,039 had revenue of less than \$25 million.¹³⁹ Based on this data, the Commission estimates that the majority of “All Other Telecommunications” firms can be considered small.

29. *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.¹⁴⁰ 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.¹⁴¹ The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small.¹⁴² U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year.¹⁴³ Of this number, 624 firms had fewer than 250 employees.¹⁴⁴ Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

30. *Semiconductor and Related Device Manufacturing.* This industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices.¹⁴⁵ Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells and other optoelectronic devices.¹⁴⁶ The SBA small business size standard for this industry classifies entities having 1,250 or fewer employees as small.¹⁴⁷ U.S. Census Bureau data for 2017 show that there were 729 firms in this industry that operated for the entire year.¹⁴⁸ Of this total, 673 firms operated with fewer than 250 employees.¹⁴⁹ Thus under the SBA size standard, the majority of firms in this industry can be considered small.

¹³⁸ 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>.

¹³⁹ *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.

¹⁴⁰ 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>.

¹⁴¹ *Id.*

¹⁴² See 13 CFR § 121.201, NAICS Code 334220.

¹⁴³ 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>.

¹⁴⁴ *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.

¹⁴⁵ See U.S. Census Bureau, *2017 NAICS Definition, “334413 Semiconductor and Related Device Manufacturing,”* <https://www.census.gov/naics/?input=334413&year=2017&details=334413>.

¹⁴⁶ *Id.*

¹⁴⁷ See 13 CFR § 121.201, NAICS Code 334413.

¹⁴⁸ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPfirm, NAICS Code 334413, <https://data.census.gov/cedsci/table?y=2017&n=334413&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>.

31. *Software Publishers*. This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction.¹⁵⁰ 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.¹⁵¹ These establishments may design, develop, and publish, or publish only.¹⁵² The SBA small business size standard for this industry classifies businesses having annual receipts of \$41.5 million or less as small.¹⁵³ U.S. Census Bureau data for 2017 indicate that 7,842 firms in this industry operated for the entire year.¹⁵⁴ Of this number 7,226 firms had revenue of less than \$25 million.¹⁵⁵ Based on this data, we conclude that a majority of firms in this industry are small.

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

32. The RFA requires federal agencies to describe the impact of proposed rules on small entities. The *Second FNPRM* proposes to adopt a rule that would require small and other wireless carriers to implement one or more georouting solutions for calls to the 988 Lifeline. The Commission believes that a georouting solution based on cell tower information would best identify a caller's location to enable routing to a geographically appropriate crisis call center and seeks comment on this conclusion. The *Second FNPRM* seeks comment on whether the Commission should mandate the use of one or more particular geographic boundaries. The *Second FNPRM* also seeks comment on routing challenges and potential georouting solutions for non-wireless calls and asks whether additional improvements are needed to route texts to geographically appropriate 988 crisis centers. Additionally, the *Second FNPRM* seeks comment on a number of aspects related to implementing any georouting solutions, including technical specifications and limitations, required routing data and transmission methods, necessary infrastructure and system changes or upgrades, testing requirements, timelines for deployment, and the Commission expects that small entities will incur costs to implement these changes. At this time the Commission does not have sufficient cost information to quantify compliance costs for small entities. However, we expect the comments received in response to the *Second FNPRM* to include information which should help the Commission further analyze the economic impact of various proposals on small entities, including but not limited to costs for professional services, before adopting final rules.

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

33. The RFA requires an agency to describe any significant alternatives that could minimize impacts to small entities that it has considered in reaching its proposed approach, which may include the

(Continued from previous page) _____

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.

¹⁵⁰ See U.S. Census Bureau, 2017 NAICS Definition, "511210 Software Publishers," <https://www.census.gov/naics/?input=511210&year=2017&details=511210>.

¹⁵¹ *Id.*

¹⁵² *Id.*

¹⁵³ See 13 CFR § 121.201, NAICS Code 511210 (as of 10/1/22 NAICS Code 513210).

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 511210, <https://data.census.gov/cedsci/table?y=2017&n=511210&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>.

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.

following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rules for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.”¹⁵⁶

34. In the *Second FNPRM*, the Commission seeks comment from all entities, including small entities, on the effect of deploying a georouting solution for wireless calls to the 988 Lifeline, and on alternative ways of implementing a georouting solution, including concepts that have yet to be tested or developed. For example, the *Second FNPRM* seeks comment on the costs and benefits of deploying a georouting solution for wireless calls to the 988 Lifeline. This includes whether rules requiring wireless carriers to implement a georouting solution for the 988 Lifeline should specify one or more technical solutions that must be used or more generally require wireless carriers to implement a georouting solution within a certain period of time of the Lifeline Administrator announcing that it is: (a) prepared to implement the terminating function of one or more georouting solutions; and (b) able to provide technical specifications needed by wireless carriers to implement the originating functions. Additionally, the *Second FNPRM* invites stakeholders to comment on whether georouting solutions that have been developed to date by major carriers would be viable for smaller carriers, and any distinctions that need to be considered for smaller carriers when mandating the use of a georouting solution for the 988 Lifeline. The *Second FNPRM* also inquires whether there are any ways to minimize costs incurred for network or system changes or upgrades, particularly for small providers. Small entities are encouraged to bring to the Commission’s attention any specific concerns they may have with the alternatives proposed in the *Second FNPRM*. We expect to take into account the economic impact on small entities, as identified in comments filed in response to the *Second FNPRM* and this IRFA, in reaching our final conclusions and promulgating rules in this proceeding.

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

35. None.

¹⁵⁶ 5 U.S.C. § 603(c)(1)-(4).