

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

In the Matter of)
Establishing the Digital Opportunity Data) WC Docket No. 19-195
Collection)
Modernizing the FCC Form 477 Data Program) WC Docket No. 11-10

ORDER

Adopted: December 9, 2022

Released: December 9, 2022

By the Commission:

I. INTRODUCTION

1. In this Order, we take another step in our efforts to implement the Broadband Data Collection (BDC) and modernize the FCC Form 477 data program. Consistent with the Broadband Deployment Accuracy and Technological Availability Act (the Broadband DATA Act or the Act) and the Third Report and Order, we sunset the collection of broadband deployment data through FCC Form 477 effective upon publication of this Order in the Federal Register. We will continue to collect broadband and voice subscription data using the FCC Form 477, but filers will submit their data through the BDC system. We also delegate authority to various Commission staff to take other actions related to the collection and use of FCC Form 477 data.

II. BACKGROUND

2. The Commission began collecting information about broadband deployment and local telephone competition through FCC Form 477 (Form 477) in 2000. Over time, the Form 477 data collection evolved, and in June 2013, the Commission adopted the current Form 477 requirement that facilities-based providers of fixed broadband service report the census blocks in which they provide broadband service to end-user customers. Census block-level fixed broadband reporting gave the

1 The BDC was formerly known as the Digital Opportunity Data Collection, or DODC.

2 Broadband Deployment Accuracy and Technological Availability Act, Pub. L. No. 116-130, 134 Stat. 228 (2020) (codified at 47 U.S.C. §§ 641-646) (Broadband DATA Act); Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program, WC Docket Nos. 19-195, 11-10, Third Report and Order, 36 FCC Rcd 1126 (2021) (Third Report and Order). We clarify that while the Form 477 system will remain open so that previous filers can file revisions to past submissions, broadband deployment data will no longer be filed through Form 477.

3 See Local Competition and Broadband Reporting, CC Docket No. 99-301, Report and Order, 15 FCC Rcd 7717, 7719-20, para. 3 (2000); see also 47 U.S.C. § 1302(b) (requiring the Commission to determine and report annually on "whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion").

4 Modernizing the FCC Form 477 Data Program, WC Docket No. 11-10, Report and Order, 28 FCC Rcd 9887, 9902, para. 32 (2013); Form 477 Instructions at 17-18 (requiring a fixed service provider to report census blocks in which it "does, or could, within a service interval that is typical for that type of connection," provide access to broadband connections to end-user premises).

Commission important data that it used in many of its proceedings. These data do not, however, reveal the number of discrete locations within a census block to which a provider makes fixed broadband service available. Facilities-based providers of mobile wireless services are required to report on mobile broadband deployment in Form 477 by submitting, for each available transmission technology, polygons in GIS mapping files that digitally represent the geographic areas in which users should expect to receive the minimum upload and download data speeds the mobile provider advertises for that area (or, if the provider does not advertise such speeds, the minimum upload and download data speeds that users should expect to receive within the polygon).⁵ Fixed and mobile providers also report broadband and voice subscription information and information through Form 477.⁶

3. In 2019, the Commission sought comment on sunsetting the collection of broadband deployment data through Form 477.⁷ At that time, the Commission indicated that over the long term it expected the new Digital Opportunity Data Collection to largely displace the Form 477 process, at least with respect to the collection of granular broadband deployment data.⁸ The Commission sought comment on “discontinuing the broadband deployment data collection that is part of Form 477 at some point after the new collection has been established.”⁹ The Commission asked commenters to address the conditions under which eliminating the collection of broadband deployment data under Form 477 would be appropriate and the appropriate timetable for sunsetting both the mobile and fixed Form 477 broadband data collections.¹⁰ The Commission also asked whether there were other portions of the Form 477 collection that it should consider sunsetting.¹¹

4. In response to the *Second Further Notice*, several commenters supported sunsetting the collection of broadband deployment data through Form 477 once the FCC implemented a new collection.¹² Others expressed support for sunsetting the Form 477 data collection after the Commission determined that there were sufficient resources to implement a new broadband data collection and that the new collection produced reliable data, and that there was a period of transition to the new collection.¹³ One commenter expressed support for maintaining the Form 477 census-block broadband deployment data collection¹⁴

5. In 2020, after the Commission adopted the *2019 Order and Second Further Notice*, Congress passed the Broadband DATA Act which also recognized the need for the collection of more granular broadband data. The Act directed the Commission to collect more granular broadband availability data and to create a publicly accessible, nationwide map of where fixed and mobile broadband is available throughout the United States.¹⁵ The Broadband DATA Act directed the Commission to

⁵ Form 477 Instructions at 24-25.

⁶ Form 477 Instructions at 18-24, 25-28.

⁷ *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Report and Order and Second Further Notice of Proposed Rulemaking, 34 FCC Rcd 7505, 7559, para. 135 (2019) (*2019 Order and Further Notice*).

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² Alaska Communications Sept. 23, 2019 Comments at 19; U.S. Cellular Sept. 23, 2019 Comments at 11; Microsoft Oct. 7, 2019 Reply at 7.

¹³ Alexicon Sept. 23, 2019 Comments at 10; ACA Connects Sept. 23, 2019 Comments at 3. California PUC Sept. 24, 2019 Comments at 19; GVNW Consulting Sept. 23, 2019 Comments at 7; NCTA Sept. 23, 2019 Comments at 25; Broadband Mapping Coalition Sept. 23, 2019 Comments at 38; West Virginia Sept. 23, 2019 Comments at 5-6.

¹⁴ Free Press Sept. 23, 2019 Comments at 22-24.

reform the Form 477 broadband deployment collection in a manner that achieves the purposes of the Act and that allows for the comparison of data produced before and after the implementation of the Broadband DATA Act.¹⁶ The Broadband DATA Act directed the Commission to “continue to collect and publicly report subscription data that the Commission collected through the Form 477 broadband deployment service availability process, as in effect on July 1, 2019.”¹⁷

6. The Commission adopted rules implementing the requirements of the Broadband DATA Act in two orders in this proceeding. In its *Second Report and Order and Third Further Notice*, the Commission created broadband availability reporting requirements for fixed and mobile broadband service providers and proposed to “continue the current census-based deployment data collection under Form 477 for at least one reporting cycle after the new granular reporting collection commences.”¹⁸ The Commission sought comment on “sunsetting the census-block broadband deployment reporting in the FCC Form 477 and the timing of doing so.”¹⁹

7. In response to the *Third Further Notice*, commenters generally expressed support for sunsetting the collection of broadband deployment data through Form 477 but recommended different time periods for doing so. Some commenters urged that the Commission sunset the Form 477 broadband deployment data collection one year after the BDC commenced.²⁰ Others recommended that it sunset after one reporting cycle of the BDC availability data.²¹ Several other commenters did not suggest a specific timeframe but urged that the Commission not rush sunsetting the collection of broadband deployment data through Form 477.²²

8. In its *Third Report and Order*, the Commission deferred sunsetting the Form 477 broadband deployment data collection until a later, to-be-determined date.²³ The Commission stated that, for fixed providers, it would continue the “census-based deployment data collection under Form 477 for at least one reporting cycle after the new granular reporting collection commences.”²⁴ In the *Third Report and Order*, the Commission also indicated that it would require mobile service providers to report both voice and broadband subscription data under the rules in effect on July 1, 2019, for all future Form 477 submissions.²⁵ The Commission noted that, while it expected the BDC to provide improved data, it was a new collection and the Commission could not predict, before the collection had begun, when it would yield useful data.²⁶

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¹⁵ 47 U.S.C. § 642(a)(1)(A), (c).

¹⁶ 47 U.S.C. § 642(b)(6)(A).

¹⁷ 47 U.S.C. § 642(b)(6)(B).

¹⁸ *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460, 7529, para. 191 (*Second Report and Order and Third Further Notice*).

¹⁹ *Id.*

²⁰ *See, e.g.*, ACA Connects Sept. 8, 2020 Comments at 5; NCTA Sept. 8, 2020 Comments at 9; Letter from B. Lynn Follansbee, Vice Pres. Policy and Advocacy, USTelecom to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-195 (filed Aug. 14, 2020).

²¹ *See, e.g.*, AT&T Sept. 8, 2020 Comments at 14; US Telecom/WISPA Sept. 8, 2020 Comments at 23-24.

²² *See, e.g.*, Connected2Fiber Sept. 8, 2020 Comments at 9; MDTC Sept. 8, 2020 Comments at 4-5; City of New York Sept. 8, 2020 at 3.

²³ *Third Report and Order*, 36 FCC Rcd at 1186, 1187-88, paras. 156, 160.

²⁴ *Id.* at 1187-88, para. 160.

²⁵ *Id.* at 1186, 1187, paras. 156, 158.

²⁶ *Id.* at 1188, para. 160.

9. Since the beginning of 2021, Commission staff have worked to develop and implement the new systems and processes to collect broadband availability data in the manner required under the Broadband DATA Act and the Commission's BDC orders.²⁷ On February 22, 2022, the Commission's Broadband Data Task Force (Task Force) and OEA announced the filing dates for the initial BDC availability data collection: data as of June 30, 2022, were due no later than September 1, 2022.²⁸ They indicated that the notice of the initial filing date for the BDC did not alter the obligation of service providers to submit the semiannual Form 477 filing and that, until the Commission announces a sunset date for the Form 477 broadband deployment collection, all service providers are required to continue to submit Form 477 data.²⁹

III. DISCUSSION

10. *Sunsetting the Collection of Broadband Deployment Data through Form 477.* In this *Order*, we sunset the collection of broadband deployment data through Form 477 effective upon publication of this *Order* in the Federal Register.³⁰ As noted above, the Commission sought comment on sunsetting the Form 477 broadband deployment data collection in 2019 and again in 2020, and indicated that it expected the new broadband data collection being developed would largely displace the Form 477 process, particularly with respect to the collection of more precise deployment data.

11. Since the *2019 Order and Second Further Notice* and the *Second Report and Order and Third Further Notice*, the Commission has made significant efforts to improve the quality of the broadband deployment data it collects. As outlined above, the Broadband DATA Act was enacted in 2020 and required the Commission to take steps to develop more granular broadband maps. The Commission has implemented the Act by adopting orders establishing the BDC and requiring broadband providers to file broadband availability data based on standardized and precise parameters, developing the Fabric as a common dataset of all locations where fixed broadband services can be installed, and establishing processes for the verification of data submitted by filers and for members of the public and other entities to challenge the accuracy of providers' data.³¹ To implement these processes, the Commission has designed, developed, and launched the necessary information technology systems to support the BDC, including a new filing interface for BDC data, a BDC help center to provide technical assistance, and online video tutorials and webinars explaining, among other things, the BDC availability

²⁷ In January 2021, the Commission received funding to initiate the procurements necessary to implement the BDC as a part of the Consolidated Appropriations Act of 2021, enacted on December 27, 2020. Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, H.R. 133, Div. E, Tit. V, Div. N, Tit. V, § 906(1) (Dec. 27, 2020). For a full list of all BDC releases, see <https://www.fcc.gov/BroadbandData/resources>.

²⁸ See *Broadband Data Task Force and Office of Economics and Analytics Announce Inaugural Broadband Data Collection Filing Dates*, WC Docket Nos. 11-10, 19-195, Public Notice, DA 22-182, 2022 WL 565718 at *1, *9, paras. 3, 22 (OEA Feb. 22, 2022) (*Initial BDC Filing Dates Public Notice*).

²⁹ *Initial BDC Filing Dates Public Notice* at *9, para. 29.

³⁰ We clarify that while the Form 477 system will remain open so that previous filers can file revisions to past submissions, broadband deployment data will no longer be filed through Form 477.

³¹ See *Second Report and Order*; *Third Report and Order*; *Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, Order, DA 22-241, 2022 WL 743185 (WTB/OEA/OET Mar. 9, 2022) (*Mobile Technical Requirements Order*); *Broadband Data Task Force Announces the Availability of the Production Version of the Broadband Serviceable Location Fabric*, WC Docket Nos. 11-10, 19-195, Public Notice, DA 22-668 (WCB/OEA June 23, 2022); *Broadband Data Task Force Publishes Data Specification for Bulk Challenges of Broadband Serviceable Location Fabric Data and Provides Further Details on Fabric Locations Data*, WC Docket Nos. 11-10, 19-195, DA 22-705 (WCB/OEA July 1, 2022); *Broadband Data Task Force Establishes Process for Entities to Use Their Own Software and Hardware to Collect On-the-Ground Test Data as Part of the Mobile Broadband Data Collection*, WC Docket No. 19-195, Public Notice, DA 22-962 (WTB/OEA/OET Sept. 15, 2022); *Broadband Data Task Force Publishes Specifications for Bulk Fixed Availability Challenge and Crowdsourced Data*, WC Docket Nos. 11-10, 19-195, Public Notice, DA 22-961 (WCB/OEA Sept. 15, 2022).

data and challenge submission processes.³² Based on this effort, the first broadband data collection under the BDC was launched on June 30, 2022 and, on September 1, 2022, the first filing window for the BDC closed. The FCC subsequently published the new data on November 18, 2022. At the same time, broadband providers were required to submit Form 477 data as of June 30, 2022 in the Form 477 filing interface which was also due no later than September 1, 2022.

12. We find that it is now appropriate to sunset the collection of broadband deployment data through Form 477. We have made significant progress in implementing the BDC, including the completion of the first BDC collection of broadband availability data and resulting publication of updated maps and data. We therefore now have a process in place for collecting more precise location-specific data from fixed broadband service providers and using more uniform standards for mobile broadband providers than the processes and standards used for the Form 477 process. Having to file concurrent Form 477 data in addition to their BDC data imposes significant burdens on providers, and we find it is unnecessary to have additional rounds of overlapping collections of BDC availability data and Form 477 deployment data.³³ We disagree with those commenters who argue that a longer transition period is necessary to ensure that the BDC is well established and will provide useful data.³⁴ Congress has provided funding and the Commission has implemented the complex technical systems necessary to support the BDC. In addition, we are confident, based on the detailed standards the Commission has established, and the newly released data, that we can now make available more granular and consistent broadband data through the BDC, and the new BDC maps. The BDC also incorporates verification and challenge processes that will help ensure that our broadband maps will improve over time based on input from various consumers, as well as state and Tribal governments and other stakeholders. We find that continuing the parallel collection of broadband deployment data through Form 477 based on parameters that we know lack sufficient detail is no longer necessary to support our objective of developing a more precise picture of broadband availability across the country. Sunsetting the collection of broadband deployment data through Form 477 will reduce burdens on providers by eliminating the need for concurrent filings in both the Form 477 and BDC systems. By removing the need to separately file deployment data in the Form 477 system, sunsetting the collection will also enable providers to devote more resources to the processes established to improve BDC data. In addition, sunsetting the collection of Form 477 deployment data will help ensure efficient use of Commission resources by allowing Commission staff to focus their analysis on the broadband deployment data submitted pursuant to the rules and processes required under the BDC. We also disagree with commenters who expressed support for maintaining the Form 477 census-based broadband deployment data collection.³⁵ These comments

³² See generally the Broadband Data Collection Help Center, <https://help.bdc.fcc.gov/hc/en-us>.

³³ See, e.g., AT&T Sept. 8, 2020 Comments at 14 (stating that “[t]he Commission should sunset the census-based fixed deployment collection after no more than one reporting cycle under the new more granular data collection begins. In light of the significant burden dual reporting obligations will place on fixed providers, one overlapping collection period is sufficient for the Commission’s data collection program”); US Telecom/WISPA Sept. 8, 2020 Comments at 23-24 (stating that “[j]oint Commenters agree that there should be no more than two cycles (one year), and preferably one cycle of overlap, as the Commission proposes, between the new reporting regime and Form 477, at which time Form 477 should sunset automatically with respect to broadband reporting”).

³⁴ See, e.g., MDTC Sept. 8, 2020 Comments at 4-5 (noting that “[i]n the Second Report and Order, the FCC suggests potentially sunsetting Form 477 reporting after just one polygon collection. That short timeframe may be too hasty to enable a full understanding of the polygon method’s accuracy and allow for resolution of appropriate challenges.”); NCTA Sept. 8, 2020 Comments at 9 (recommending a one year transition period to “remove the burdens of duplicative reporting on providers in a timely manner while easing the transition of data collection from the old process to the new. It will also allow the Commission adequate time to address any issues that may arise as the new reporting regime is implemented”). We note, with respect to MDTC’s concern about the accuracy of the polygon method, that, under the BDC, the Commission will not rely solely on the submission of polygons. Instead, the Commission will collect fixed broadband deployment information using either polygons or lists of addresses or locations that constitute providers’ service areas. 47 CFR § 1.7004(c)(1).

were filed prior to the passage of the Broadband DATA Act, and we find that the standards and processes that the Commission has adopted to implement the requirements of the Act will ensure that we collect and make available to the public more useful broadband availability data than the data previously available through Form 477.

13. Although we sunset the collection of Form 477 broadband deployment data, providers must continue to submit the subscription data required under Form 477.³⁶ Going forward, however, the BDC system, rather than the Form 477 filing platform, will be used for the submission of both the subscription data collected for Form 477 and the availability data collected for the BDC. Therefore, beginning with data as of December 31, 2022, providers are required to submit the following data using the BDC filing system: fixed and mobile broadband and voice Form 477 subscription data, fixed and mobile BDC broadband availability data, BDC mobile voice availability data.³⁷ The Form 477 filing system will no longer be used to collect new Form 477 submissions, and will remain open only for filers to make corrections to existing Form 477 filings for data as of June 30, 2022 and earlier. The Form 477 instructions will be updated to reflect the changes we adopt today.

14. *Other Matters.* We recognize that the Commission currently relies upon information from its Form 477 data collection in other contexts, including, among other things, to assess the deployment of broadband services and the state of competition in local telecommunications services.³⁸ We therefore delegate certain additional responsibilities related to transitioning away from reliance on Form 477 deployment data for other uses and purposes within the Commission.³⁹ We delegate authority and direct the Wireless Telecommunications Bureau (WTB) and the Office of Economics and Analytics (OEA) to provide instructions to mobile providers that participate in the Alaska Plan on how to submit coverage data after the sunset of the Form 477 broadband deployment data collection, including whether to use the BDC filing system for submission of data currently submitted using the Form 477 filing system that are specific to Alaska.⁴⁰ We delegate authority and direct the Wireline Competition

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³⁵ Free Press Sept. 23, 2019 Comments at 22-24 (stating that “the use of Census-based geographies is invaluable for demographic and economic analysis of broadband deployment. This is the case not just in rural areas, but in urban areas where the digital divide is primarily driven by inadequate competition not inadequate deployment. The Commission must not throw out this valuable demography tool in the name of improving its data. Sunsetting the current Form 477 Census Block-based reporting and dissemination is completely unnecessary”).

³⁶ See Form 477 Instructions at 18-24, 25-26, 27-28; see also 47 CFR § 1.7001(b).

³⁷ See Form 477 Instructions at 26-27. Fixed voice-only service providers are not required to file voice availability data, only voice subscribership data. See Form 477 Instructions at 19-21. Service providers offering only fixed voice service will be required to submit their voice subscribership data in the subscribership module of the BDC system.

³⁸ 2019 Order and Further Notice, 34 FCC Rcd at 7521, para. 35; *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10, Report and Order, 28 FCC Rcd 9887, 9889, para. 7 (2013).

³⁹ See 47 U.S.C. § 155(c); 47 CFR § 0.201(d) (providing that the Commission may delegate its functions by rule or order). These delegations of authority are rules of agency organization that do not require prior notice and comment. See 5 U.S.C. § 553(b)(A).

⁴⁰ See *Connect America Fund; Universal Service Reform–Mobility Fund; Connect America Fund–Alaska Plan*, WC Docket Nos. 10-90, 16-271, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139 (2016). We delegate to WTB authority to use the data collected through the BDC filing system (or any other mechanism WTB and OEA determine to use for collection of coverage data from Alaska Plan participants) in place of Form 477 data whenever Form 477 data would have been used for Alaska Plan purposes. See *id.* at 10173, para. 103 (“We will rely on participating carriers’ Form 477 submissions in determining whether each carrier’s five-year and 10-year milestones have been met.”); see also *Connect America Fund–Alaska Plan*, WC Docket No. 16-271, Order, 35 FCC Rcd 10373, 10376, para. 9 (WTB 2020) (relying on mobile-provider participants’ Form 477 coverage data as part of the determination of how many people are covered by the providers’ networks); *Wireless Telecommunications Bureau Seeks Comment on Drive Test Parameters and Model for Alaska*

(continued...)

Bureau (WCB) to provide instructions to providers that participate in either the Bringing Puerto Rico Together Fund or the Connect USVI Fund on how to submit coverage data that are specific to Puerto Rico and the U.S. Virgin Islands to comply with the requirements of those funding mechanisms.⁴¹ For Business Data Services (BDS, also formerly known as Special Access services), we delegate to WCB and OEA the authority to conduct a rulemaking to determine the best way to implement the required competitive market tests using BDC instead of Form 477 data.⁴² Consistent with existing delegations, we delegate to WCB authority to develop broadband deployment obligations for Connect America Fund Broadband Loop Support recipients pursuant to section 54.308(a)(2), which currently specifies use of Form 477 data for certain calculations.⁴³ This rulemaking authority is limited to the modification of existing rules and adoption of new rules as needed to facilitate the transition from the use of Form 477 data to the use of the BDC to conduct the triennial competitive market tests beginning with the 2026 triennial update.⁴⁴ We also delegate additional responsibilities to WCB, WTB, the International Bureau (IB), and OEA as may be necessary related to the collection and use of Form 477 deployment data for other similar such uses and purposes within the Commission.

IV. PROCEDURAL MATTERS

15. *Regulatory Flexibility Act.* The Regulatory Flexibility Act of 1980, as amended (RFA),⁴⁵ 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.”⁴⁶ Accordingly, we have prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of the rule changes contained in this *Order* on small entities. The FRFA is set forth in the Appendix.

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Plan Participants, WC Docket No. 16-271, Public Notice, 36 FCC Rcd 11279, 11290, Appx. B (WTB 2021) (proposing to rely on Form 477 data for frame construction); Letter from Christine O’Connor, Executive Director, Alaska Telecom Association, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 16-271 (filed Oct. 12, 2021) (requesting the Commission rely on BDC instead of Form 477 for decisions that could affect high-cost distribution). We direct WCB, WTB, and OEA staff to include a copy of this Order in the respective dockets, WC Docket Nos. 10-90 and 16-271, in order to provide sufficient notice of this delegation of authority to interested parties.

⁴¹ Carriers participating in the Bringing Puerto Rico Together Fund or the Connect USVI Fund must also submit coverage data consistent with the requirements for all carriers. *Uniendo a Puerto Rico Fund and the Connect USVI Fund, Connect America Fund, ETC Annual Report and Certifications*, WC Docket Nos. 18-143, 10-90, 14-58, Report and Order and Order on Reconsideration, 34 FCC Rcd 9109, 9173, para. 128 (2019). We direct WCB staff to include a copy of this Order in the respective dockets, WC Docket Nos. 18-143, 10-90, and 14-58, in order to provide sufficient notice of this delegation of authority to interested parties.

⁴² See 47 CFR §§ 61.50(j), 69.803(c); *Business Data Services in an Internet Protocol Environment et al.*, WC Docket Nos. 16-143, 05-25, GN Docket No. 13-5, RM-10593, Report and Order, 32 FCC Rcd 3459, 3527-29, paras. 145-52 (2017) (*Price Cap BDS Order*); *Regulation of Business Data Services for Rate-of-Return Local Exchange Carriers et al.*, WC Docket Nos. 17-144, 16-143, 05-25, Report and Order, Second Further Notice of Proposed Rulemaking, and Further Notice of Proposed Rulemaking, 33 FCC Rcd 10403, 10439-40, paras. 103-04 (2018) (*Rate-of-Return BDS Order*). We direct WCB and OEA staff to include a copy of this Order in WC Docket Nos. 21-17 and 17-144, and GN Docket No. 13-5, in order to provide interested parties sufficient notice of this delegation of authority.

⁴³ See 47 CFR § 54.308(a)(2).

⁴⁴ For the 2023 update, we instruct WCB and OEA to conduct the competitive market tests using the most recent Form 477 data available to them.

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

⁴⁶ 5 U.S.C. § 605(b).

16. *Paperwork Reduction Act.* The rulemaking required under the Broadband DATA Act is exempt from review by OMB and from the requirements of the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13.461. As a result, the *Order* will not be submitted to OMB for review under the PRA.

17. *Congressional Review Act.* The Commission will send a copy of this *Order* to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

18. *Contact Person.* For further information about this proceeding, contact William Holloway, Assistant Counsel, Broadband Data Task Force, 45 L Street, NE., Washington, D.C., 20554, William.Holloway@fcc.gov.

V. ORDERING CLAUSES

19. Accordingly, IT IS ORDERED that, pursuant to sections 1-4, 201, 301, 303, 319, 332, 642, and 1702 of the Communications Act of 1934, as amended, and section 706 of the Telecommunications Act of 1996, 47 U.S.C. §§ 151-154, 201, 301, 303, 319, 332, 642, 646, 1302, 1702, this *Order* IS ADOPTED.

20. IT IS FURTHER ORDERED that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of the *Order* to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

21. IT IS FURTHER ORDERED that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Order*, including the Final Regulatory Flexibility Analysis to the Chief Counsel for Advocacy of the Small Business Administration.

22. IT IS FURTHER ORDERED that the *Order* SHALL BE effective upon publication in the Federal Register.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *2019 Order and Second Further Notice* released in August 2019² and the *Second Report and Order and Third Further Notice* released in July 2020³ in this proceeding. The Commission sought written public comment on the proposals in the *Second Further Notice* and *Third Further Notice* including comments on the IRFA. No comments were filed addressing the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.⁴

A. Need for, and Objectives of, the Order

2. The *Order* continues the Commission's efforts to implement the Broadband Data Collection (BDC)⁵ and modernize the FCC Form 477 (Form 477) data program. Consistent with the Broadband Deployment Accuracy and Technological Availability Act (Broadband DATA Act) and the *Third Report and Order*, the *Order* sunsets the collection of broadband deployment data through Form 477.⁶ The *Order* also delegates authority to various Commission staff to take other actions related to the collection and use of Form 477 data involving the Alaska Plan,⁷ the Bringing Together Puerto Rico Fund or Connect USVI Fund⁸ and for Business Data Services (BDS, formerly known as Special Access services).⁹

¹ See 5 U.S.C. § 604. 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).

² *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Report and Order and Second Further Notice of Proposed Rulemaking, 34 FCC Rcd 7505 (2019) (*2019 Order and Second Further Notice*).

³ *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460 (2020) (*Second Report and Order and Third Further Notice*).

⁴ See 5 U.S.C. § 604.

⁵ The BDC was formerly known as the Digital Opportunity Data Collection, or DODC.

⁶ Broadband Deployment Accuracy and Technological Availability Act, Pub. L. No. 116-130, 134 Stat. 228 (2020) (codified at 47 U.S.C. §§ 641-646) (Broadband DATA Act); *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Third Report and Order, 36 FCC Rcd 1126 (2021) (*Third Report and Order*).

⁷ See *Connect America Fund; Universal Service Reform–Mobility Fund; Connect America Fund–Alaska Plan*, WC Docket Nos. 10-90, 16-271, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139 (2016). We delegate to WTB authority to use the data collected through the BDC filing system (or any other mechanism WTB and OEA determine to use for collection of coverage data from Alaska Plan participants) in place of Form 477 data whenever Form 477 data would have been used for Alaska Plan purposes. See *id.* at 10173, para. 103 (“We will rely on participating carriers’ Form 477 submissions in determining whether each carrier’s five-year and 10-year milestones have been met.”); see also *Connect America Fund–Alaska Plan*, WC Docket No. 16-271, Order, 35 FCC Rcd 10373, 10376, para. 9 (WTB 2020) (relying on mobile-provider participants’ Form 477 coverage data as part of the determination of how many people are covered by the providers’ networks); *Wireless Telecommunications Bureau Seeks Comment on Drive Test Parameters and Model for Alaska Plan Participants*, WC Docket No. 16-271, Public Notice, 36 FCC Rcd 11279, 11290, Appx. B (WTB 2021) (proposing to rely on Form 477 data for frame construction); Letter from Christine O’Connor, Executive Director, Alaska Telecom Association, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 16-271 (filed Oct. 12, 2021) (requesting the Commission rely on BDC instead of Form 477 for decisions that could affect high-cost distribution).

⁸ Carriers participating in the Bringing Puerto Rico Together Fund or the Connect USVI Fund must also submit coverage data consistent with the requirements for all carriers. *Uniendo a Puerto Rico Fund and the Connect USVI* (continued....)

3. The sunset of the collection of broadband data through Form 477 follows the Commission's inquiries in this proceeding on the conditions under which it would be appropriate to sunset this data collection and the appropriate timetable to implement the sunset, since the Commission expected the Form 477 process, at least with respect to the collection of granular deployment data to be displaced by the BDC.¹⁰ The Commission sought comment in the *2019 Order and Second Further Notice* on discontinuing the broadband deployment data collection that is part of Form 477 at some point after the new collection has been established; the conditions and timetable for discontinuing the collection of broadband deployment data under Form 477 for both the mobile and fixed collections and whether there were other portions of the Form 477 collection that should be sunset.¹¹

4. In the *Second Report and Order and Third Further Notice*, the Commission created broadband availability reporting requirements for fixed and mobile broadband service providers and proposed to "continue the current census-based deployment data collection under Form 477 for at least one reporting cycle after the new granular reporting collection commences."¹² The Commission sought comment on "sunsetting the census-block broadband deployment reporting in the FCC Form 477 and the timing of doing so."¹³ Thereafter, in the *Third Report and Order*, the Commission deferred the sunsetting of the Form 477 broadband deployment data collection to a later, to-be-determined date after further refining the availability data collection requirements, promulgating a framework for the challenge process requirements set out in the Broadband DATA Act and establishing the requirements for the collection and submission of verified availability data from governmental entities and other third parties.

5. On February 22, 2022, the Commission's Broadband Data Task Force (Task Force) and OEA announced the filing dates for the initial BDC availability data collection (coverage data as of June 30, 2022, must have been submitted no later than September 1, 2022).¹⁴ This notice of the initial filing date for the BDC did not alter the obligation of service providers to file the semiannual Form 477 filing. All service providers were still required to submit these data under Form 477.¹⁵ In light of the significant progress that the Commission has made in implementing the BDC and the conclusion of the first data collection into the BDC system, the Commission determined that it is now appropriate to sunset the collection of broadband deployment data through Form 477.

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Fund, Connect America Fund, ETC Annual Report and Certifications, WC Docket Nos. 18-143, 10-90, 14-58, Report and Order and Order on Reconsideration, 34 FCC Rcd 9109, 9173, para. 128 (2019).

⁹ See 47 CFR §§ 61.50(j), 69.803(c); *Business Data Services in an Internet Protocol Environment et al.*, WC Docket Nos. 16-143, 05-25, GN Docket No. 13-5, RM-10593, Report and Order, 32 FCC Rcd 3459, 3527-29, paras. 145-52 (2017) (*Price Cap BDS Order*); *Regulation of Business Data Services for Rate-of-Return Local Exchange Carriers et al.*, WC Docket Nos. 17-144, 16-143, 05-25, Report and Order, Second Further Notice of Proposed Rulemaking, and Further Notice of Proposed Rulemaking, 33 FCC Rcd 10403, 10439-40, paras. 103-04 (2018) (*Rate-of-Return BDS Order*).

¹⁰ *2019 Order and Second Further Notice*, 34 FCC Rcd at 7559, para. 135.

¹¹ *Id.*

¹² *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460, 7529, para. 191 (*Second Report and Order and Third Further Notice*).

¹³ *Id.*

¹⁴ See *Broadband Data Task Force and Office of Economics and Analytics Announce Inaugural Broadband Data Collection Filing Dates*, WC Docket Nos. 11-10, 19-195, Public Notice, DA 22-182, 2022 WL 565718 at *1, *9, paras. 3, 22 (OEA Feb. 22, 2022) (*Initial BDC Filing Dates Public Notice*).

¹⁵ *Initial BDC Filing Dates Public Notice* at *9, para. 29.

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

6. There were no comments filed that specifically addressed the proposed rules and policies presented in the IRFAs.

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

7. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.¹⁶

8. The Chief Counsel did not file comments in response to this proceeding.

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

9. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.¹⁷ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹⁸ In addition, the term “small business” has the same meaning as the term “small-business concern” under the Small Business Act.¹⁹ 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.²⁰

10. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe, at the outset, three broad groups of small entities that could be directly affected herein.²¹ 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.²² These types of small businesses represent 99.9% of all businesses in the United States, which translates to 32.5 million businesses.²³

11. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”²⁴ The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual

¹⁶ 5 U.S.C. § 604(a)(3).

¹⁷ 5 U.S.C. § 604(a)(4).

¹⁸ 5 U.S.C. § 601(6).

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

²⁰ 15 U.S.C. § 632.

²¹ See 5 U.S.C. § 601(3)-(6).

²² See SBA, Office of Advocacy, Frequently Asked Questions, “What is a small business?,” <https://cdn.advocacy.sba.gov/wp-content/uploads/2021/11/03093005/Small-Business-FAQ-2021.pdf>. (Nov 2021).

²³ *Id.*

²⁴ See 5 U.S.C. § 601(4).

electronic filing requirements for small exempt organizations.²⁵ Nationwide, for tax year 2020, there were approximately 447,689 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.²⁶

12. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”²⁷ U.S. Census Bureau data from the 2017 Census of Governments²⁸ indicate there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.²⁹ Of this number, there were 36,931 general purpose governments (county,³⁰ municipal, and town or township³¹) with populations of less than 50,000 and 12,040 special purpose governments— independent school districts³² with enrollment

²⁵ 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 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.

²⁶ 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 2020 with revenue less than or equal to \$50,000 for Region 1-Northeast Area (58,577), Region 2-Mid-Atlantic and Great Lakes Areas (175,272), and Region 3-Gulf Coast and Pacific Coast Areas (213,840) that includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.

²⁷ See 5 U.S.C. § 601(5).

²⁸ See 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/cog/about.html>.

²⁹ See U.S. Census Bureau, 2017 Census of Governments – Organization Table 2. Local Governments by Type and State: 2017 [CG1700ORG02], <https://www.census.gov/data/tables/2017/econ/gus/2017-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. CG1700ORG02 Table Notes_Local Governments by Type and State_2017.

³⁰ See *id.* at tbl.5. County Governments by Population-Size Group and State: 2017 [CG1700ORG05], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

³¹ See *id.* at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2017 [CG1700ORG06], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 18,729 municipal and 16,097 town and township governments with populations less than 50,000.

³² See *id.* at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 12,040 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes_Special Purpose Local Governments by State_Census Years 1942 to 2017.

populations of less than 50,000.³³ Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”³⁴

1. Broadband Internet Access Service Providers

13. *Wired Broadband Internet Access Service Providers (Wired ISPs).*³⁵ Providers of wired broadband internet access service include various types of providers except dial-up internet access providers. Wireline service that terminates at an end user location or mobile device and enables the end user to receive information from and/or send information to the internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction is classified as a broadband connection under the Commission’s rules.³⁶ Wired broadband internet services fall in the Wired Telecommunications Carriers industry.³⁷ The SBA small business size standard for this industry 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

14. Additionally, according to Commission data on internet access services as of December 31, 2018, nationwide there were approximately 2,700 providers of connections over 200 kbps in at least one direction using various wireline technologies.⁴¹ The Commission does not collect data on the number of employees for providers of these services, therefore, at this time we are not able to estimate the number of providers that would qualify as small under the SBA’s small business size standard. However, in light of the general data on fixed technology service providers in the Commission’s *2020 Communications Marketplace Report*,⁴² we believe that the majority of wireline internet access service providers can be considered small entities.

³³ While the special purpose governments category also includes local special district governments, the 2017 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.

³⁴ 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 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations tbls.5, 6 & 10.

³⁵ Formerly included in the scope of the Internet Service Providers (Broadband), Wired Telecommunications Carriers and All Other Telecommunications small entity industry descriptions.

³⁶ See 47 CFR § 1.7001(a)(1).

³⁷ See U.S. Census Bureau, *2017 NAICS Definition, “517311 Wired Telecommunications Carriers,”* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

³⁸ See 13 CFR § 121.201, NAICS Code 517311.

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: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&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 See *IAS Status 2018*, Fig. 30 (The technologies used by providers include aDSL, sDSL, Other Wireline, Cable Modem and FTTP). Other wireline includes: all copper-wire based technologies other than xDSL (such as Ethernet over copper, T-1/DS-1 and T3/DS-1) as well as power line technologies which are included in this category to maintain the confidentiality of the providers.

⁴² See *Communications Marketplace Report*, GN Docket No. 20-60, 2020 WL 8025117 at 44, paras. 34-35, Figs. II.B.2-4, 6. (2020) (*2020 Communications Marketplace Report*).

15. *Wireless Broadband Internet Access Service Providers (Wireless ISPs or WISPs)*.⁴³ Providers of wireless broadband internet access service include fixed and mobile wireless providers. The Commission defines a WISP as “[a] company that provides end-users with wireless access to the Internet[.]”⁴⁴ Wireless service that terminates at an end user location or mobile device and enables the end user to receive information from and/or send information to the internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction is classified as a broadband connection under the Commission’s rules.⁴⁵ Neither the SBA nor the Commission have developed a size standard specifically applicable to Wireless Broadband Internet Access Service Providers. The closest applicable industry with an SBA small business size standard is Wireless Telecommunications Carriers (except Satellite).⁴⁶ The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.⁴⁷ U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.⁴⁸ Of that number, 2,837 firms employed fewer than 250 employees.⁴⁹

16. Additionally, according to Commission data on internet access services as of December 31, 2018, nationwide there were approximately 1,209 fixed wireless and 71 mobile wireless providers of connections over 200 kbps in at least one direction.⁵⁰ The Commission does not collect data on the number of employees for providers of these services, therefore, at this time we are not able to estimate the number of providers that would qualify as small under the SBA’s small business size standard. However, based on data in the Commission’s *2020 Communications Marketplace Report* on the small number of large mobile wireless nationwide and regional facilities-based providers, the dozens of small regional facilities-based providers and the number of wireless mobile virtual network providers in general,⁵¹ as well as on terrestrial fixed wireless broadband providers in general,⁵² we believe that the majority of wireless internet access service providers can be considered small entities.

2. Wireline Providers

17. *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.⁵³ Transmission facilities may be based on a single technology or a

⁴³ Formerly included in the scope of the Internet Service Providers (Broadband), Wireless Telecommunications Carriers (except Satellite) and All Other Telecommunications small entity industry descriptions.

⁴⁴ Federal Communications Commission, Internet Access Services: Status as of December 31, 2018 (*IAS Status 2018*), Industry Analysis Division, Office of Economics & Analytics (September 2020). The report can be accessed at <https://www.fcc.gov/economics-analytics/industry-analysis-division/iad-data-statistical-reports>.

⁴⁵ See 47 CFR § 1.7001(a)(1).

⁴⁶ 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>.

⁴⁷ See 13 CFR § 121.201, NAICS Code 517312.

⁴⁸ 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>.

⁴⁹ *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.

⁵⁰ See *IAS Status 2018*, Fig. 30.

⁵¹ See *Communications Marketplace Report*, GN Docket No. 20-60, 2020 WL 8025117 at 4, paras. 9-13. (2020 *Communications Marketplace Report*).

⁵² *Id.* at para. 91.

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.⁵⁴ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.⁵⁵ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.⁵⁶

18. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁵⁷ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁵⁸ Of this number, 2,964 firms operated with fewer than 250 employees.⁵⁹ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 5,183 providers that reported they were engaged in the provision of fixed local services.⁶⁰ Of these providers, the Commission estimates that 4,737 providers have 1,500 or fewer employees.⁶¹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

19. *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 Carriers⁶² is the closest industry with a SBA small business size standard.⁶³ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.⁶⁴ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having

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⁵³ See U.S. Census Bureau, *2017 NAICS Definition*, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ 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.

⁵⁷ See 13 CFR § 121.201, NAICS Code 517311.

⁵⁸ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁵⁹ *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.

⁶⁰ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/pub/d.lic/attachments/DOC-379181A1.pdf>.

⁶¹ *Id.*

⁶² See U.S. Census Bureau, *2017 NAICS Definition*, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁶³ See 13 CFR § 121.201, NAICS Code 517311.

⁶⁴ 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.

1,500 or fewer employees as small.⁶⁵ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁶⁶ Of this number, 2,964 firms operated with fewer than 250 employees.⁶⁷ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 5,183 providers that reported they were fixed local exchange service providers.⁶⁸ Of these providers, the Commission estimates that 4,737 providers have 1,500 or fewer employees.⁶⁹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

20. *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 Carriers⁷⁰ is the closest industry with a SBA small business size standard.⁷¹ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁷² U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁷³ Of this number, 2,964 firms operated with fewer than 250 employees.⁷⁴ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 1,227 providers that reported they were incumbent local exchange service providers.⁷⁵ Of these providers, the Commission estimates that 929 providers have 1,500 or fewer employees.⁷⁶ 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.

21. *Competitive 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 several types of competitive local exchange service providers.⁷⁷

⁶⁵ *Id.*

⁶⁶ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁶⁷ *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.

⁶⁸ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf>.

⁶⁹ *Id.*

⁷⁰ See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁷¹ See 13 CFR § 121.201, NAICS Code 517311.

⁷² *Id.*

⁷³ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁷⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁷⁵ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf>.

⁷⁶ *Id.*

Wired Telecommunications Carriers⁷⁸ 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.⁷⁹ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁸⁰ Of this number, 2,964 firms operated with fewer than 250 employees.⁸¹ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 3,956 providers that reported they were competitive local exchange service providers.⁸² Of these providers, the Commission estimates that 3,808 providers have 1,500 or fewer employees.⁸³ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

22. *Interexchange Carriers (IXCs).* Neither the Commission nor the SBA have developed a small business size standard specifically for Interexchange Carriers. Wired Telecommunications Carriers⁸⁴ is the closest industry with a SBA small business size standard.⁸⁵ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁸⁶ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁸⁷ Of this number, 2,964 firms operated with fewer than 250 employees.⁸⁸ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 151 providers that reported they were engaged in the provision of interexchange services. Of these providers, the Commission estimates that 131 providers have 1,500 or fewer employees.⁸⁹ 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.

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⁷⁷ 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.

⁷⁸ See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁷⁹ See 13 CFR § 121.201, NAICS Code 517311.

⁸⁰ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁸¹ *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.

⁸² Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/pub/ld/lic/attachments/DOC-379181A1.pdf>.

⁸³ *Id.*

⁸⁴ See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁸⁵ See 13 CFR § 121.201, NAICS Code 517311.

⁸⁶ *Id.*

⁸⁷ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁸⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁸⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), (continued....)

23. *Operator Service Providers (OSPs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The closest applicable industry with a SBA small business size standard is Wired Telecommunications Carriers.⁹⁰ The SBA small business size standard classifies a business as small if it has 1,500 or fewer employees.⁹¹ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁹² Of this number, 2,964 firms operated with fewer than 250 employees.⁹³ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 32 providers that reported they were engaged in the provision of operator services.⁹⁴ Of these providers, the Commission estimates that all 32 providers have 1,500 or fewer employees.⁹⁵ Consequently, using the SBA's small business size standard, all of these providers can be considered small entities.

24. *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 Carriers⁹⁶ is the closest industry with a SBA small business size standard.⁹⁷ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁹⁸ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁹⁹ Of this number, 2,964 firms operated with fewer than 250 employees.¹⁰⁰ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 115 providers that reported they were engaged in the provision of other toll services.¹⁰¹ Of these

(Continued from previous page)

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

⁹⁰ See U.S. Census Bureau, *2017 NAICS Definition*, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁹¹ See 13 CFR § 121.201, NAICS Code 517311.

⁹² See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁹³ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁹⁴ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf>.

⁹⁵ *Id.*

⁹⁶ See U.S. Census Bureau, *2017 NAICS Definition*, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁹⁷ See 13 CFR § 121.201, NAICS Code 517311.

⁹⁸ *Id.*

⁹⁹ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

¹⁰⁰ *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.

¹⁰¹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf>.

providers, the Commission estimates that 113 providers have 1,500 or fewer employees.¹⁰² Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

25. *Internet Service Providers (Non-Broadband)*. Internet access service providers using client-supplied telecommunications connections (e.g., dial-up ISPs) as well as VoIP service providers using client-supplied telecommunications connections fall in the industry classification of All Other Telecommunications.¹⁰³ The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small.¹⁰⁴ For this industry, U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.¹⁰⁵ Of those firms, 1,039 had revenue of less than \$25 million.¹⁰⁶ Consequently, under the SBA size standard a majority of firms in this industry can be considered small.

3. Wireless Providers—Fixed and Mobile

26. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves.¹⁰⁷ 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.¹⁰⁸ The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁰⁹ U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.¹¹⁰ Of that number, 2,837 firms employed fewer than 250 employees.¹¹¹ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 797 providers that reported they were engaged in the provision of wireless services.¹¹² Of these providers, the Commission estimates that 715 providers have 1,500 or

¹⁰² *Id.*

¹⁰³ See U.S. Census Bureau, *2017 NAICS Definition, "517919 All Other Telecommunications,"* <https://www.census.gov/naics/?input=517919&year=2017&details=517919>.

¹⁰⁴ See 13 CFR § 121.201, NAICS Code 517919.

¹⁰⁵ 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>.

¹⁰⁶ *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.

¹⁰⁷ 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>.

¹⁰⁸ *Id.*

¹⁰⁹ See 13 CFR § 121.201, NAICS Code 517312.

¹¹⁰ 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>.

¹¹¹ *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.

¹¹² Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf>.

fewer employees.¹¹³ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

27. *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.¹¹⁴ Wireless Telecommunications Carriers (*except Satellite*)¹¹⁵ is the closest industry with a SBA small business size standard applicable to these services. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹¹⁶ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹¹⁷ Of this number, 2,837 firms employed fewer than 250 employees.¹¹⁸ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

28. 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.¹¹⁹

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

30. *1670–1675 MHz Services.* These wireless communications services can be used for fixed and mobile uses, except aeronautical mobile.¹²⁰ Wireless Telecommunications Carriers (*except Satellite*)¹²¹ is the closest industry with a SBA small business size standard applicable to these services.

¹¹³ *Id.*

¹¹⁴ See 47 CFR §§ 27.1 – 27.1607.

¹¹⁵ 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>.

¹¹⁶ See 13 CFR § 121.201, NAICS Code 517312.

¹¹⁷ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFFIRM&hidePreview=false>.

¹¹⁸ *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.

¹¹⁹ 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.

¹²⁰ See 47 CFR § 27.902.

¹²¹ 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>.

The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹²² U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹²³ Of this number, 2,837 firms employed fewer than 250 employees.¹²⁴ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

31. According to Commission data as of November 2021, there were three active licenses in this service.¹²⁵ The Commission's small business size standards with respect to 1670–1675 MHz Services involve eligibility for bidding credits and installment payments in the auction of licenses for these services. For licenses in the 1670-1675 MHz service band, a “small business” is defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and a “very small business” is defined as an entity that, together with its affiliates and controlling interests, has had average annual gross revenues not exceeding \$15 million for the preceding three years.¹²⁶ The 1670-1675 MHz service band auction's winning bidder did not claim small business status.¹²⁷

32. 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.

33. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. The closest applicable industry with a SBA small business size standard is Wireless Telecommunications Carriers (except Satellite).¹²⁸ The size standard for this industry under SBA rules is that a business is small if it has 1,500 or fewer employees.¹²⁹ For this industry, U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated for the entire year.¹³⁰ Of this number, 2,837 firms employed fewer than 250 employees.¹³¹ Additionally, based

¹²² See 13 CFR § 121.201, NAICS Code 517312.

¹²³ 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>.

¹²⁴ *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.

¹²⁵ Based on a FCC Universal Licensing System search on November 8, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, “Match only the following radio service(s)”, Radio Service = BC; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹²⁶ See 47 CFR § 27.906(a).

¹²⁷ See *1670–1675 MHz Band Auction Closes; Winning Bidder Announced; FCC Form 600s Due May 12, 2003*, Public Notice, DA-03-1472, Report No. AUC-03-46-H (Auction No.46) (May 2, 2003).

¹²⁸ 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>.

¹²⁹ See 13 CFR § 121.201, NAICS Code 517312.

¹³⁰ 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,

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on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 407 providers that reported they were engaged in the provision of cellular, personal communications services, and specialized mobile radio services.¹³² Of these providers, the Commission estimates that 333 providers have 1,500 or fewer employees.¹³³ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

34. *Broadband Personal Communications Service.* The broadband personal communications services (PCS) spectrum encompasses services in the 1850-1910 and 1930-1990 MHz bands.¹³⁴ The closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (except Satellite).¹³⁵ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹³⁶ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹³⁷ Of this number, 2,837 firms employed fewer than 250 employees.¹³⁸ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

35. Based on Commission data as of November 2021, there were approximately 5,060 active licenses in the Broadband PCS service.¹³⁹ The Commission's small business size standards with respect to Broadband PCS involve eligibility for bidding credits and installment payments in the auction of licenses for these services. In auctions for these licenses, the Commission defined "small business" as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and a "very small business" as an entity that, together with its affiliates and controlling interests, has had average annual gross revenues not exceeding \$15 million for the preceding three years.¹⁴⁰ Winning bidders claiming small business credits won Broadband PCS licenses in C, D, E, and F Blocks.¹⁴¹

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

¹³² Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/pub/ld/lic/attachments/DOC-379181A1.pdf>.

¹³³ *Id.*

¹³⁴ See 47 CFR § 24.200.

¹³⁵ 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>.

¹³⁶ See 13 CFR § 121.201, NAICS Code 517312.

¹³⁷ 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>.

¹³⁸ *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.

¹³⁹ Based on a FCC Universal Licensing System search on November 16, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = CW; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁴⁰ See 47 CFR § 24.720(b).

¹⁴¹ See Federal Communications Commission, Office of Economics and Analytics, Auctions, Auctions 4, 5, 10, 11, 22, 35, 58, 71 and 78, <https://www.fcc.gov/auctions>.

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

37. *Specialized Mobile Radio Licenses.* Special Mobile Radio (SMR) licenses allow licensees to provide land mobile communications services (other than radiolocation services) in the 800 MHz and 900 MHz spectrum bands on a commercial basis including but not limited to services used for voice and data communications, paging, and facsimile services, to individuals, Federal Government entities, and other entities licensed under Part 90 of the Commission's rules. Wireless Telecommunications Carriers (except Satellite)¹⁴² is the closest industry with a SBA small business size standard applicable to these services. The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁴³ For this industry, U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.¹⁴⁴ Of this number, 2,837 firms employed fewer than 250 employees.¹⁴⁵ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 119 providers that reported they were of SMR (dispatch) providers.¹⁴⁶ Of this number, the Commission estimates that all 119 providers have 1,500 or fewer employees.¹⁴⁷ Consequently, using the SBA's small business size standard, these 119 SMR licensees can be considered small entities.¹⁴⁸

38. Based on Commission data as of December 2021, there were 3,924 active SMR licenses.¹⁴⁹ However, since the Commission does not collect data on the number of employees for licensees providing SMR 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. Nevertheless, for purposes of this analysis the Commission estimates that the majority of SMR licensees can be considered small entities using the SBA's small business size standard.

¹⁴² 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>.

¹⁴³ See 13 CFR § 121.201, NAICS Code 517312.

¹⁴⁴ 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>.

¹⁴⁵ *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.

¹⁴⁶ Federal-State Joint Board on Universal Service, *Universal Service Monitoring Report* at 26, Table 1.12 (2021), <https://docs.fcc.gov/pubId/lic/attachments/DOC-379181A1.pdf>.

¹⁴⁷ *Id.*

¹⁴⁸ We note that there were also SMR providers reporting in the "Cellular/PCS/SMR" classification, therefore there are maybe additional SMR providers that have not been accounted for in the SMR (dispatch) classification.

¹⁴⁹ Based on a FCC Universal Licensing System search on December 15, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match radio services within this group", Radio Service = SMR; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

39. *Lower 700 MHz Band Licenses.* The lower 700 MHz band encompasses spectrum in the 698-746 MHz frequency bands. Permissible operations in these bands include flexible fixed, mobile, and broadcast uses, including mobile and other digital new broadcast operation; fixed and mobile wireless commercial services (including FDD- and TDD-based services); as well as fixed and mobile wireless uses for private, internal radio needs, two-way interactive, cellular, and mobile television broadcasting services.¹⁵⁰ Wireless Telecommunications Carriers (*except Satellite*)¹⁵¹ is the closest industry with a SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁵² U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁵³ Of this number, 2,837 firms employed fewer than 250 employees.¹⁵⁴ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

40. According to Commission data as of December 2021, there were approximately 2,824 active Lower 700 MHz Band licenses.¹⁵⁵ The Commission's small business size standards with respect to Lower 700 MHz Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For auctions of Lower 700 MHz Band licenses the Commission adopted criteria for three groups of small businesses. A very small business was defined as an entity that, together with its affiliates and controlling interests, has average annual gross revenues not exceeding \$15 million for the preceding three years, a small business was defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and an entrepreneur was defined as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years.¹⁵⁶ In auctions for Lower 700 MHz Band licenses seventy-two winning bidders claiming a small business classification won 329 licenses,¹⁵⁷ twenty-six winning bidders claiming a small business classification won 214 licenses,¹⁵⁸ and three winning bidders claiming a small business classification won all five auctioned licenses.¹⁵⁹

¹⁵⁰ See Federal Communications Commission, Economics and Analytics, Auctions, Auctions 44, 49, 60: Lower 700 MHz Band, Fact Sheet, Permissible Operations, <https://www.fcc.gov/auction/44/factsheet>, <https://www.fcc.gov/auction/49/factsheet>, <https://www.fcc.gov/auction/60/factsheet>.

¹⁵¹ 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>.

¹⁵² See 13 CFR § 121.201, NAICS Code 517312.

¹⁵³ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFFIRM&hidePreview=false>.

¹⁵⁴ *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.

¹⁵⁵ Based on a FCC Universal Licensing System search on December 14, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = WY, WZ; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁵⁶ See 47 CFR § 27.702(a)(1)-(3).

¹⁵⁷ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 44: Lower 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, <https://www.fcc.gov/sites/default/files/wireless/auctions/44/charts/44cls2.pdf>.

41. 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.

42. *Upper 700 MHz Band Licenses.* The upper 700 MHz band encompasses spectrum in the 746-806 MHz bands. Upper 700 MHz D Block licenses are nationwide licenses associated with the 758-763 MHz and 788-793 MHz bands.¹⁶⁰ Permissible operations in these bands include flexible fixed, mobile, and broadcast uses, including mobile and other digital new broadcast operation; fixed and mobile wireless commercial services (including FDD- and TDD-based services); as well as fixed and mobile wireless uses for private, internal radio needs, two-way interactive, cellular, and mobile television broadcasting services.¹⁶¹ Wireless Telecommunications Carriers (*except* Satellite)¹⁶² is the closest industry with a SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁶³ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁶⁴ Of that number, 2,837 firms employed fewer than 250 employees.¹⁶⁵ Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

43. According to Commission data as of December 2021, there were approximately 152 active Upper 700 MHz Band licenses.¹⁶⁶ The Commission's small business size standards with respect to

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¹⁵⁸ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 49: Lower 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, <https://www.fcc.gov/sites/default/files/wireless/auctions/49/charts/49cls2.pdf>.

¹⁵⁹ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 60: Lower 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, <https://www.fcc.gov/sites/default/files/wireless/auctions/60/charts/60cls2.pdf>.

¹⁶⁰ See 47 CFR § 27.4.

¹⁶¹ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 73: 700 MHz Band, Fact Sheet, Permissible Operations, <https://www.fcc.gov/auction/73/factsheet>. We note that in Auction 73, Upper 700 MHz Band C and D Blocks as well as Lower 700 MHz Band A, B, and E Blocks were auctioned.

¹⁶² 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>.

¹⁶³ See 13 CFR § 121.201, NAICS Code 517312.

¹⁶⁴ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFFIRM&hidePreview=false>.

¹⁶⁵ *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.

¹⁶⁶ Based on a FCC Universal Licensing System search on December 14, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = WP, WU; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

Upper 700 MHz Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For the auction of these licenses, the Commission defined a “small business” as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years, and a “very small business” an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.¹⁶⁷ Pursuant to these definitions, three winning bidders claiming very small business status won five of the twelve available licenses.¹⁶⁸

44. *700 MHz Guard Band Licensees.* The 700 MHz Guard Band encompasses spectrum in 746-747/776-777 MHz and 762-764/792-794 MHz frequency bands. Wireless Telecommunications Carriers (*except* Satellite)¹⁶⁹ is the closest industry with a SBA small business size standard applicable to licenses providing services in these bands. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁷⁰ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁷¹ Of this number, 2,837 firms employed fewer than 250 employees.¹⁷² Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

45. According to Commission data as of December 2021, there were approximately 224 active 700 MHz Guard Band licenses.¹⁷³ The Commission’s small business size standards with respect to 700 MHz Guard Band licensees involve eligibility for bidding credits and installment payments in the auction of licenses. For the auction of these licenses, the Commission defined a “small business” as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years, and a “very small business” an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.¹⁷⁴ Pursuant to these definitions, five winning bidders claiming one of the small business status classifications won 26 licenses, and one winning bidder claiming small business won two licenses.¹⁷⁵ None of the winning bidders claiming a small business status classification in these 700 MHz Guard Band license auctions had an active license as of December 2021.¹⁷⁶

¹⁶⁷ See 47 CFR § 27.502(a).

¹⁶⁸ See *Auction of 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction 73*, Public Notice, DA-08-595, Attachment A, Report No. AUC-08-73-I (Auction 73) (March 20, 2008). The results for Upper 700 MHz Band C Block can be found on pp. 62-63.

¹⁶⁹ 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>.

¹⁷⁰ See 13 CFR § 121.201, NAICS Code 517312.

¹⁷¹ 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>.

¹⁷² *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.

¹⁷³ Based on a FCC Universal Licensing System search on December 14, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, “Match only the following radio service(s)”, Radio Service = WX; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁷⁴ See 47 CFR § 27.502(a).

¹⁷⁵ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 33: Upper 700 MHz Guard Bands, Summary, Closing Charts, Licenses by Bidder, <https://www.fcc.gov/sites/default/files/wireless/auctions/33/charts/33cls2.pdf>, Auction 38: Upper 700 MHz Guard

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46. 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.

47. *Air-Ground Radiotelephone Service.* Air-Ground Radiotelephone Service is a wireless service in which licensees are authorized to offer and provide radio telecommunications service for hire to subscribers in aircraft.¹⁷⁷ A licensee may provide any type of air-ground service (i.e., voice telephony, broadband Internet, data, etc.) to aircraft of any type, and serve any or all aviation markets (commercial, government, and general). A licensee must provide service to aircraft and may not provide ancillary land mobile or fixed services in the 800 MHz air-ground spectrum.¹⁷⁸

48. The closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (*except* Satellite).¹⁷⁹ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁸⁰ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁸¹ Of this number, 2,837 firms employed fewer than 250 employees.¹⁸² Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

49. Based on Commission data as of December 2021, there were approximately four licensees with 110 active licenses in the Air-Ground Radiotelephone Service.¹⁸³ The Commission's small business size standards with respect to Air-Ground Radiotelephone Service involve eligibility for bidding credits and installment payments in the auction of licenses. For purposes of auctions, the Commission

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Bands, Summary, Closing Charts, Licenses by Bidder,

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

¹⁷⁶ Based on a FCC Universal Licensing System search on December 14, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = WX; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

¹⁷⁷ 47 CFR § 22.99.

¹⁷⁸ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 65: 800 MHz Air-Ground Radiotelephone Service, Fact Sheet, Permissible Operations, <https://www.fcc.gov/auction/65/factsheet>.

¹⁷⁹ 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>.

¹⁸⁰ See 13 CFR § 121.201, NAICS Code 517312.

¹⁸¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFFIRM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFFIRM&hidePreview=false>.

¹⁸² *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.

¹⁸³ Based on a FCC Universal Licensing System search on December 20, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = CG, CJ; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

defined “small business” as an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$40 million for the preceding three years, and a “very small business” as an entity that, together with its affiliates and controlling interests, has had average annual gross revenues not exceeding \$15 million for the preceding three years.¹⁸⁴ In the auction of Air-Ground Radiotelephone Service licenses in the 800 MHz band, neither of the two winning bidders claimed small business status.¹⁸⁵

50. 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, the Commission does not collect data on the number of employees for licensees providing these services therefore, 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.

51. Advanced Wireless Services (AWS) - (1710–1755 MHz and 2110–2155 MHz bands (AWS-1); 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz bands (AWS-2); 2155–2175 MHz band (AWS-3); 2000–2020 MHz and 2180–2200 MHz (AWS-4)). Spectrum is made available and licensed in these bands for the provision of various wireless communications services.¹⁸⁶ Wireless Telecommunications Carriers (except Satellite)¹⁸⁷ is the closest industry with a SBA small business size standard applicable to these services. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.¹⁸⁸ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁸⁹ Of this number, 2,837 firms employed fewer than 250 employees.¹⁹⁰ Thus, under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

52. According to Commission data as December 2021, there were approximately 4,472 active AWS licenses.¹⁹¹ The Commission’s small business size standards with respect to AWS involve eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of AWS licenses, the Commission defined a “small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a “very small business” as an

¹⁸⁴ See 47 CFR § 22.223(b).

¹⁸⁵ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 65: 800 MHz Air-Ground Radiotelephone Service, Summary, Closing Charts, Licenses by Bidder, <https://www.fcc.gov/sites/default/files/wireless/auctions/65/charts/65cls2.pdf>.

¹⁸⁶ See 47 CFR § 27.1(b).

¹⁸⁷ 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>.

¹⁸⁸ See 13 CFR § 121.201, NAICS Code 517312.

¹⁸⁹ 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>.

¹⁹⁰ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹⁹¹ Based on a FCC Universal Licensing System search on December 10, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, “Match only the following radio service(s)”, Radio Service = AD, AH, AT, AW; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

entity with average annual gross revenues for the preceding three years not exceeding \$15 million.¹⁹² Pursuant to these definitions, 57 winning bidders claiming status as small or very small businesses won 215 of 1,087 licenses.¹⁹³ In the most recent auction of AWS licenses 15 of 37 bidders qualifying for status as small or very small businesses won licenses.¹⁹⁴

53. 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

54. *3650–3700 MHz band.* Wireless broadband service licensing in the 3650-3700 MHz band provides for nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based technologies, in the 3650 MHz band (i.e., 3650–3700 MHz).¹⁹⁵ Licensees are permitted to provide services on a non-common carrier and/or on a common carrier basis.¹⁹⁶ Wireless broadband services in the 3650-3700 MHz band fall in the Wireless Telecommunications Carriers (*except Satellite*)¹⁹⁷ industry with a SBA small business size standard that classifies a business as small if it has 1,500 or fewer employees.¹⁹⁸ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.¹⁹⁹ Of this number, 2,837 firms employed fewer than 250 employees.²⁰⁰ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

55. The Commission has not developed a small business size standard applicable to 3650–3700 MHz band licensees. Based on the licenses that have been granted, however, we estimate that the majority of licensees in this service are small Internet Access Service Providers (ISPs). As of November 2021, Commission data shows that there were 902 active licenses in the 3650–3700 MHz band.²⁰¹

¹⁹² See 47 CFR §§ 27.1002, 27.1102, 27.1104, 27.1106.

¹⁹³ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 66: Advanced Wireless Services (AWS-1), Summary, Spreadsheets, <https://www.fcc.gov/sites/default/files/wireless/auctions/66/charts/66cls2.pdf>.

¹⁹⁴ See *Auction of Advanced Wireless Services (AWS-3) Licenses Closes; Winning Bidders Announced for Auction 97*, Public Notice, DA-15-131, Attachments A-B, (Auction No. 97) (January 30, 2015).

¹⁹⁵ See 47 CFR §§ 90.1305, 90.1307.

¹⁹⁶ See *id.* § 90.1309.

¹⁹⁷ 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>.

¹⁹⁸ See 13 CFR § 121.201, NAICS Code 517312.

¹⁹⁹ 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>.

²⁰⁰ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

²⁰¹ Based on a FCC Universal Licensing System search on November 19, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, “Match only the following radio service(s)”, Radio Service = NN; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

However, 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.

56. *Fixed Microwave Services.* Fixed microwave services include common carrier,²⁰² private-operational fixed,²⁰³ and broadcast auxiliary radio services.²⁰⁴ They also include the Upper Microwave Flexible Use Service (UMFUS),²⁰⁵ Millimeter Wave Service (70/80/90 GHz),²⁰⁶ Local Multipoint Distribution Service (LMDS),²⁰⁷ the Digital Electronic Message Service (DEMS),²⁰⁸ 24 GHz Service,²⁰⁹ Multiple Address Systems (MAS),²¹⁰ and Multichannel Video Distribution and Data Service (MVDDS),²¹¹ where in some bands licensees can choose between common carrier and non-common carrier status.²¹² Wireless Telecommunications Carriers (*except Satellite*)²¹³ is the closest industry with a SBA small business size standard applicable to these services. The SBA small size standard for this industry classifies a business as small if it has 1,500 or fewer employees.²¹⁴ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.²¹⁵ Of this number, 2,837 firms employed fewer than 250 employees.²¹⁶ Thus under the SBA size standard, the Commission estimates that a majority of fixed microwave service licensees can be considered small.

57. The Commission's small business size standards with respect to fixed microwave services involve eligibility for bidding credits and installment payments in the auction of licenses for the various frequency bands included in fixed microwave services. When bidding credits are adopted for the auction of licenses in fixed microwave services 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

²⁰² See 47 CFR Part 101, Subparts C and I.

²⁰³ See *id.* Subparts C and H.

²⁰⁴ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. See 47 CFR Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

²⁰⁵ See 47 CFR Part 30.

²⁰⁶ See 47 CFR Part 101, Subpart Q.

²⁰⁷ See *id.* Subpart L.

²⁰⁸ See *id.* Subpart G.

²⁰⁹ See *id.*

²¹⁰ See *id.* Subpart O.

²¹¹ See *id.* Subpart P.

²¹² See 47 CFR §§ 101.533, 101.1017.

²¹³ 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>.

²¹⁴ See 13 CFR § 121.201, NAICS Code 517312.

²¹⁵ 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>.

²¹⁶ *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.

identified in Part 101 of the Commission's rules for the specific fixed microwave services frequency bands.²¹⁷

58. 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.

59. *Broadband Radio Service and Educational Broadband Service.* Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable,"²¹⁸ transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service (ITFS)).²¹⁹ Wireless cable operators that use spectrum in the BRS often supplemented with leased channels from the EBS, provide a competitive alternative to wired cable and other multichannel video programming distributors. Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels.²²⁰

60. In light of the use of wireless frequencies by BRS and EBS services, the closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (*except* Satellite).²²¹ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.²²² U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.²²³ Of this number, 2,837 firms employed fewer than 250 employees.²²⁴ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

²¹⁷ See 47 CFR §§ 101.538(a)(1)-(3), 101.1112(b)-(d), 101.1319(a)(1)-(2), and 101.1429(a)(1)-(3).

²¹⁸ The use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

²¹⁹ See 47 CFR § 27.4; see also *Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

²²⁰ Generally, a wireless cable system may be described as a microwave station transmitting on a combination of BRS and EBS channels to numerous receivers with antennas, such as single-family residences, apartment complexes, hotels, educational institutions, business entities and governmental offices. The range of the transmission depends upon the transmitter power, the type of receiving antenna and the existence of a line-of-sight path between the transmitter or signal booster and the receiving antenna.

²²¹ 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>.

²²² See 13 CFR § 121.201, NAICS Code 517312.

²²³ 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>.

²²⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

61. According to Commission data as December 2021, there were approximately 5,869 active BRS and EBS licenses.²²⁵ The Commission's small business size standards with respect to BRS involves eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of BRS licenses, the Commission adopted criteria for three groups of small businesses. A very small business is an entity that, together with its affiliates and controlling interests, has average annual gross revenues exceed \$3 million and did not exceed \$15 million for the preceding three years, a small business is an entity that, together with its affiliates and controlling interests, has average gross revenues exceed \$15 million and did not exceed \$40 million for the preceding three years, and an entrepreneur is an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years.²²⁶ Of the ten winning bidders for BRS licenses, two bidders claiming the small business status won 4 licenses, one bidder claiming the very small business status won three licenses and two bidders claiming entrepreneur status won six licenses.²²⁷ One of the winning bidders claiming a small business status classification in the BRS license auction has an active licenses as of December 2021.²²⁸

62. The Commission's small business size standards for EBS define a small business as an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$55 million for the preceding five (5) years, and a very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$20 million for the preceding five (5) years.²²⁹ 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.

4. Satellite Service Providers

63. *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."²³⁰ Satellite telecommunications service providers include satellite

²²⁵ Based on a FCC Universal Licensing System search on December 10, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR, ED; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

²²⁶ See 47 CFR § 27.1218(a).

²²⁷ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 86: Broadband Radio Service, Summary, Reports, All Bidders, <https://www.fcc.gov/sites/default/files/wireless/auctions/86/charts/86bidder.xls>.

²²⁸ Based on a FCC Universal Licensing System search on December 10, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

²²⁹ See 47 CFR § 27.1219(a).

²³⁰ See U.S. Census Bureau, 2017 NAICS Definition, "517410 Satellite Telecommunications," <https://www.census.gov/naics/?input=517410&year=2017&details=517410>.

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.²³¹ U.S. Census Bureau data for 2017 show that 275 firms in this industry operated for the entire year.²³² Of this number, 242 firms had revenue of less than \$25 million.²³³ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 71 providers that reported they were engaged in the provision of satellite telecommunications services.²³⁴ Of these providers, the Commission estimates that approximately 48 providers have 1,500 or fewer employees.²³⁵ Consequently using the SBA's small business size standard, a little more than of these providers can be considered small entities.

64. *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.²³⁶ 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.²³⁷ 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.²³⁸ The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small.²³⁹ U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.²⁴⁰ Of those firms, 1,039 had revenue of less than \$25 million.²⁴¹ Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

5. Cable Service Providers

65. Because section 706 of the Act requires us to monitor the deployment of broadband using any technology, we anticipate that some broadband service providers may not provide telephone service.

²³¹ See 13 CFR § 121.201, NAICS Code 517410.

²³² 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>.

²³³ *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.

²³⁴ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/pub/Id.lic/attachments/DOC-379181A1.pdf>.

²³⁵ *Id.*

²³⁶ See U.S. Census Bureau, *2017 NAICS Definition, "517919 All Other Telecommunications,"* <https://www.census.gov/naics/?input=517919&year=2017&details=517919>.

²³⁷ *Id.*

²³⁸ *Id.*

²³⁹ See 13 CFR § 121.201, NAICS Code 517919.

²⁴⁰ 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>.

²⁴¹ *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.

Accordingly, we describe below other types of firms that may provide broadband services, including cable companies, MDS providers, and utilities, among others.

66. *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.²⁴² 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.²⁴³ The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.²⁴⁴ The SBA small business size standard for this industry classifies firms with annual receipts less than \$41.5 million as small.²⁴⁵ Based on U.S. Census Bureau data for 2017, 378 firms operated in this industry during that year.²⁴⁶ Of that number, 149 firms operated with revenue of less than \$25 million a year and 44 firms operated with revenue of \$25 million or more.²⁴⁷ Based on this data, the Commission estimates that a majority of firms in this industry are small.

67. *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.²⁴⁸ Based on industry data, there are about 420 cable companies in the U.S.²⁴⁹ Of these, only seven have more than 400,000 subscribers.²⁵⁰ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.²⁵¹ Based on industry data, there are about 4,139 cable systems (headends) in the U.S.²⁵² Of these, about 639 have more than 15,000 subscribers.²⁵³ Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.

²⁴² 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>.

²⁴³ *Id.*

²⁴⁴ *Id.*

²⁴⁵ See 13 CFR § 121.201, NAICS Code 515210.

²⁴⁶ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 515210, <https://data.census.gov/cedsci/table?y=2017&n=515210&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. 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).

²⁴⁷ *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.

²⁴⁸ 47 CFR § 76.901(d).

²⁴⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

²⁵⁰ 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).

²⁵¹ 47 CFR § 76.901(c).

²⁵² S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

²⁵³ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022).

68. *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.”²⁵⁴ For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 677,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator based on the cable subscriber count established in a 2001 Public Notice.²⁵⁵ Based on industry data, only six cable system operators have more than 677,000 subscribers.²⁵⁶ Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.²⁵⁷ 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.

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

69. The *Order* will reduce reporting, recordkeeping, and other compliance requirements on small entities. The *Order* sunsets the collection of broadband deployment data through Form 477. Fixed and mobile broadband service providers who previously filed broadband deployment data through Form 477 will no longer be required to do so. Instead, providers will file their broadband availability data in the BDC system. By sunseting the collection of broadband deployment data through Form 477 the *Order* reduces the reporting requirements for small providers and does not require small providers to hire professionals to comply or impose any compliance costs. Providers will be required to report broadband deployment data only in the BDC filing system rather than in both the BDC system and through Form 477.

70. Although the *Order* sunsets the collection of broadband deployment data, small and other providers are still required to submit the subscription data required under Form 477. Additionally, because our decision to sunset the collection of broadband deployment data through Form 477 may impact other areas where the Commission currently uses information from the Form 477 data collection we have directed the Wireline Communications Bureau (WCB), the Wireless Telecommunications Bureau (WTB), the International Bureau, and the Office of Economic Analysis (OEA) to address matters related to the collection and use of Form 477 deployment data for other uses and purposes within the Commission.

²⁵⁴ 47 U.S.C. § 543(m)(2).

²⁵⁵ *FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, 16 FCC Rcd 2225 (CSB 2001) (*2001 Subscriber Count PN*). In this Public Notice, the Commission determined that there were approximately 67.7 million cable subscribers in the United States at that time using the most reliable source publicly available. *Id.* We recognize that the number of cable subscribers changed since then and that the Commission has recently estimated the number of cable subscribers to be approximately 58.1 million. *See Communications Marketplace Report*, GN Docket No. 20-60, 2020 Communications Marketplace Report, 36 FCC Rcd 2945, 3049, para. 156 (2020) (*2020 Communications Marketplace Report*). However, because the Commission has not issued a public notice subsequent to the *2001 Subscriber Count PN*, the Commission still relies on the subscriber count threshold established by the *2001 Subscriber Count PN* for purposes of this rule. *See* 47 CFR § 76.901(e)(1).

²⁵⁶ 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).

²⁵⁷ 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).

71. Small and other mobile providers that participate in the Alaska Plan will be informed by WTB and OEA how to submit coverage data after the sunset of the Form 477 broadband deployment data collection, including whether to use the BDC filing system for submission of data currently submitted using the Form 477 filing system that are specific to Alaska. WCB will provide small and other providers that participate in either the Bringing Puerto Rico Together Fund or the Connect USVI Fund instructions on how to submit coverage data that are specific to Puerto Rico and the U.S. Virgin Islands to comply with the requirements of those funding mechanisms.

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

72. The RFA requires an agency to provide, “a description of the steps the agency has taken to minimize the significant economic impact on small entities. . .including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.”²⁵⁸

73. The Commission considered the comments in the record regarding the sunset of the Form 477 broadband deployment data collection and is mindful of the time and resources that small entities incur to file broadband data with the Commission. The *Order* concludes that sunset of the Form 477 deployment data collection at this time will reduce burdens on small and other providers, by streamlining broadband reporting requirements so that providers have to file broadband deployment only in the BDC system rather than in both the BDC system and through Form 477.

74. In reaching our decision, we specifically considered sunset of the collection of broadband deployment data through Form 477, (1) once a new collection was implemented;²⁵⁹ (2) after a period of transition following a Commission determination that there are sufficient resources to implement a new collection and that the new broadband data collection produced reliable data;²⁶⁰ (3) one year after the BDC commenced;²⁶¹ (4) after one reporting cycle of the BDC;²⁶² and (5) after the BDC requirements were in place.²⁶³ We also considered comments advocating maintaining the Form 477 census-block broadband deployment data collection going forward.²⁶⁴ The Commission rejected proposals and alternative approaches suggested by commenters that would have required a longer transition period during which broadband providers would have been subject to the dual collection of deployment data. Limiting the duration of the transition period will reduce the burden and economic impact on small providers that would have been associated with maintaining the dual reporting obligation for a longer period of time.

²⁵⁸ 5 U.S.C. § 604(b)(6).

²⁵⁹ Alaska Communications Sept. 23, 2019 Comments on *Further Notice* at 19; U.S. Cellular Sept. 23, 2019 Comments on *Further Notice* at 11; Microsoft Oct. 7, 2019 Reply to *Further Notice* at 7.

²⁶⁰ Alexicon Sept. 23, 2019 Comments at 10; ACA Connects Sept. 23, 2019 Comments at 3. California PUC Sept. 24, 2019 Comments at 19; GVNW Consulting Sept. 23, 2019 Comments at 7; NCTA Sept. 23, 2019 Comments at 25; Broadband Mapping Coalition Sept. 23, 2019 Comments at 38; West Virginia Sept. 23, 2019 Comments at 5-6.

²⁶¹ ACA Connects Sept. 8, 2020 Comments at 5; NCTA Sept. 8, 2020 Comments at 9; Letter from B. Lynn Follansbee, Vice Pres. Policy and Advocacy, USTelecom to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-195 (filed Aug. 14, 2020).

²⁶² AT&T Sept. 8, 2020 Comments at 14; US Telecom/WISPA Sept. 8, 2020 Comments at 23-24.

²⁶³ NRECA Sept. 8, 2020 Comments at 8.

²⁶⁴ Free Press Sept. 23, 2019 Comments at 22-24. These comments were filed prior to the passage of the Broadband DATA Act, and the standards and processes that the Commission has adopted to implement the requirements of the Act will ensure that we collect and make available to the public more useful broadband availability data than the data previously available through Form 477.

G. Report to Congress

75. The Commission will send a copy of the *Order*, including this FRFA, in a report to Congress pursuant to the Congressional Review Act.²⁶⁵ In addition, the Commission will send a copy of the *Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Order* and FRFA (or summaries thereof) will also be published in the Federal Register.²⁶⁶

²⁶⁵ See 5 U.S.C. § 801(a)(1)(A).

²⁶⁶ See 5 U.S.C. § 604(b).