

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

In the Matter of)
)
Connect America Fund) WC Docket No. 10-90
)

REPORT AND ORDER

Adopted: February 14, 2019

Released: February 15, 2019

By the Commission: Chairman Pai and Commissioners ORIelly, Carr, Rosenworcel and Starks issuing separate statements.

I. INTRODUCTION

1. In this Report and Order, the Commission takes a small but important step towards closing the digital divide and making broadband available for all Americans, by phasing down legacy support for voice services to make greater funding available for voice and broadband services. Specifically, the Commission adopts a transition framework to phase down Connect America Fund (CAF) Phase I frozen support in areas where support is now awarded pursuant to the CAF Phase II auction. Winning bidders were awarded \$1.488 billion in support over 10 years to deploy broadband in 45 states to 713,176 locations.¹ Approximately 73% of the locations available in the CAF Phase II auction were covered by winning bids, significantly narrowing the areas where price cap carriers will maintain voice-only obligations under the legacy regime. The transition plan we adopt today provides certainty and stability in those areas by establishing a reasonable support glide path as we transition from one support mechanism to another.

II. BACKGROUND

2. In the *USF/ICC Transformation Order*, the Commission undertook a comprehensive reform of the universal service and intercarrier compensation systems to ensure that robust, affordable voice and broadband services, both fixed and mobile, are available to Americans throughout the nation.² As part of that reform effort, the Commission created the CAF, with the goal that it would ultimately replace all existing high-cost support mechanisms.³ The Commission envisioned the CAF as the mechanism by which we would help make broadband available to homes, businesses, and community anchor institutions in areas that do not, or would not otherwise, have those services, by using competitive bidding and other incentive-based and market-driven mechanisms that will ensure the efficient distribution of universal service funds to the country's hardest-to-serve areas.⁴

¹ See *Connect America Fund Phase II Auction (Auction 903) Closes; Winning Bidders Announced; FCC Form 683 Due October 15, 2018*, AU Docket No. 17-182, WC Docket No. 10-90, Public Notice, DA 18-887, at 1 (RBATF/WTB/WCB Aug. 28, 2018).

² *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17667, para. 1 (2011) (*USF/ICC Transformation Order*), *aff'd sub nom. In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014).

³ *Id.* at 17673, para. 20.

⁴ *Id.*

3. To begin the process of transitioning high-cost support to the CAF, the Commission implemented CAF Phase I by freezing support under then-existing high-cost support mechanisms⁵ and decided that this frozen support would transition to CAF Phase II support upon completion of the CAF Phase II auction.⁶ Specifically, it determined that, for a price cap carrier that declined the offer of Phase II model-based support and the associated state-wide service commitment, “the carrier will continue to receive support in an amount equal to its CAF Phase I support amount until the first month that the winner of any competitive bidding process receives support under CAF Phase II; at that time, the carrier declining the state-wide commitment will cease to receive high-cost universal service support.”⁷

4. The Commission also eliminated the “identical support rule,” which provided competitive eligible telecommunications carriers (ETCs) with the same per-line amount of high-cost support as the incumbent local exchange carrier serving the same area.⁸ The Commission decided to transition this legacy competitive ETC support for both fixed and mobile competitive ETCs beginning July 1, 2012.⁹ The Commission further determined that it would pause the phase-down for all competitive ETCs at 60% of support received under the identical support rule if the Mobility Fund Phase II (MF-II) auction was not operational by June 30, 2014.¹⁰

5. Subsequently, in the *April 2014 Connect America Further Notice*, the Commission sought comment on how to allocate Phase I frozen support to areas won at auction, areas not eligible for the auction, and areas eligible but not won at auction.¹¹ In the associated *April 2014 Connect America Report and Order*, the Commission decided that a competitive ETC that is awarded “support through the competitive bidding process will cease to receive legacy phase-down support for those specific areas upon commencement of Connect America Phase II support.”¹² As of July 1, 2014, consistent with the *USF/ICC Transformation Order*, the Commission froze fixed competitive ETCs’ legacy support at 60% of what they had received under the identical support rule.¹³

6. Later that year, the Commission determined that high-cost census blocks served by competitive ETCs offering service to fixed locations (fixed competitive ETCs) would be eligible for support in the CAF Phase II auction.¹⁴ Additionally, the Commission forbore “from enforcing a federal

⁵ *Id.* at 17712-13, paras. 128-129. The Commission froze, effective January 1, 2012, all support for price cap carriers and their rate-of-return affiliates, which carriers received pending Phase II. *Id.* at 17715, para. 133.

⁶ *Id.* at 17733, para. 180.

⁷ *Id.*

⁸ *See id.* at 17825-30, paras. 498-511.

⁹ *Id.* at 17830-37, paras. 512-532. At that time, the Commission noted that “wireline competitive ETCs receive a relatively small portion of total competitive ETC support, and developing administrative procedures to separately address wireline competitive ETCs would be unduly administratively burdensome.” *Id.* at 17832 n.860.

¹⁰ *Id.* at 17832, para. 519.

¹¹ *Connect America Fund, et al.*, Report and Order, Declaratory Ruling, Order, Memorandum Opinion and Order, Seventh Order on Reconsideration, and Further Notice of Proposed Rulemaking, 29 FCC Rcd 7051, 7115, paras. 189-190 (2014) (*April 2014 Connect America Report and Order and/or Further Notice*, as appropriate). The Commission sought comment on how exactly it would “determine the appropriate amount of frozen support to provide in those instances where a competitive ETC is awarded support to serve less than the entire area of the incumbent where the average cost exceeds the funding benchmark.” *See id.*

¹² *April 2014 Connect America Report and Order*, 29 FCC Rcd at 7068, para. 53.

¹³ *See USF/ICC Transformation Order*, 26 FCC Rcd at 17832, para. 519.

¹⁴ *Connect America Fund; ETC Annual Reports and Certifications; Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) from Obsolete ILEC Regulatory Obligations that Inhibit Deployment of Next-Generation Networks*, Report and Order, 29 FCC Rcd 15644, 15671-72, paras. 73-75 (2014) (*December 2014 Connect America Order*).

high-cost requirement that price cap carriers offer voice telephony service . . . [in] census blocks where a subsidized competitor—i.e., another ETC—is receiving federal high-cost support,”¹⁵ effective from “the first month that support is disbursed to another ETC that is required to serve particular census blocks with voice and broadband service to fixed locations.”¹⁶ The Commission noted, however, that price cap carriers “remain obligated . . . to maintain existing voice service unless and until they receive authority under section 214(a) to discontinue that service.”¹⁷

7. The Commission more recently linked the phase-down timing for fixed competitive ETCs’ frozen identical legacy support to the CAF Phase II auction.¹⁸ Concurrently, the Commission decided that, to transition mobile competitive ETC support to Mobility Fund Phase II (MF-II) support, the Wireless Telecommunications Bureau and Wireline Competition Bureau would first disaggregate a carrier’s legacy support among the census blocks within its designated service area, and then phase down that support depending on the census block’s eligibility in the MF-II auction and, if eligible, the results of the auction.¹⁹

III. DISCUSSION

8. As the Commission has noted, “the CAF is not created on a blank slate, but rather against the backdrop of a decades-old regulatory system.”²⁰ Thus, a smooth transition must account for the several support mechanisms currently in effect as well as the auction outcomes in different areas. To comprehensively resolve these phase-down issues prior to authorizing CAF Phase II auction support, we address the transition of both price cap carriers’ and fixed competitive ETCs’ legacy support together.

A. Legacy Support Disaggregation Methodology

9. Pursuant to the *April 2014 Connect America Further Notice*,²¹ we adopt a methodology for disaggregating support by employing the Connect America Cost Model (CAM) to account for the relative costs of providing service among areas in states where price cap carriers declined model-based CAF Phase II support.²² These price cap carriers currently receive an amount of frozen support for each carrier’s designated service area within a particular state.²³ Within that state, we use the CAM to allocate a portion of each carrier’s existing frozen support to each auction-eligible census block based on the

¹⁵ *Id.* at 15663, para. 51.

¹⁶ *Id.* at 15670, para. 69.

¹⁷ *Id.* at 15663-64, para. 51.

¹⁸ *Connect America Fund; Universal Service Reform – Mobility Fund*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 2152, 2182 n.189 (2017).

¹⁹ *Id.* at 2183-87, paras. 70-79.

²⁰ *USF/ICC Transformation Order*, 26 FCC Rcd at 17727, para. 165.

²¹ *April 2014 Connect America Further Notice*, 29 FCC Rcd at 7115, paras. 189-190.

²² In this Report and Order, we address only the phase-down of CAF Phase I frozen support in states where the price cap carriers declined the offer of model-based CAF Phase II support. This includes the phase-down of Phase I frozen support in New York after the authorization of Phase II auction support awarded pursuant to the *New York Waiver Order*. See generally *Connect America Fund; ETC Annual Reports and Certifications*, Order, 32 FCC Rcd 968 (2017) (*New York Waiver Order*). The Commission has already addressed areas served by Alaska Communications, for which the Commission adopted tailored Phase II service obligations, see generally *Connect America Fund*, Order, 31 FCC Rcd 12086 (2016), and will address any transitions when it adopts Stage 2 for Puerto Rico and the U.S. Virgin Islands, see generally *The Uniendo a Puerto Rico Fund and the Connect USVI Fund et al.*, WC Docket No. 18-143 et al., Order and Notice of Proposed Rulemaking, FCC 18-57 (2018).

²³ Price cap carriers annually certify that all Phase I frozen support received in the previous year was used to build and operate broadband-capable networks used to offer the provider’s own retail broadband service in areas substantially unserved by an unsubsidized competitor. See 47 CFR § 54.313(c)(4).

relative costs of providing service across all auction-eligible census blocks within the same state. Consistent with the cap for reserve prices exceeding the extremely high-cost threshold in the CAF Phase II auction,²⁴ we limit the allocated monthly support for any census block to \$146.10 per location.

10. We conclude that the interim methodology we adopt is a reasonable approach for allocating support among a price cap carrier's census blocks because it targets support based on the relative costs of providing service based on the CAM.²⁵ Phase I frozen support was based largely on inherently inefficient legacy support mechanisms that did not reflect the costs of serving high-cost and extremely high-cost areas;²⁶ our interim methodology now ties disaggregated support amounts to the costs of serving each affected census block for the transitional period. We also conclude that the methodology we adopt is preferable to the proposal in the *April 2014 Connect America Further Notice*²⁷ because it better calibrates the available support with the cost to serve the defined areas.²⁸ Our 2014 proposal would have distributed the legacy support that carriers received in each state based on the average cost to serve *all* high-cost and extremely high-cost areas in that state.²⁹ As a result, it would have allocated the same amount of support regardless of the relative mix of high-cost and extremely high-cost areas that carriers are required to serve after the auction until a replacement ETC is in place.

B. Transitioning Legacy Support

11. We adopt the schedule below for the transition of price cap carriers' and fixed competitive ETCs' legacy support.³⁰ This transition schedule will fund new service obligations undertaken by Phase II auction winners, protect customers of current support recipients from a potential loss of service, and minimize the disruption to recipients of frozen legacy support from a loss of funding.³¹ It balances the need for responsible stewardship of finite universal service funds against the need to distribute funding for voice and broadband services consistent with the results of our CAF Phase II auction while providing a reasonable termination of legacy support for voice services.³² The schedule we adopt maintains the Commission's prior decision that a price cap carrier declining model-based Phase II support will continue to receive support in an amount equal to its Phase I frozen support amount only

²⁴ See *Connect America Fund Phase II Auction Scheduled for July 24, 2018; Notice and Filing Requirements and Other Procedures for Auction 903*, Public Notice, 34 FCC Rcd 1428, 1486, para. 210 (2018); *New York Waiver Order*, 32 FCC Rcd at 985-86, para. 46.

²⁵ The CAM employs advanced modeling techniques to determine costs to serve census blocks on a granular basis. See *Connect America Fund*, WC Docket No. 10-90 et al., Report and Order, 28 FCC Rcd 5301 (WCB 2013); *Connect America Fund*, WC Docket No. 10-90 et al., Report and Order, 29 FCC Rcd 3964 (WCB 2014).

²⁶ *USF/ICC Transformation Order*, 26 FCC Rcd at 17713, para. 131 (noting that the legacy mechanism averaged costs on a statewide basis).

²⁷ *April 2014 Connect America Further Notice*, 29 FCC Rcd at 7115, para. 191.

²⁸ See Comments of AT&T, WC Docket No. 10-90 et al., at 28-29 (filed Aug. 8, 2014) (AT&T Comments) ("AT&T recommends that the Commission devise some methodology to calculate offered support amounts other than the one it proposed in the *FNPRM*.").

²⁹ *Contra* ITTA Comments at 20-21 (asserting that the methodology proposed in the *April 2014 Connect America Further Notice* "is a simple and reasonable approach").

³⁰ Our phase-down rules have been designed to be consistent with the provisions in 47 CFR § 54.307(e)(5)-(6) (2015), unless and until the restrictions in Consolidated Appropriations Act, 2016, Pub. L. No. 114- 113, Div. E, Title VI, § 631, 129 Stat. 2242, 2470 (2015), are no longer in effect.

³¹ See *April 2014 Connect America Report and Order*, 29 FCC Rcd at 7067, para. 50 (citing *USF/ICC Transformation Order*, 26 FCC Rcd at 17752, 17936, paras. 242, 802) ("[T]he Commission generally prefers to avoid flash cuts in support that would dramatically affect consumers."); see also *USF/ICC Transformation Order*, 26 FCC Rcd at 17671, para. 11 ("We have also sought to phase in reform with measured but certain transitions, so companies affected by reform have time to adapt to changing circumstances.").

until the winner of any competitive bidding process receives support under Phase II.³³ Accordingly, in our implementation of Phase II auction support, we now establish a path toward eliminating legacy support, except to maintain service on an interim basis in auction-eligible, high-cost areas where there was no winning bidder in the CAF Phase II auction, pending further Commission action.

1. Price Cap Carriers

12. For auction-eligible census blocks where price cap carriers receive CAF Phase I frozen support, starting the first day of the month following the authorization of Phase II auction support in a price cap carrier's designated service area within a state, the price cap carrier's legacy support will be (1) converted to Phase II support (for a winning price cap carrier bidder); (2) maintained for an interim period (for the price cap carrier in areas without a winning bidder); or (3) eliminated (for price cap carriers in areas won by another carrier).³⁴

13. Although the CAF Phase II auction saw significant interest, some eligible areas did not receive a qualifying winning bid. By including these areas in the auction, the Commission has already determined that these areas require continued high-cost support. Thus, in those auction-eligible areas where there was no winning bidder in the Phase II auction, the price cap carrier will continue to receive disaggregated legacy support until further Commission action.³⁵ That is, interim support will be determined for each census block consistent with the legacy support disaggregation methodology we adopt. Maintaining such support is necessary on an interim basis to preserve service to consumers in these areas, pending further Commission action. At the same time, using our disaggregation methodology will ensure interim support is distributed more efficiently.

14. For areas where the winning bidder is the price cap carrier receiving legacy support, Phase II support will commence on the first day of the month after the support is authorized by the Wireline Competition Bureau in that area. To ensure a smooth transition to Phase II support, a winning bidder will receive support payments at the current, disaggregated legacy support level until that time.³⁶

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³² Many carriers expressed concerns regarding a potential rapid termination of legacy support particularly in the context of the Mobility Fund II transition. *See Mobility Fund Phase II Order*, 32 FCC Rcd at 2186-87 n.202 (citing numerous filings expressing such concerns).

³³ Many carriers expressed concerns regarding a potential rapid termination of legacy support particularly in the context of the Mobility Fund II transition. *See Mobility Fund Phase II Order*, 32 FCC Rcd at 2186-87 n.202 (citing numerous filings expressing such concerns). *See supra* note 31; *USF/ICC Transformation Order*, 26 FCC Rcd at 17733, para. 180. The phase-down schedule we adopt provides "a mechanism to determine the appropriate amount of frozen support to provide in those instances where a competitive ETC is awarded support to serve less than the entire area of the incumbent where the average cost exceeds the funding benchmark." *See April 2014 Connect America Further Notice*, 29 FCC Rcd at 7115, para. 189. The schedule is also consistent with the Commission's expressed preference for avoiding flash cuts in support. *See April 2014 Connect America Report and Order*, 29 FCC Rcd at 7067, para. 50 (citing *USF/ICC Transformation Order*, 26 FCC Rcd at 17752, 17936, paras. 242, 802) ("However, the Commission generally prefers to avoid flash cuts in support that would dramatically affect consumers.").

³⁴ At that time, the forbearance from the federal high-cost requirement to offer voice telephony service in census blocks where another ETC "is receiving federal high-cost support to deploy modern networks capable of providing voice and broadband to fixed locations" shall take effect, and we direct the Wireline Competition Bureau to update and publish the list of census blocks subject to federal high-cost voice obligations. *See December 2014 Connect America Order*, 29 FCC Rcd at 15663, para. 51, 15670, para. 69.

³⁵ Those areas not subject to winning bids in the Phase II auction will be considered for eligibility in a subsequent auction. *See Connect America Fund; ETC Annual Reports and Certifications; Rural Broadband Experiments, Report and Order and Further Notice of Proposed Rulemaking*, 31 FCC Rcd 5949, 6020, para. 198 (2016). The Commission will adopt more specific rules and procedures prior to conducting such a future auction.

³⁶ A price cap winning bidder that is receiving legacy support for an area subject to its own winning bid will not be entitled to receive Phase II support until the Wireline Competition Bureau issues a public notice authorizing support (continued....)

Continuing disaggregated legacy support until Phase II support has been authorized for each census block will minimize disruptions and ensure continuity of services for consumers. And, as with areas without any winning bidder, using disaggregated legacy support amounts until Phase II support is authorized will better target legacy support during the interim period than the inherently inefficient legacy support mechanisms used on which Phase I frozen support are based.

15. In areas won at auction by a carrier other than the price cap carrier, beginning on the first day of the month immediately following authorization to receive Phase II support, the winning bidder ETC will begin receiving support and bear an obligation to serve those areas. Accordingly, the price cap carrier will not receive legacy support for those census blocks beginning on the first day of the month after Phase II support is authorized for those census blocks.³⁷ At that point, continued legacy support would become duplicative.

16. *Auction-Ineligible Blocks.* In all census blocks determined to be ineligible for the CAF Phase II auction, price cap carriers that declined statewide model-based support will no longer receive legacy support starting the first day of the month following the first authorization of any Phase II auction support nationwide. By excluding certain areas from the auction, the Commission has already determined not to offer ongoing high-cost support for those areas.³⁸ Thus, this approach implements the Commission's earlier decision not to distribute Phase I frozen support after Phase II auction support has begun.

2. Fixed Competitive ETCs

17. Fixed competitive ETCs' legacy support will be subject to a two-year phase down, beginning on the first day of the month immediately following the first authorization of any Phase II auction support. Fixed competitive ETCs will receive phase-down support equal to two-thirds of their total legacy support for the first 12 months. For the following 12 months, fixed competitive ETCs will receive one-third of their total legacy support. All legacy support will end thereafter.

18. Unlike the phase down for price cap carriers' legacy support in auction-eligible areas, the timing of the phase down for fixed competitive ETCs' legacy support will not differ by census block. For fixed competitive ETCs, we conclude that a straightforward phase-down of support is more appropriate; fixed competitive ETCs receive a comparatively small amount of legacy support, and few expressed

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for that bidder. In the public notice, the Wireline Competition Bureau shall direct and authorize USAC to disburse monthly Phase II payments to the winning bidder and to cease paying it at the frozen support level. If the Wireline Competition Bureau does not authorize the bidder to receive Phase II support, the price cap will continue receiving legacy support for the relevant areas.

³⁷ In some situations, two or more auction winners may win different portions of a price cap carrier's designated service area and state, and Phase II support may be authorized on a rolling basis, such that one ETC receives its authorization before others in that same designated service area and state. A price cap carrier's phase-down for any auction-eligible census block will not begin until another ETC is authorized for that census block.

³⁸ See *Connect America Fund; ETC Annual Reports and Certifications; Rural Broadband Experiments*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 5949, 5973, paras. 70-71 (2016). In the *April 2014 Connect America Further Notice*, the Commission clarified that frozen support would be eliminated for the geographic area where another provider is awarded Phase II support. *April 2014 Connect America Further Notice*, 29 FCC Rcd at 7115, paras. 187, 189. That clarification did not address areas where no providers may be awarded CAF Phase II auction support. We now clarify that, in those auction-ineligible areas, the price cap carrier declining the state-level commitment will cease receiving frozen support the first month that any CAF Phase II auction winning bidder receives CAF Phase II auction support. See *id.* (citing *USF/ICC Transformation Order*, 26 FCC Rcd at 17733, para. 180).

interest in continuing to provide service by participating in the CAF Phase II auction.³⁹ The two-year phase-down schedule resumes the phase-down schedule adopted in the *USF/ICC Transformation Order* for competitive ETCs.⁴⁰ The two-year phase-down schedule thus eliminates support that is no longer necessary while providing an appropriate adjustment period for affected carriers.

19. In sum, Tables 1 and 2 below illustrate the transition schedule we adopt.

Table 1: Transition of Price Cap Carriers’ Legacy Support

Before the first day of the month following authorization of any Phase II support nationwide	Transition Schedule
Price cap carrier receives legacy support in an eligible census block won by that carrier in the Phase II auction	Beginning the first day of the month following authorization of Phase II support in an auction-eligible census block, legacy support is converted to Phase II support
Price cap carrier receives legacy support in an eligible census block with no winning bidder in the Phase II auction	Legacy support is maintained until further Commission action
Price cap carrier receives legacy support in a census block won by another carrier in the Phase II auction	Beginning the first day of the month following authorization of Phase II support in an auction-eligible census block, legacy support is eliminated
Price cap carrier receives legacy support in an auction-ineligible census block	Beginning the first day of the month following authorization of any Phase II support nationwide, legacy support is eliminated

³⁹ Implementing a transition process mirroring price cap carriers’ transition would require separately disaggregating legacy support among fixed competitive ETCs’ service areas—adding complexity to the transition process with no benefit to those carriers and with little impact on the Commission’s budget.

⁴⁰ See *USF/ICC Transformation Order*, 26 FCC Rcd at 17832, para. 519; Consolidated Appropriations Act of 2016 § 631, 129 Stat. 2470 (2015).

Table 2: Transition of Fixed Competitive ETCs’ Legacy Support

Before the first day of the month following the first authorization of any Phase II support nationwide	Beginning the first day of the month following the first authorization of any Phase II support nationwide	Beginning 12 months after the first day of the month following the first authorization of any Phase II support nationwide	Beginning 24 months after the first day of the month following the first authorization of any Phase II support nationwide
Fixed competitive ETC receives legacy support	Legacy support is reduced to two-thirds of support	Legacy support is reduced to one-third of support	Legacy support is eliminated

C. Declining to Extend Interim Support to New Areas

20. In establishing this schedule, we decline to adopt, within the context of the high-cost universal service program, a different definition of “unsubsidized competitor,” i.e., by including areas with mobile or non-terrestrial voice service.⁴¹ The existence of other voice service options within a particular census block does not guarantee that consumers there will continue to have access to voice service in the absence of an ETC being required to serve those consumers.⁴² We therefore remain unpersuaded that the Commission need not continue providing support to ETCs simply based on the fact that there are multiple non-ETCs serving that census block.⁴³

21. We also decline to adopt USTelecom’s most recent proposal⁴⁴ to (1) distribute \$105 million in “new voice support” across all high-cost and extremely high-cost census blocks for which, after the CAF Phase II auction, price cap carriers will continue to have an ETC obligation to provide voice

⁴¹ See AT&T Comments at 24-28 (“Rather than focusing on whether some other ETC provides voice service in a particular area to determine if continued funding is warranted, AT&T . . . suggests that the Commission instead consider whether a particular high-cost area is unserved by *any* provider of voice telephony service, including satellite providers.”); *USF/ICC Transformation Order*, 26 FCC Rcd at 17701, paras. 103-04 (defining “unsubsidized competitor” as “a facilities-based provider of residential terrestrial fixed voice and broadband service that does not receive high-cost support”). See also 47 CFR § 54.5 (providing the definition for “unsubsidized competitor” with the rules for the high-cost universal service program).

⁴² See *Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) from Enforcement of Obsolete ILEC Legacy Regulations That Inhibit Deployment of Next-Generation Networks; Lifeline and Link Up Reform and Modernization; Connect America Fund*, Memorandum Opinion and Order, 31 FCC Rcd 6157, 6219, para. 117. (2015) (*December 2015 Forbearance Order*). Nonetheless, an ETC may relinquish its ETC designation in any area served by more than one ETC. 47 U.S.C. § 214(e)(4).

⁴³ See *December 2015 Forbearance Order*, 31 FCC Rcd at 6219, para. 117.

⁴⁴ USTelecom’s June 29, 2018 proposal supersedes its previous proposals offered in a series of *ex parte* filings, which we do not consider here. Letter from Michael Saperstein, USTelecom Association, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90, at 1 (filed June 29, 2018) (USTelecom June 29, 2018 *Ex Parte*) (“propos[ing] an updated methodology for distributing universal service funds to support voice telephony service obligations in high cost and extremely high cost price cap areas that are not and will not be otherwise supported via the Connect America Fund Phase II . . . program”). See, e.g., Letter from Jonathan Banks, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 (filed Mar. 23, 2018) (proposing that, for each price cap carrier and state, the Commission use the CAM “to adjust the level of frozen support as a function of the funded census blocks . . . that are successfully bid for during the CAF II auction”); Letter from Jonathan Banks, Senior Vice President Law & Policy, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 (filed Apr. 3, 2015) (proposing that, “Frozen Support shall be reallocated on a holding company basis . . . [and] will not be disbursed . . . in any census block for which CAF II funding is disbursed”). USTelecom members also previously

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service;⁴⁵ (2) distribute an additional \$35 million in transitional support to carriers receiving less “new voice support” in a state than the carrier’s “residual frozen support” amount for that state;⁴⁶ and (3) phase down the additional transitional support over a two-year period.⁴⁷ We find this proposal inconsistent with the overarching objective of transitioning away from the current Phase I frozen support funding mechanism. Instead, USTelecom seeks to expand the areas for which price cap carriers receive support—through a new funding mechanism, “new voice support”—to include areas where they do not currently receive legacy support. We decline to do so. Through the interim framework we adopt, we establish a reasonable process for transitioning Phase I frozen support and fixed competitive ETCs’ legacy support after the authorization of Phase II auction support. Price cap carriers currently receive Phase I frozen support for use within particular service areas, and we now allocate that support across the census blocks for which the support is provided, i.e., within the same service areas, to be phased down, converted, or maintained.

22. Even if we were to adopt a transition mechanism more like USTelecom’s proposal, modified to only include areas for which carriers receive legacy support, the proposed annual budget of \$105 million for “new voice support” and first-year budget of \$35 million in additional transitional support would far exceed a reasonable amount of legacy support for carriers to continue serving only those areas not won at auction. USTelecom explains that \$105 million “equals the \$95 million of frozen support currently distributed to price cap carriers and \$10 million of additional support to account for ACS’s participation in the program.”⁴⁸ Under USTelecom’s proposal, as with the transition mechanism we adopt, carriers would not receive legacy support in either areas ineligible for the auction or areas won at auction. But USTelecom’s proposal would require distributing a fixed amount of \$105 million—more than the total frozen support price cap carriers currently receive—across the remaining areas and up to \$35 million in additional support for some of those same areas.⁴⁹ In contrast, our method efficiently targets support by using the CAM to allocate the support a price cap carrier currently receives to serve its entire service area according to the relative costs of serving each census block and then removing only the support associated with census blocks for which the price cap no longer has a federal high-cost voice obligation. The approach we adopt today therefore more rationally ties the current legacy support a price cap carrier receives in a designated service area within a state to the phase-down support it will continue to receive until further Commission action. We do not believe increasing support to maintain existing voice service in these areas—even on an interim basis—is a good use of our limited funds.

23. We recognize, nonetheless, that drawing on the results of legacy support mechanisms may produce results undesirable to certain carriers. Under those legacy mechanisms, some price cap carriers did not receive legacy support in certain states containing high-cost and extremely high-cost areas.⁵⁰ The Commission has likewise explained that the identical support rule for competitive ETCs

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expressed support for the proposal in USTelecom’s April 3, 2015 *ex parte* filing. *See, e.g.*, Comments of CenturyLink, WC Docket No. 10-90 et al., at 3 (filed Sept. 9, 2015); Reply Comments of Frontier Communications Corporation, WC Docket No. 10-90 et al., at 3-5 (filed Sept. 24, 2015).

⁴⁵ *See* USTelecom June 29, 2018 *Ex Parte* at 2-6.

⁴⁶ *See id.* at 6-8. USTelecom’s proposed residual frozen support calculation approximates how much legacy support a carrier might receive after the auction if carriers’ existing frozen support were reallocated on a state-by-state basis. *See id.*

⁴⁷ *See id.*

⁴⁸ *Id.* at 6.

⁴⁹ *Id.* at 6, 8.

⁵⁰ *See* AT&T Comments at 28. *Cf.* USTelecom June 29, 2018 *Ex Parte* at 5-6 (noting that with previous legacy support mechanisms, “certain states may have received significantly more or less support for reasons that are no longer relevant”). However, designation as an ETC under section 214 does not entitle a carrier to funding. *See In re*

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“fail[ed] to efficiently target support where it is needed.”⁵¹ Accordingly, we emphasize that the phase-down support maintained under our transition mechanism is not intended to provide a long-term solution. Instead, until the Commission is able to implement a new program,⁵² we maintain a targeted portion of carriers’ existing legacy support to preserve affordable consumer access to telecommunications in high-cost areas. In adopting this interim framework, we thus balance our statutory duties to ensure affordable access to quality services,⁵³ promote in “rural, insular, and high cost areas . . . access to telecommunications and information services . . . that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas,”⁵⁴ and establish “specific, predictable and sufficient . . . mechanisms to preserve and advance universal service.”⁵⁵

D. Election and Certification

24. We also provide price cap carriers and fixed competitive ETCs the option to decline phase-down support on a state-by-state basis. It is possible that, despite their mandatory voice obligations, some carriers may conclude that they do not wish to continue receiving legacy support in every state.⁵⁶ We therefore direct the Wireline Competition Bureau to calculate and publish, for each price cap carrier’s designated service area within each affected state, the amount of support available in every census block after the authorization of Phase II auction support within the same service area. Within 30 days after the release of public notice of such support amounts, price cap carriers and fixed competitive ETCs electing not to receive phase-down support in any states must provide notice of such election in the manner specified by the Wireline Competition Bureau.

25. Regardless of the carrier’s election, however, the federal ETC high-cost obligation to provide voice service is mandatory and independent of whether a carrier accepts phase-down support.⁵⁷ To the extent a price cap carrier or fixed competitive ETC no longer wishes to maintain its ETC designation in the relevant areas, it may petition the relevant state to relinquish its ETC designation for

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FCC 11-161, 753 F.3d 1015, 1088 (10th Cir. 2014), *cert. denied sub nom., inter alia, Cellular S., Inc. v. FCC*, 135 S. Ct. 2050 (2015).

⁵¹ See *USF/ICC Transformation Order*, 26 FCC Rcd at 17832, para. 502 (“Based on more than a decade of experience with the operation of the current rule and having received a multitude of comments noting that the current rule fails to efficiently target support where it is needed, we reiterate the conclusion that this rule has not functioned as intended.”).

⁵² See *supra* note 35. Our interim framework continues the “process of transitioning all federal high-cost support to price cap carriers to supporting modern communications networks capable of supporting voice and broadband in areas without an unsubsidized competitor.” *USF/ICC Transformation Order*, 26 FCC Rcd at 17722, para. 149.

⁵³ 47 U.S.C. § 254(b)(1).

⁵⁴ 47 U.S.C. § 254(b)(3).

⁵⁵ 47 U.S.C. § 254(b)(5). See *AT&T, Inc. v. FCC*, 886 F.3d 1236, 1252-53 (D.C. Cir. 2018) (“The sufficiency of funding is but one of several enumerated principles that the FCC must consider in devising universal service mechanisms. . . . [T]he FCC’s conclusion that funding may fall short of full compensation in particular areas and still be ‘sufficient’ is faithful to Section 254(b)(5) of the Act.”). See also *Rural Cellular Ass’n v. FCC*, 588 F.3d 1095, 1103 (D.C. Cir. 2009) (citing, *inter alia, Alenco Commc’ns, Inc. v. FCC*, 201 F.3d 608, 620 (5th Cir. 2000); *Qwest Commc’ns Int’l Inc. v. FCC*, 398 F.3d 1222, 1234 (10th Cir. 2005)) (“The [Fifth Circuit] court thus recognized the principle of providing sufficient funding mechanisms to advance universal service, 47 U.S.C. § 254(b)(5), may need to be balanced against the principle of affordability for consumers, *id.* § 254(b)(1). The Commission enjoys broad discretion when conducting exactly this type of balancing.”).

⁵⁶ See AT&T Comments at 27 (“The Commission’s offer of support in this narrow circumstance must be voluntary”) (citing *April 2014 Connect America Order*, 29 FCC Rcd at 7092-93, para. 120).

⁵⁷ See 47 U.S.C. § 214(1)(A).

those areas where another ETC is providing service, and it may choose to go through the section 214 discontinuance process.⁵⁸ For those price cap carriers and fixed competitive ETCs that receive phase-down support, we will require that they certify annually that they have and will use the support they continue to receive in the relevant high-cost and extremely high-cost areas to provide voice telephony service throughout the relevant census blocks at rates that are reasonably comparable to comparable offerings in urban areas.⁵⁹

26. To the extent that any carrier believes it needs additional support to provide voice service at reasonably comparable rates throughout the remaining census blocks within its service area, it may request a waiver pursuant to Section 1.3 of the Commission's rules.⁶⁰ In evaluating requests for a waiver, the Commission will consider any relevant facts presented by the carrier that demonstrate it is necessary and in the public interest for the price cap carrier to receive that additional funding to maintain reasonably priced voice service. Examples of such facts would include not only all revenues derived from network facilities that are supported by universal service but also revenues derived from unregulated and unsupported services. We do not, however, expect to grant these requests routinely, and caution petitioners that we generally intend to subject such requests to a rigorous, thorough and searching review comparable to a total company earnings review.⁶¹

IV. PROCEDURAL MATTERS

27. *Paperwork Reduction Analysis.*—This Report and Order contains new and modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law No. 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the new and modified information collection requirements contained in the proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002,⁶² we previously sought specific comment on how we might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”⁶³ We have described impacts that might affect small businesses, which includes most businesses with fewer than 25 employees, in the Final Regulatory Flexibility Analysis (FRFA), attached as Appendix B.

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

29. *Regulatory Flexibility Act.*—The Regulatory Flexibility Act of 1980, as amended (RFA), 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.”⁶⁴ The FRFA concerning the impact of the rule changes contained in the Report and Order is attached as Appendix B.

⁵⁸ *See* 47 U.S.C. § 214(a), (e)(4).

⁵⁹ *See April 2014 Connect America Further Notice*, 29 FCC Rcd at 7116, para. 192; *see also* 47 U.S.C. § 254(e); 47 CFR § 54.7. Appendix A contains this new addition to section 54.313 of the rules.

⁶⁰ 47 CFR § 1.3.

⁶¹ *See, e.g., Wait Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969) (“An applicant for waiver faces a high hurdle even at the starting gate” and “must plead with particularity the facts and circumstances which warrant such action.”) (citation and internal quotation marks omitted).

⁶² Pub. L. No. 107-198.

⁶³ 44 U.S.C. § 3506(c)(4).

⁶⁴ 5 U.S.C. §§ 601 *et seq.*

V. ORDERING CLAUSES

30. Accordingly, IT IS ORDERED, pursuant to the authority contained in sections 4(i), 214, and 254 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 214, and 254, that this Report and Order is ADOPTED, effective thirty (30) days after publication of the text or summary thereof in the Federal Register, except that modifications to Paperwork Reduction Act burdens shall become effective immediately upon announcement in the Federal Register of OMB approval.

31. IT IS FURTHER ORDERED that Part 54 of the Commission's rules, 47 CFR Part 54 IS AMENDED as set forth in Appendix A, and such rule amendments SHALL BE EFFECTIVE thirty (30) days after publication of the rules amendments in the Federal Register, except to the extent they contain information collections subject to PRA review. The rules that contain information collections subject to PRA review SHALL BECOME EFFECTIVE immediately upon announcement in the Federal Register of OMB approval.

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

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 54 as follows:

1. Amend § 54.307(e) by adding paragraph (8) to read as follows:

§54.307 Support to a competitive eligible telecommunications carrier.

* * * * *

(e) * * *

(8) *Eligibility for support after Connect America Phase II auction.* Starting the first day of the month following the first authorization of Connect America Phase II auction support nationwide, fixed competitive eligible telecommunications carriers shall have the option of receiving support pursuant to § 54.307(e)(2)(iii) as described below:

- (i) For 12 months following the first authorization of Connect America Phase II auction support nationwide, each fixed competitive eligible telecommunications carrier shall receive two-thirds (2/3) of the carrier's total support pursuant to § 54.307(e)(2)(iii).
- (ii) For 12 months starting the month following the period described in paragraph (e)(8)(i) of this section, each fixed competitive eligible telecommunications carrier shall receive one-third (1/3) of the carrier's total support pursuant to § 54.307(e)(2)(iii).
- (iii) Following the period described in paragraph (e)(8)(ii) of this section, no fixed competitive eligible telecommunications carrier shall receive any support pursuant to § 54.307(e)(2)(iii).
- (iv) Notwithstanding the foregoing schedule, the phase-down of support below the level described in § 54.307(e)(2)(iii) shall be subject to the restrictions in Consolidated Appropriations Act, 2016, Public Law 114-113, Div. E, Title VI, section 631, 129 Stat. 2242, 2470 (2015), unless and until such restrictions are no longer in effect.

2. Amend § 54.312 by adding paragraph (d) to read as follows:

§54.312 Connect America Fund for Price Cap Territories—Phase I.

* * * * *

(d) *Eligibility for support after Connect America Phase II auction.*

- (1) A price cap carrier that receives monthly baseline support pursuant to this section and is a winning bidder in the Connect America Phase II auction shall receive support at the same level as described in paragraph (a) of this section for such area until the Wireline Competition Bureau determines whether to authorize the carrier to receive Connect America Phase II auction support for the same area. Upon the Wireline Competition Bureau's release of a public notice approving a price cap carrier's application submitted pursuant to §54.315(b) and authorizing the carrier to receive Connect America Fund Phase II auction support, the carrier shall no longer receive support at the level of monthly baseline support pursuant to this section for such area. Thereafter, the carrier shall receive monthly support in the amount of its Connect America Phase II winning bid.

- (2) Starting the first day of the month following the first authorization of Connect America Phase II auction support nationwide, no price cap carrier that receives monthly baseline support pursuant to this section shall receive such monthly baseline support for areas that are ineligible for Connect America Phase II auction support.
- (3) To the extent Connect America Phase II auction support is not awarded at auction for an eligible area, as determined by the Wireline Competition Bureau, the price cap carrier shall have the option of continuing to receive support at the level described in paragraph (a) of this section until further Commission action.
- (4) Starting the first day of the month following the authorization of Connect America Phase II auction support to a winning bidder other than the price cap carrier that receives monthly baseline support pursuant to this section for such area, the price cap carrier shall no longer receive monthly baseline support pursuant to this section.
- (5) Notwithstanding the foregoing schedule, the phase-down of support below the level described in paragraph (a) of this section shall be subject to the restrictions in Consolidated Appropriations Act, 2016, Public Law 114-113, Div. E, Title VI, section 631, 129 Stat. 2242, 2470 (2015), unless and until such restrictions are no longer in effect.

3. Amend § 54.313 by adding paragraph (m) to read as follows:

§54.313 Annual reporting requirements for high-cost recipients.

* * * * *

- (m) Any price cap carrier or fixed competitive eligible telecommunications carrier that elects to continue receiving support pursuant to § 54.312(d) or § 54.307(e)(2)(iii) shall provide certifications, starting July 1, 2020 and for each subsequent year they receive such support, that all such support the company received in the previous year was used to provide voice service throughout the high-cost and extremely high-cost census blocks where they continue to have the federal high-cost eligible telecommunications carrier obligation to provide voice service pursuant to § 54.201(d) at rates that are reasonably comparable to comparable offerings in urban areas. Any price cap carrier or fixed competitive eligible telecommunications carrier that solely receives support pursuant to § 54.312(d) or § 54.307(e)(2)(iii) in its designated service area shall not be subject to reporting requirements in any other paragraphs in this section for such support.

APPENDIX B**Final Regulatory Flexibility Analysis**

1. As required by the Regulatory Flexibility Act of 1980 (RFA),¹ as amended, an Initial Regulatory Flexibility Analysis (IRFAs) was incorporated in the *Further Notice of Proposed Rulemaking* adopted in April 2014 (*April 2014 Connect America FNPRM*).² The Commission sought written public comment on the proposals in *April 2014 Connect America FNPRM*, including comment on the IRFA. The Commission did not receive any relevant comments in response to this IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the Report and Order

2. The Report and Order addresses outstanding issues regarding the transition of legacy universal service support—i.e., price cap carriers' Connect America Fund (CAF) Phase I frozen support and the frozen identical support of competitive eligible telecommunications carriers (ETCs) offering service to fixed locations (fixed competitive ETCs)—after the authorization of support pursuant to the CAF Phase II auction. The transition plan provides certainty and stability in areas covered by winning bids in the CAF Phase II auction by establishing a reasonable support glide path as we transition from one support mechanism to another.

3. Specifically, in the Report and Order, we adopt a methodology to disaggregate price cap carriers' existing CAF Phase I frozen support among areas based on the relative costs of serving different census blocks, and we adopt a schedule for transitioning this legacy support upon the authorization of CAF Phase II auction support. We also adopt a schedule for transitioning fixed competitive ETCs' legacy support over a two-year period. We provide an option for price cap carriers and fixed competitive ETCs to decline phase-down support on a state-by-state basis, and we adopt a modified annual certification requirement for carriers that elect phase-down support.

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

4. There were no comments raised that specifically addressed the amount of frozen support carriers would continue to receive, and the associated obligations, as presented in the *April 2014 Connect America FNPRM* IRFA.⁴ Nonetheless, the Commission considered the potential impact of the rules proposed in the IRFA on small entities and reduced the compliance burden for all small entities in order to reduce the economic impact of the rules enacted herein on such entities.

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

5. Pursuant to the Small Business Jobs Act of 2010,⁵ which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rule(s) as a result of those comments.

¹ 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-612 has been amended by the Contract with America Advancement Act of 1996, Public Law No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

² *Connect America Fund, et al.*, Report and Order, Declaratory Ruling, Order, Memorandum Opinion and Order, Seventh Order on Reconsideration, and Further Notice of Proposed Rulemaking, 29 FCC Rcd 7051, 7216-44 (2014) (*April 2014 Connect America Report and Order and/or FNPRM*, as appropriate).

³ See 5 U.S.C. § 604.

⁴ See *April 2014 Connect America FNPRM*, 29 FCC Rcd at 7217, para. 6.

⁵ 5 U.S.C. § 604(a)(3).

6. The Chief Counsel did not file any comments in response to the proposed rule(s) in this proceeding.

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

7. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁶ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁷ In addition, the term “small business” has the same meaning as the term “small-business concern” under the Small Business Act.⁸ A small-business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁹

1. Total Small Entities

8. *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 here, at the outset, three broad groups of small entities that could be directly affected herein.¹⁰ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA’s Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.¹¹ These types of small businesses represent 99.9 percent of all businesses in the United States which translates to 28.8 million businesses.¹²

9. 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.”¹³ Nationwide, as of Aug 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS).¹⁴

⁶ See 5 U.S.C. § 603(b)(3).

⁷ See 5 U.S.C. § 601(6).

⁸ See 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.”

⁹ See 15 U.S.C. § 632.

¹⁰ See 5 U.S.C. § 601(3)-(6).

¹¹ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 1 – What is a small business?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016)

¹² See SBA, Office of Advocacy, “Frequently Asked Questions, Question 2- How many small business are there in the U.S.?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016).

¹³ 5 U.S.C. § 601(4).

¹⁴ Data from the Urban Institute, National Center for Charitable Statistics (NCCS) reporting on nonprofit organizations registered with the IRS was used to estimate the number of small organizations. Reports generated using the NCCS online database indicated that as of August 2016 there were 356,494 registered nonprofits with total revenues of less than \$100,000. Of this number, 326,897 entities filed tax returns with 65,113 registered nonprofits reporting total revenues of \$50,000 or less on the IRS Form 990-N for Small Exempt Organizations and 261,784 nonprofits reporting total revenues of \$100,000 or less on some other version of the IRS Form 990 within 24 months of the August 2016 data release date. See <http://nccs.urban.org/sites/all/nccs-archive/html/tablewiz/tw.php> where the report showing this data can be generated by selecting the following data fields: Report: “The Number and

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10. 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.”¹⁵ U.S. Census Bureau data from the 2012 Census of Governments¹⁶ indicates that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.¹⁷ Of this number there were 37,132 General purpose governments (county¹⁸, municipal and town or township¹⁹) with populations of less than 50,000 and 12,184 Special purpose governments (independent school districts²⁰ and special districts²¹) with populations of less than 50,000. The 2012 U.S. Census Bureau data for most types of governments in the local government category shows that the majority of these governments have populations of less than 50,000.²² Based on this data we estimate that at least 49,316 local government jurisdictions fall in the category of “small governmental jurisdictions.”²³

2. Broadband Internet Access Service Providers

11. *Internet Service Providers (Broadband)*. Broadband Internet service providers include wired (e.g., cable, DSL) and VoIP service providers using their own operated wired telecommunications infrastructure fall in the category of Wired Telecommunication Carriers.²⁴ Wired Telecommunications Carriers are comprised of establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.²⁵ The SBA size standard for this category classifies a business as small if it has 1,500 or fewer employees.²⁶ U.S. Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000

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Finances of All Registered 501(c) Nonprofits”; Show: “Registered Nonprofits”; By: “Total Revenue Level (years 1995, Aug to 2016, Aug)”; and For: “2016, Aug” then selecting “Show Results”.

¹⁵ 5 U.S.C. § 601(5).

¹⁶ See 13 U.S.C. § 161. The Census of Government is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Program Description Census of Government <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=program&id=program.en.CO G#>.

¹⁷ See U.S. Census Bureau, 2012 Census of Governments, Local Governments by Type and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG02.US01>. Local governmental jurisdictions are classified in two categories - General purpose governments (county, municipal and town or township) and Special purpose governments (special districts and independent school districts).

¹⁸ See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01>. There were 2,114 county governments with populations less than 50,000.

¹⁹ See U.S. Census Bureau, 2012 Census of Governments, Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States – States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01>. There were 18,811 municipal and 16,207 town and township governments with populations less than 50,000.

²⁰ See U.S. Census Bureau, 2012 Census of Governments, Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States.

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employees.²⁷ Consequently, under this size standard the majority of firms in this industry can be considered small.

3. Wireline Providers

12. *Wired Telecommunications Carriers.* The U.S. Census Bureau defines this industry as “establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”²⁸ The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees.²⁹ U.S. Census Bureau data for 2012 shows that there were 3,117 firms that operated that year.³⁰ Of this total, 3,083 operated with fewer than 1,000 employees.³¹ Thus, under this size standard, the majority of firms in this industry can be considered small.

13. *Incumbent Local Exchange Carriers (Incumbent LECs).* Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent LEC services. The closest applicable size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³² According to Commission data,³³ 1,307 carriers reported that they were incumbent LEC providers.³⁴ Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.³⁵

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<https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01>. There were 12,184 independent school districts with enrollment populations less than 50,000.

²¹ See U.S. Census Bureau, 2012 Census of Governments, Special District Governments by Function and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG09.US01>. The U.S. Census Bureau data did not provide a population breakout for special district governments.

²² See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States - <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01>; Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States-States - <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01>; and Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01>. While U.S. Census Bureau data did not provide a population breakout for special district governments, if the population of less than 50,000 for this category of local government is consistent with the other types of local governments the majority of the 38,266 special district governments have populations of less than 50,000.

²³ *Id.*

²⁴ See, 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition show the NAICS code as 517311. See, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>

²⁵ *Id.*

²⁶ *Id.*

Consequently, the Commission estimates that most providers of incumbent LEC service are small businesses.

14. Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers. Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁶ According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services.³⁷ Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.³⁸ In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees.³⁹ In addition, 72 carriers have reported that they are Other Local Service Providers.⁴⁰ Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees.⁴¹ Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and other local service providers are small entities.

15. We have included small incumbent LECs in this present RFA analysis. As noted above, a “small business” under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and “is not dominant in its field of operation.”⁴² The SBA’s Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not “national” in scope.⁴³ We have therefore included small incumbent LECs in this RFA analysis, although we emphasize

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²⁷ http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

²⁸ See 13 CFR § 120.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

²⁹ *Id.*

³⁰ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

³¹ *Id.*

³² 13 CFR § 121.201, NAICS code 517311.

³³ Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, *Trends in Telephone Service*, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*).

³⁴ See *Trends in Telephone Service* at tbl. 5.3.

³⁵ See *id.*

³⁶ 13 CFR § 121.201, NAICS code 517311.

³⁷ See *Trends in Telephone Service* at tbl.5.3.

³⁸ See *id.*

³⁹ See *id.*

⁴⁰ See *id.*

⁴¹ See *id.*

that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

16. *Interexchange Carriers.* Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁴ According to Commission data,⁴⁵ 359 carriers have reported that they are engaged in the provision of interexchange service. Of these, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees. Consequently, the Commission estimates that the majority of IXC are small entities.

17. *Operator Service Providers (OSPs).* Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁶ According to Commission data, 33 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 31 have 1,500 or fewer employees and two have more than 1,500 employees.⁴⁷ Consequently, the Commission estimates that the majority of OSPs are small entities.

18. *Prepaid Calling Card Providers.* Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁴⁸ According to Commission data, 193 carriers have reported that they are engaged in the provision of prepaid calling cards.⁴⁹ Of these, an estimated all 193 have 1,500 or fewer employees and none have more than 1,500 employees.⁵⁰ Consequently, the Commission estimates that the majority of prepaid calling card providers are small entities.

19. *Local Resellers.* The SBA has not developed a small business size standard specifically for Local Resellers. The SBA category of Telecommunications Resellers is the closest NAICS code category for local resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry.⁵¹ Under the SBA's size standard, such a business is small if it has 1,500 or fewer employees.⁵²

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⁴² 5 U.S.C. § 601(3).

⁴³ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, Federal Communications Commission (May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." 15 U.S.C. § 632(a); 5 U.S.C. § 601(3). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 CFR § 121.102(b).

⁴⁴ 13 CFR § 121.201, NAICS code 517311.

⁴⁵ *Trends in Telephone Service*, tbl. 5.3.

⁴⁶ 13 CFR § 121.201, NAICS code 517311.

⁴⁷ *Trends in Telephone Service*, tbl. 5.3.

⁴⁸ See 13 CFR § 121.201, NAICS code 517911.

⁴⁹ See *Trends in Telephone Service* at Table 5.3.

⁵⁰ See *id.*

⁵¹ <https://www.census.gov/cgi-in/sssd/naics/naicsrch?input=517911&search=2012+NAICS+Search&search=2012>.

U.S. Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, all operated with fewer than 1,000 employees.⁵³ Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services.⁵⁴ Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees.⁵⁵ Consequently, the Commission estimates that the majority of local resellers are small entities.

20. *Toll Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁵⁶ According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services.⁵⁷ Of these, an estimated 857 have 1,500 or fewer employees and 24 have more than 1,500 employees.⁵⁸ Consequently, the Commission estimates that the majority of toll resellers are small entities.

21. *Other Toll Carriers.* Neither the Commission nor the SBA has developed a size standard 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. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁵⁹ According to Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage.⁶⁰ Of these, an estimated 279 have 1,500 or fewer employees and five have more than 1,500 employees.⁶¹ Consequently, the Commission estimates that most Other Toll Carriers are small.

22. *800 and 800-Like Service Subscribers.*⁶² Neither the Commission nor the SBA has developed a small business size standard specifically for 800 and 800-like service (toll free) subscribers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁶³ The most reliable source of information regarding the number of these service subscribers appears to be data the Commission collects on the 800, 888, 877, and 866 numbers in use.⁶⁴ According to our data, as of September 2009, the number of 800 numbers assigned was 7,860,000; the number of 888 numbers assigned was 5,588,687; the number of 877 numbers assigned was 4,721,866; and the number of 866 numbers assigned was

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⁵² 13 CFR § 121.201, NAICS code 517911.

⁵³ U.S. Census Bureau, 2012 Economic Census, Subject Series: Information, “Establishment and Firm Size,” NAICS code 517911.

⁵⁴ See *Trends in Telephone Service* at Table 5.3.

⁵⁵ See *id.*

⁵⁶ See 13 CFR § 121.201, NAICS code 517911.

⁵⁷ See *Trends in Telephone Service* at Table 5.3.

⁵⁸ See *id.*

⁵⁹ See 13 CFR § 121.201, NAICS code 517311.

⁶⁰ See *Trends in Telephone Service* at Table 5.3.

⁶¹ See *id.*

⁶² We include all toll-free number subscribers in this category, including those for 888 numbers.

⁶³ See 13 CFR § 121.201, NAICS code 517911.

⁶⁴ See *Trends in Telephone Service* at Tables 18.7-18.10.

7,867,736.⁶⁵ We do not have data specifying the number of these subscribers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of toll free subscribers that would qualify as small businesses under the SBA size standard. Consequently, we estimate that there are 7,860,000 or fewer small entity 800 subscribers; 5,588,687 or fewer small entity 888 subscribers; 4,721,866 or fewer small entity 877 subscribers; and 7,867,736 or fewer small entity 866 subscribers.

4. Wireless Providers – Fixed and Mobile

23. The broadband Internet access service provider category covered by this Report and Order may cover multiple wireless firms and categories of regulated wireless services. Thus, to the extent the wireless services listed below are used by wireless firms for broadband Internet access service, the proposed actions may have an impact on those small businesses as set forth above and further below. In addition, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that claim to qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments and transfers or reportable eligibility events, unjust enrichment issues are implicated.

24. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. 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.⁶⁶ The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.⁶⁷ For this industry, U.S. Census Bureau data for 2012 shows that there were 967 firms that operated for the entire year.⁶⁸ Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.⁶⁹ Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

25. *Wireless Communications Services*. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined “small business” for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a “very small business” as an entity with average gross revenues of \$15 million for each of the three preceding years.⁷⁰ The SBA has approved these small business size standards.⁷¹ In the Commission’s auction for geographic area licenses in the WCS there

⁶⁵ See *id.*

⁶⁶ U.S. Census Bureau, 2012 NAICS Definitions, “517210 Wireless Telecommunications Carriers (Except Satellite),” See <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.517210>.

⁶⁷ 13 CFR § 121.201, NAICS code 517210.

⁶⁸ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ5, Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012 NAICS Code 517210 (rel. Jan. 8, 2016). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517210.

⁶⁹ *Id.* Available census data does not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

⁷⁰ *Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service (WCS)*, GN Docket No. 96-228, Report and Order, 12 FCC Rcd 10785, 10879, para. 194 (1997).

⁷¹ See Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (Dec. 2, 1998) (*Alvarez Letter 1998*).

were seven winning bidders that qualified as “very small business” entities, and one that qualified as a “small business” entity.

26. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.⁷² In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, the Commission established a small business size standard for a “small business” as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed \$15 million for the preceding three years.⁷³ A “very small business” is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed \$3 million for the preceding three years.⁷⁴ These size standards will be used in future auctions of 218-219 MHz spectrum.

27. *2.3 GHz Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined “small business” for the wireless communications services (“WCS”) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a “very small business” as an entity with average gross revenues of \$15 million for each of the three preceding years.⁷⁵ The SBA has approved these definitions.⁷⁶ The Commission auctioned geographic area licenses in the WCS service. In the auction, which was conducted in 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity.

28. *1670–1675 MHz Services.* This service can be used for fixed and mobile uses, except aeronautical mobile.⁷⁷ An auction for one license in the 1670–1675 MHz band was conducted in 2003. One license was awarded. The winning bidder was not a small entity.

29. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. The closest applicable SBA category is Wireless Telecommunications Carriers (except Satellite)⁷⁸ and the appropriate size standard for this category under the SBA rules is that such a business is small if it has 1,500 or fewer employees.⁷⁹ For this industry, U.S. Census Bureau data for 2012 shows that there were 967 firms that operated for the

⁷² See generally *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 9 FCC Rcd 2330 (1994).

⁷³ See generally *Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 1497 (1999) (*218-219 MHz Report and Order and Memorandum Opinion and Order*).

⁷⁴ See *id.*

⁷⁵ *Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service (WCS)*, GN Docket No. 96-228, Report and Order, 12 FCC Rcd 10785, 10879, para. 194 (1997).

⁷⁶ See *Alvarez Letter 1998*.

⁷⁷ 47 CFR § 2.106; see generally 47 CFR §§ 27.1-27.70.

⁷⁸ 13 CFR § 121.201, NAICS code 517210.

⁷⁹ *Id.*

entire year.⁸⁰ Of this total, 955 firms had fewer than 1,000 employees and 12 firms has 1000 employees or more.⁸¹ Thus under this category and the associated size standard, the Commission estimates that a majority of these entities can be considered small. According to Commission data, 413 carriers reported that they were engaged in wireless telephony.⁸² Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.⁸³ Therefore, more than half of these entities can be considered small.

30. *Broadband Personal Communications Service.* The broadband personal communications services (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission initially defined a “small business” for C- and F-Block licenses as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁸⁴ For F-Block licenses, an additional small business size standard for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁸⁵ These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.⁸⁶ No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that claimed small business status in the first two C-Block auctions. A total of 93 bidders that claimed small business status won approximately 40 percent of the 1,479 licenses in the first auction for the D, E, and F Blocks.⁸⁷ On April 15, 1999, the Commission completed the reauction of 347 C-, D-, E-, and F-Block licenses in Auction No. 22.⁸⁸ Of the 57 winning bidders in that auction, 48 claimed small business status and won 277 licenses.

31. On January 26, 2001, the Commission completed the auction of 422 C and F Block Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in that auction, 29 claimed small business status.⁸⁹ Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. On February 15, 2005, the Commission completed an auction of 242 C-, D-, E-, and F-Block licenses in Auction No.

⁸⁰ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ5, Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012 NAICS Code 517210 (rel. Jan. 8, 2016). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517210.

⁸¹ *Id.* Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

⁸² See Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, Trends in Telephone Service at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*), https://apps.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁸³ *Id.*

⁸⁴ See *Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap; Amendment of the Commission’s Cellular/PCS Cross-Ownership Rule*; WT Docket No. 96-59, GN Docket No. 90-314, Report and Order, 11 FCC Rcd 7824, 7850-52, paras. 57-60 (1996) (*PCS Report and Order*); see also 47 CFR § 24.720(b).

⁸⁵ See *PCS Report and Order*, 11 FCC Rcd at 7852, para. 60.

⁸⁶ See *Alvarez Letter 1998*.

⁸⁷ See *Broadband PCS, D, E and F Block Auction Closes*, Public Notice, Doc. No. 89838 (rel. Jan. 14, 1997).

⁸⁸ See *C, D, E, and F Block Broadband PCS Auction Closes*, Public Notice, 14 FCC Rcd 6688 (WTB 1999). Before Auction No. 22, the Commission established a very small standard for the C Block to match the standard used for F Block. *Amendment of the Commission’s Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees*, WT Docket No. 97-82, Fourth Report and Order, 13 FCC Rcd 15743, 15768, para. 46 (1998).

58. Of the 24 winning bidders in that auction, 16 claimed small business status and won 156 licenses.⁹⁰ On May 21, 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction No. 71.⁹¹ Of the 12 winning bidders in that auction, five claimed small business status and won 18 licenses.⁹² On August 20, 2008, the Commission completed the auction of 20 C-, D-, E-, and F-Block Broadband PCS licenses in Auction No. 78.⁹³ Of the eight winning bidders for Broadband PCS licenses in that auction, six claimed small business status and won 14 licenses.⁹⁴

32. *Specialized Mobile Radio Licenses.* The Commission awards “small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.⁹⁵ The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.⁹⁶ The SBA has approved these small business size standards for the 900 MHz Service.⁹⁷ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.⁹⁸ A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.⁹⁹

33. The auction of the 1,053 800 MHz SMR geographic area licenses for the General Category channels was conducted in 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band and qualified as small businesses under the \$15 million size standard.¹⁰⁰ In an auction completed in 2000, a total of 2,800 Economic Area licenses in the

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⁸⁹ See *C and F Block Broadband PCS Auction Closes; Winning Bidders Announced*, Public Notice, 16 FCC Rcd 2339 (2001).

⁹⁰ See *Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58*, Public Notice, 20 FCC Rcd 3703 (2005).

⁹¹ See *Auction of Broadband PCS Spectrum Licenses Closes; Winning Bidders Announced for Auction No. 71*, Public Notice, 22 FCC Rcd 9247 (2007).

⁹² *Id.*

⁹³ See *Auction of AWS-1 and Broadband PCS Licenses Closes; Winning Bidders Announced for Auction 78*, Public Notice, 23 FCC Rcd 12749 (WTB 2008).

⁹⁴ *Id.*

⁹⁵ 47 CFR § 90.814(b)(1).

⁹⁶ *Id.*

⁹⁷ See Letter from Aida Alvarez, Administrator, SBA, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (Aug. 10, 1999) (*Alvarez Letter 1999*).

⁹⁸ See *Correction to Public Notice DA 96-586 “FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,”* Public Notice, 18 FCC Rcd 18367 (WTB 1996).

⁹⁹ See *Multi-Radio Service Auction Closes*, Public Notice, 17 FCC Rcd 1446 (WTB 2002).

¹⁰⁰ See *800 MHz Specialized Mobile Radio (SMR) Service General Category (851–854 MHz) and Upper Band (861–865 MHz) Auction Closes; Winning Bidders Announced*, Public Notice, 15 FCC Rcd 17162 (2000).

lower 80 channels of the 800 MHz SMR service were awarded.¹⁰¹ Of the 22 winning bidders, 19 claimed small business status and won 129 licenses. Thus, combining all four auctions, 41 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small businesses.

34. In addition, there are numerous incumbent site-by-site SMR licenses and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. In addition, we do not know how many of these firms have 1,500 or fewer employees, which is the SBA-determined size standard.¹⁰² We assume, for purposes of this analysis, that all of the remaining extended implementation authorizations are held by small entities, as defined by the SBA.

35. *Lower 700 MHz Band Licenses.* The Commission previously adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.¹⁰³ 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.¹⁰⁴ A “very small business” is defined as 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.¹⁰⁵ Additionally, the lower 700 MHz Service had a third category of small business status for Metropolitan/Rural Service Area (MSA/RSA) licenses—“entrepreneur”—which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.¹⁰⁶ The SBA approved these small size standards.¹⁰⁷ An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were won by 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.¹⁰⁸ A second auction commenced on May 28, 2003, closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 Cellular Market Area licenses.¹⁰⁹ Seventeen winning bidders claimed small or very small business status and won 60 licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.¹¹⁰ On July 26, 2005, the Commission completed an auction of 5 licenses in the Lower 700 MHz band (Auction No. 60). There were three winning bidders for five licenses. All three winning bidders claimed small business status.

¹⁰¹ See *800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced*, Public Notice, 16 FCC Rcd 1736 (2000).

¹⁰² See generally 13 CFR § 121.201, NAICS code 517210.

¹⁰³ See *Reallocation and Service Rules for the 698–746 MHz Spectrum Band (Television Channels 52–59)*, GN Docket No. 01-74, Report and Order, 17 FCC Rcd 1022 (2002) (*Channels 52–59 Report and Order*).

¹⁰⁴ See *id.* at 1087-88, para. 172.

¹⁰⁵ See *id.*

¹⁰⁶ See *id.* at 1088, para. 173.

¹⁰⁷ See *Alvarez Letter 1999*.

¹⁰⁸ See *Lower 700 MHz Band Auction Closes*, Public Notice, 17 FCC Rcd 17272 (WTB 2002).

¹⁰⁹ See *id.*

¹¹⁰ See *id.*

36. In 2007, the Commission reexamined its rules governing the 700 MHz band in the *700 MHz Second Report and Order*.¹¹¹ An auction of 700 MHz licenses commenced January 24, 2008 and closed on March 18, 2008, which included, 176 Economic Area licenses in the A Block, 734 Cellular Market Area licenses in the B Block, and 176 EA licenses in the E Block.¹¹² Twenty winning bidders, claiming small business status (those with attributable average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years) won 49 licenses. Thirty three winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) won 325 licenses.

37. *Upper 700 MHz Band Licenses*. In the *700 MHz Second Report and Order*, the Commission revised its rules regarding Upper 700 MHz licenses.¹¹³ On January 24, 2008, the Commission commenced Auction 73 in which several licenses in the Upper 700 MHz band were available for licensing: 12 Regional Economic Area Grouping licenses in the C Block, and one nationwide license in the D Block.¹¹⁴ The auction concluded on March 18, 2008, with 3 winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) and winning five licenses.

38. *700 MHz Guard Band Licensees*. In 2000, in the 700 MHz Guard Band Order, the Commission adopted size standards for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹¹⁵ A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.¹¹⁶ Additionally, a very small business is 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.¹¹⁷ SBA approval of these definitions is not required.¹¹⁸ An auction of 52 Major Economic Area licenses commenced on September 6, 2000, and closed on September 21, 2000.¹¹⁹ Of the 104 licenses auctioned, 96 licenses were sold to

¹¹¹ *Service Rules for the 698–746, 747–762 and 777–792 MHz Band; Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones; Biennial Regulatory Review—Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services; Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission’s Rules; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010; Declaratory Ruling on Reporting Requirement under Commission’s Part 1 Anti-Collusion Rule*, WT Docket Nos. 07-166, 06-169, 06-150, 03-264, 96-86, PS Docket No. 06-229, CC Docket No. 94-102, Second Report and Order, 22 FCC Rcd 15289, 15359 n. 434 (2007) (*700 MHz Second Report and Order*).

¹¹² *See Auction of 700 MHz Band Licenses Closes*, Public Notice, 23 FCC Rcd 4572 (WTB 2008).

¹¹³ *700 MHz Second Report and Order*, 22 FCC Rcd 15289.

¹¹⁴ *See Auction of 700 MHz Band Licenses Closes*, Public Notice, 23 FCC Rcd 4572 (WTB 2008).

¹¹⁵ *See Service Rules for the 746–764 MHz Bands, and Revisions to Part 27 of the Commission’s Rules*, WT Docket No. 99-168, Second Report and Order, 15 FCC Rcd 5299 (2000) (*746–764 MHz Band Second Report and Order*).

¹¹⁶ *See id.* at 5343, para. 108.

¹¹⁷ *See id.*

¹¹⁸ *See id.* at 5343, para. 108 n.246 (for the 746–764 MHz and 776–794 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain SBA approval before adopting small business size standards).

¹¹⁹ *See 700 MHz Guard Bands Auction Closes: Winning Bidders Announced*, Public Notice, 15 FCC Rcd 18026 (WTB 2000).

nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001, and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.¹²⁰

39. *Cellular Radiotelephone Service.* Auction 77 was held to resolve one group of mutually exclusive applications for Cellular Radiotelephone Service licenses for unserved areas in New Mexico.¹²¹ Bidding credits for designated entities were not available in Auction 77.¹²² In 2008, the Commission completed the closed auction of one unserved service area in the Cellular Radiotelephone Service, designated as Auction 77. Auction 77 concluded with one provisionally winning bid for the unserved area totaling \$25,002.¹²³

40. *Private Land Mobile Radio (“PLMR”).* PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories, and are often used in support of the licensee’s primary (non-telecommunications) business operations. For the purpose of determining whether a licensee of a PLMR system is a small business as defined by the SBA, we use the broad census category, Wireless Telecommunications Carriers (except Satellite). This definition provides that a small entity is any such entity employing no more than 1,500 persons.¹²⁴ The Commission does not require PLMR licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many PLMR licensees constitute small entities under this definition. We note that PLMR licensees generally use the licensed facilities in support of other business activities, and therefore, it would also be helpful to assess PLMR licensees under the standards applied to the particular industry subsector to which the licensee belongs.¹²⁵

41. As of March 2010, there were 424,162 PLMR licensees operating 921,909 transmitters in the PLMR bands below 512 MHz. We note that any entity engaged in a commercial activity is eligible to hold a PLMR license, and that any revised rules in this context could therefore potentially impact small entities covering a great variety of industries.

42. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.¹²⁶ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).¹²⁷ In the present context, we will use the SBA’s small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), i.e., an entity employing no more than 1,500 persons.¹²⁸ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service.

¹²⁰ See *700 MHz Guard Bands Auction Closes: Winning Bidders Announced*, Public Notice, 16 FCC Rcd 4590 (WTB 2001).

¹²¹ See *Closed Auction of Licenses for Cellular Unserved Service Area Scheduled for June 17, 2008, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 77*, Public Notice, 23 FCC Rcd 6670 (WTB 2008).

¹²² *Id.* at 6685.

¹²³ See *Auction of Cellular Unserved Service Area License Closes, Winning Bidder Announced for Auction 77, Down Payment due July 2, 2008, Final Payment due July 17, 2008*, Public Notice, 23 FCC Rcd 9501 (WTB 2008).

¹²⁴ See 13 CFR § 121.201, NAICS code 517210.

¹²⁵ See generally 13 CFR § 121.201.

¹²⁶ The service is defined in 47 CFR § 22.99.

¹²⁷ BETRS is defined in 47 CFR §§ 22.757 and 22.759.

¹²⁸ 13 CFR § 121.201, NAICS code 517210.

43. *Air-Ground Radiotelephone Service.* The Commission has previously used the SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), which is an entity employing no more than 1,500 persons.¹²⁹ For this industry, U.S. Census data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms had fewer than 1,000 employees and 12 had employment of 1000 employees or more.¹³⁰ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small entities under the SBA definition. For purposes of assigning Air-Ground Radiotelephone Service licenses through competitive bidding, the Commission has defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$40 million.¹³¹ A "very small business" is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million.¹³² These definitions were approved by the SBA.¹³³ In May 2006, the Commission completed an auction of nationwide commercial Air-Ground Radiotelephone Service licenses in the 800 MHz band (Auction No. 65). On June 2, 2006, the auction closed with two winning bidders winning two Air-Ground Radiotelephone Services licenses. Neither of the winning bidders claimed small business status.

44. *Aviation and Marine Radio Services.* Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.¹³⁴ U.S. Census Bureau data for 2012 shows that there were 967 firms that operated for the entire year.¹³⁵ Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.¹³⁶ Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship

¹²⁹ 13 CFR § 121.201, NAICS codes 517210.

¹³⁰ *Id.* Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

¹³¹ *Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review—Amendment of Parts 1, 22, and 90 of the Commission's Rules, Amendment of Parts 1 and 22 of the Commission's Rules to Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service*, Order on Reconsideration and Report and Order, 20 FCC Red 19663, paras. 28-42 (2005).

¹³² *Id.*

¹³³ See Letter from Hector V. Barreto, Administrator, SBA, to Gary D. Michaels, Deputy Chief, Auctions and Spectrum Access Division, Wireless Telecommunications Bureau, Federal Communications Commission (Sept. 19, 2005).

¹³⁴ See 13 CFR § 121.201, NAICS code 517210.

¹³⁵ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ5, Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012 NAICS Code 517210 (rel. Jan. 8, 2016). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517210.

¹³⁶ *Id.* Available census data does not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a “small” business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars.¹³⁷ In addition, a “very small” business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.¹³⁸ There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as “small” businesses under the above special small business size standards.

45. 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)). For the AWS-1 bands,¹³⁹ the Commission has defined a “small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a “very small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. For AWS-2 and AWS-3, although we do not know for certain which entities are likely to apply for these frequencies, we note that the AWS-1 bands are comparable to those used for cellular service and personal communications service. The Commission has not yet adopted size standards for the AWS-2 or AWS-3 bands but proposes to treat both AWS-2 and AWS-3 similarly to broadband PCS service and AWS-1 service due to the comparable capital requirements and other factors, such as issues involved in relocating incumbents and developing markets, technologies, and services.¹⁴⁰

46. *3650–3700 MHz band.* In March 2005, the Commission released a *Report and Order and Memorandum Opinion and Order* that provides for nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based technologies, in the 3650 MHz band (i.e., 3650–3700 MHz). As of April 2010, more than 1270 licenses have been granted and more than 7433 sites have been registered. The Commission has not developed a definition of small entities applicable to 3650–3700 MHz band nationwide, non-exclusive licensees. However, we estimate that the majority of these licensees are Internet Access Service Providers (ISPs) and that most of those licensees are small businesses.

47. *Fixed Microwave Services.* Microwave services include common carrier,¹⁴¹ private-operational fixed,¹⁴² and broadcast auxiliary radio services.¹⁴³ They also include the Local Multipoint

¹³⁷ See generally *Amendment of the Commission’s Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853, 19884–88 paras. 64–73 (1998).

¹³⁸ See *id.*

¹³⁹ The service is defined in section 90.1301 *et seq.* of the Commission’s Rules, 47 CFR § 90.1301 *et seq.*

¹⁴⁰ See *Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, WT Docket No. 02-353, Report and Order, 18 FCC Rcd 25162, Appx. B (2003), *modified by Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, WT Docket No. 02-353, Order on Reconsideration, 20 FCC Rcd 14058, Appx. C (2005); *Service Rules for Advanced Wireless Services in the 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz Bands*; *Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, WT Docket Nos. 04-356, 02-353, Notice of Proposed Rulemaking, 19 FCC Rcd 19263, Appx. B (2005); *Service Rules for Advanced Wireless Services in the 2155–2175 MHz Band*, WT Docket No. 07-195, Notice of Proposed Rulemaking, 22 FCC Rcd 17035, Appx. (2007).

¹⁴¹ See 47 CFR Part 101, Subparts C and I.

¹⁴² See 47 CFR Part 101, Subparts C and H.

¹⁴³ 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.

Distribution Service (LMDS),¹⁴⁴ the Digital Electronic Message Service (DEMS),¹⁴⁵ and the 24 GHz Service,¹⁴⁶ where licensees can choose between common carrier and non-common carrier status.¹⁴⁷ At present, there are approximately 36,708 common carrier fixed licensees and 59,291 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. There are approximately 135 LMDS licensees, three DEMS licensees, and three 24 GHz licensees. The Commission has not yet defined a small business with respect to microwave services. The closest applicable SBA category is Wireless Telecommunications Carriers (except Satellite) and the appropriate size standard for this category under SBA rules is that such a business is small if it has 1,500 or fewer employees.¹⁴⁸ For this industry, U.S. Census data for 2012 show that there were 967 firms that operated for the entire year.¹⁴⁹ Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.¹⁵⁰ Thus under this SBA category and the associated size standard, the Commission estimates that a majority of fixed microwave service licensees can be considered small.

48. The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are up to 36,708 common carrier fixed licensees and up to 59,291 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies adopted herein. We note, however, that the common carrier microwave fixed licensee category does include some large entities.

49. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.¹⁵¹ The closest applicable SBA size standard is for Wireless Telecommunications Carriers (except Satellite), which is an entity employing no more than 1,500 persons.¹⁵² U.S. Census Bureau data in this industry for 2012 show that there were 967 firms that operated for the entire year.¹⁵³ Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.¹⁵⁴ Thus, under this SBA category and the associated small business size standard, the majority of Offshore Radiotelephone Service firms can be considered small. There are presently

¹⁴⁴ See 47 CFR Part 101, Subpart L.

¹⁴⁵ See 47 CFR Part 101, Subpart G.

¹⁴⁶ See *id.*

¹⁴⁷ See 47 CFR §§ 101.533, 101.1017.

¹⁴⁸ See 13 CFR § 121.201, NAICS code 517210.

¹⁴⁹ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ5, Information: Subject Series, "Estab and Firm Size: Employment Size of Firms for the U.S.: 2012 NAICS Code 517210" (rel. Jan. 8, 2016). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517210.

¹⁵⁰ *Id.* Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

¹⁵¹ This service is governed by Subpart I of Part 22 of the Commission's Rules. See 47 CFR §§ 22.1001-22.1037.

¹⁵² 13 CFR § 121.201, NAICS codes 517210.

¹⁵³ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ5, Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012 NAICS Code 517210 (rel. Jan. 8, 2016). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~5172100.

¹⁵⁴ *Id.* Available census data does not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

approximately 55 licensees in this service. However, the Commission is unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for the category of Wireless Telecommunications Carriers (except Satellite).

50. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses—an entity that has average gross revenues of \$40 million or less in the three previous calendar years.¹⁵⁵ An additional size standard for “very small business” is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹⁵⁶ The SBA has approved these small business size standards.¹⁵⁷ The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by rules adopted pursuant to the Order.

51. *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,” 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)).¹⁵⁸

52. *BRS -* In connection with the 1996 BRS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of no more than \$40 million in the previous three calendar years.¹⁵⁹ The BRS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. BRS also includes licensees of stations authorized prior to the auction. At this time, we estimate that of the 61 small business BRS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 86 incumbent BRS licensees that are considered small entities (18 incumbent BRS licensees do not meet the small business size standard).¹⁶⁰ After adding the number of small business auction licensees to the number of incumbent licensees not already counted, there are currently approximately 133 BRS licensees that are defined as small businesses under either the SBA or the Commission's rules.

53. In 2009, the Commission conducted Auction 86, the sale of 78 licenses in the BRS areas.¹⁶¹ The Commission offered three levels of bidding credits: (i) a bidder with attributed average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three

¹⁵⁵ See *Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, PP Docket No. 93-253, Report and Order, 12 FCC Rcd 18600, 18661–64, paras. 149–151 (1997).

¹⁵⁶ See *id.*

¹⁵⁷ See Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

¹⁵⁸ *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).

¹⁵⁹ 47 CFR § 21.961(b)(1).

¹⁶⁰ 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard of 1500 or fewer employees.

¹⁶¹ *Auction of Broadband Radio Service (BRS) Licenses, Scheduled for October 27, 2009, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 86*, Public Notice, 24 FCC Rcd 8277 (2009).

years (small business) received a 15 percent discount on its winning bid; (ii) a bidder with attributed average annual gross revenues that exceed \$3 million and do not exceed \$15 million for the preceding three years (very small business) received a 25 percent discount on its winning bid; and (iii) a bidder with attributed average annual gross revenues that do not exceed \$3 million for the preceding three years (entrepreneur) received a 35 percent discount on its winning bid.¹⁶² Auction 86 concluded in 2009 with the sale of 61 licenses.¹⁶³ Of the ten winning bidders, two bidders that claimed small business status won 4 licenses; one bidder that claimed very small business status won three licenses; and two bidders that claimed entrepreneur status won six licenses.

54. *EBS - Educational Broadband Service* has been included within the broad economic census category and SBA size standard for Wired Telecommunications Carriers since 2007. Wired Telecommunications Carriers are comprised of establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.¹⁶⁴ The SBA's small business size standard for this category is all such firms having 1,500 or fewer employees.¹⁶⁵ U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated that year.¹⁶⁶ Of this total, 3,083 operated with fewer than 1,000 employees.¹⁶⁷ Thus, under this size standard, the majority of firms in this industry can be considered small. In addition to Census data, the Commission's Universal Licensing System indicates that as of October 2014, there are 2,206 active EBS licenses. The Commission estimates that of these 2,206 licenses, the majority are held by non-profit educational institutions and school districts, which are by statute defined as small businesses.¹⁶⁸

55. *Narrowband Personal Communications Services*. Two auctions of narrowband personal communications services (PCS) licenses have been conducted. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses.¹⁶⁹ A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million. A "very small business" is an entity that, together with

¹⁶² *Id.* at 8296, para. 73.

¹⁶³ *Auction of Broadband Radio Service Licenses Closes, Winning Bidders Announced for Auction 86, Down Payments Due November 23, 2009, Final Payments Due December 8, 2009, Ten-Day Petition to Deny Period*, Public Notice, 24 FCC Rcd 13572 (2009).

¹⁶⁴ U.S. Census Bureau, 2017 NAICS Definitions, "517311 Wired Telecommunications Carriers," (partial definition), <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

¹⁶⁵ *See*, 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. *See*, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

¹⁶⁶ *See* U.S. Census Bureau, 2012 *Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5/naics~517110.

¹⁶⁷ *Id.*

¹⁶⁸ The term "small entity" within SBREFA applies to small organizations (non-profits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). [5 U.S.C. §§ 601\(4\)-\(6\)](#).

¹⁶⁹ *Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, GEN Docket No. 90-314, ET Docket No. 92-100, PP Docket No. 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456 (2000).

affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million. The SBA has approved these small business size standards.¹⁷⁰

56. *Paging (Private and Common Carrier)*. In the *Paging Third Report and Order*, the Commission developed a small business size standard for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹⁷¹ A “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. The SBA has approved these small business size standards.¹⁷² According to Commission data, 291 carriers have reported that they are engaged in Paging or Messaging Service.¹⁷³ Of these, an estimated 289 have 1,500 or fewer employees, and two have more than 1,500 employees.¹⁷⁴ Consequently, the Commission estimates that the majority of paging providers are small entities that may be affected by our action. An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold. Fifty-seven companies claiming small business status won 440 licenses.¹⁷⁵ A subsequent auction of MEA and Economic Area (“EA”) licenses was held in the year 2001. Of the 15,514 licenses auctioned, 5,323 were sold.¹⁷⁶ One hundred thirty-two companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs, was held in 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.¹⁷⁷ A fourth auction, consisting of 9,603 lower and upper paging band licenses was held in the year 2010. Twenty-nine bidders claiming small or very small business status won 3,016 licenses.¹⁷⁸

57. *220 MHz Radio Service – Phase I Licensees*. The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to Wireless Telecommunications Carriers (except Satellite). Under this category,

¹⁷⁰ See Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (Dec. 2, 1998) (*Alvarez Letter 1998*).

¹⁷¹ See *Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, PR Docket No. 93-253, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, 10085–88, paras. 98–107 (1999) (*Paging Third Report and Order*).

¹⁷² See *Alvarez Letter 1998*.

¹⁷³ See *Trends in Telephone Service* at Table 5.3.

¹⁷⁴ See *id.*

¹⁷⁵ See *id.*

¹⁷⁶ See *Lower and Upper Paging Band Auction Closes*, Public Notice, 16 FCC Rcd 21821 (Wireless Tel. Bur. 2002).

¹⁷⁷ See *Lower and Upper Paging Bands Auction Closes*, Public Notice, 18 FCC Rcd 11154 (Wireless Tel. Bur. 2003). The current number of small or very small business entities that hold wireless licenses may differ significantly from the number of such entities that won in spectrum auctions due to assignments and transfers of licenses in the secondary market over time. In addition, some of the same small business entities may have won licenses in more than one auction.

¹⁷⁸ See *Auction of Lower and Upper Paging Bands Licenses Closes*, Public Notice, 25 FCC Rcd 18164 (Wireless Tel. Bur. 2010).

the SBA deems a wireless business to be small if it has 1,500 or fewer employees.¹⁷⁹ The Commission estimates that nearly all such licensees are small businesses under the SBA's small business size standard.

58. *220 MHz Radio Service – Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is subject to spectrum auctions. In the *220 MHz Third Report and Order*, the Commission adopted a small business size standard for “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹⁸⁰ This small business size standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.¹⁸¹ A “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.¹⁸² The SBA has approved these small business size standards.¹⁸³ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.¹⁸⁴ In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold. Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.¹⁸⁵

5. Satellite Service Providers

59. *Satellite Telecommunications Providers.* This category 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.”¹⁸⁶ Satellite telecommunications service providers include satellite and earth station operators. The category has a small business size standard of \$32.5 million or less in average annual receipts, under SBA rules.¹⁸⁷ For this category, U.S. Census Bureau data for 2012 shows that there were a total of 333 firms that operated for the entire year.¹⁸⁸ Of this total, 299 firms had annual receipts of less than \$25 million.¹⁸⁹ Consequently, we estimate that the majority of satellite telecommunications providers are small entities.

¹⁷⁹ See 13 CFR § 121.201, NAICS code 517210.

¹⁸⁰ See *Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service*, PR Docket No. 89-552, GN Docket No. 93-252, PP Docket No. 93-253, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068–70, paras. 291–295 (1997) (*220 MHz Third Report and Order*).

¹⁸¹ See *id.* at 11068–69, para. 291.

¹⁸² See *id.* at 11068–70, paras. 291–95.

¹⁸³ See Letter to D. Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998) (*Alvarez to Phythyon Letter 1998*).

¹⁸⁴ See *Phase II 220 MHz Service Auction Closes*, Public Notice, 14 FCC Rcd 605 (Wireless Tel. Bur. 1998).

¹⁸⁵ See *Phase II 220 MHz Service Spectrum Auction Closes*, Public Notice, 14 FCC Rcd 11218 (Wireless Tel. Bur. 1999).

¹⁸⁶ U.S. Census Bureau, 2017 NAICS Definitions, “517410 Satellite Telecommunications”; <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517410&search=2017+NAICS+Search&search=2017>.

¹⁸⁷ 13 CFR § 121.201, NAICS code 517410.

¹⁸⁸ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ4, Information: Subject Series - Estab and Firm Size: Receipts Size of Firms for the United States: 2012, NAICS code 517410 https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4//naics~517410.

¹⁸⁹ *Id.*

60. Because section 706 requires us to monitor the deployment of broadband using any technology, we anticipate that some broadband service providers may not provide telephone service. Accordingly, we describe below other types of firms that may provide broadband services, including cable companies, MDS providers, and utilities, among others.

61. *Cable and Other Subscription Programming.* This industry comprises establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. 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. The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.¹⁹⁰ The SBA size standard for this industry establishes as small, any company in this category which has annual receipts of \$38.5 million or less.¹⁹¹ According to 2012 U.S. Census Bureau data, 367 firms operated for the entire year.¹⁹² Of that number, 319 operated with annual receipts of less than \$25 million a year and 48 firms operated with annual receipts of \$25 million or more.¹⁹³ Based on this data, the Commission estimates that the majority of firms operating in this industry are small.

62. *Cable Companies and Systems (Rate Regulation).* The Commission has developed its own small business size standards 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.¹⁹⁴ Industry data indicate that there are currently 4,600 active cable systems in the United States.¹⁹⁵ Of this total, all but nine cable operators nationwide are small under the 400,000-subscriber size standard.¹⁹⁶ In addition, under the Commission's rate regulation rules, a "small system" is a cable system serving 15,000 or fewer subscribers.¹⁹⁷ Current Commission records show 4,600 cable systems nationwide.¹⁹⁸ Of this total, 3,900 cable systems have fewer than 15,000 subscribers, and 700 systems have 15,000 or more subscribers, based on the same records.¹⁹⁹ Thus, under this standard as well, we estimate that most cable systems are small entities.

63. *Cable System Operators (Telecom Act Standard).* The Communications Act of 1934, as amended also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the

¹⁹⁰ See U.S. Census Bureau, 2012 NAICS Definitions, "515210 Cable and other Subscription Programming", <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.515210#>.

¹⁹¹ See 13 CFR § 121.201, NAICS Code 515210.

¹⁹² See U.S. Census Bureau, 2012 *Economic Census of the United States*, Table EC1251SSSZ4, Information: Subject Series - Estab & Firm Size: Receipts Size of Firms for the U.S.: 2012, NAICS Code 515210, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4//naics~515210.

¹⁹³ *Id.* Available census data does not provide a more precise estimate of the number of firms that have receipts of \$38.5 million or less.

¹⁹⁴ 47 CFR § 76.901(e).

¹⁹⁵ The number of active, registered cable systems comes from the Commission's Cable Operations and Licensing System (COALS) database on August 15, 2015. See FCC, *Cable Operations and Licensing System (COALS)*, www.fcc.gov/coals (last visited Oct. 25, 2016).

¹⁹⁶ See SNL KAGAN, *Top Cable MSOs*, <https://www.snl.com/Interactivex/TopCableMSOs.aspx> (last visited Oct. 25, 2016).

¹⁹⁷ 47 CFR § 76.901(c).

¹⁹⁸ See *March 31, 2013 Broadcast Station Totals Press Release*.

¹⁹⁹ See FCC, *Cable Operations and Licensing System (COALS)*, www.fcc.gov/coals (last visited Oct. 25, 2016).

United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000.”²⁰⁰ There are approximately 52,403,705 cable video subscribers in the United States today.²⁰¹ Accordingly, an operator serving fewer than 524,037 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.²⁰² Based on available data, we find that all but nine incumbent cable operators are small entities under this size standard.²⁰³ We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.²⁰⁴ Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million, 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.

64. The open video system (“OVS”) framework was established in 1996, and is one of four statutorily recognized options for the provision of video programming services by local exchange carriers.²⁰⁵ The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,²⁰⁶ OVS falls within the SBA small business size standard covering cable services, which is “Wired Telecommunications Carriers.”²⁰⁷ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.²⁰⁸ U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated that year.²⁰⁹ Of this total, 3,083 operated with fewer than 1,000 employees.²¹⁰ Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the Report and Order. In addition, we note that the Commission has certified some OVS operators, with some now providing service.²¹¹ Broadband service providers (“BSPs”) are currently the only significant holders of OVS certifications or local OVS franchises.²¹² The Commission does not have

²⁰⁰ 47 CFR § 76.90(f) and notes ff. 1, 2, and 3.

²⁰¹ See SNL KAGAN at <http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx>.

²⁰² 47 CFR § 76.901(f) and notes ff. 1, 2, and 3.

²⁰³ See SNL KAGAN at <http://www.snl.com/interactivex/TopCableMSOs.aspx>.

²⁰⁴ 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 section 76.901(f) of the Commission’s rules. See 47 CFR § 76.901(f).

²⁰⁵ 47 U.S.C. § 571(a)(3)-(4). See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 06-189, Thirteenth Annual Report, 24 FCC Rcd 542, 606, para. 135 (2009) (*Thirteenth Annual Cable Competition Report*).

²⁰⁶ See 47 U.S.C. § 573.

²⁰⁷ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers”; <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

²⁰⁸ *Id.*

²⁰⁹ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

²¹⁰ *Id.*

²¹¹ A list of OVS certifications may be found at <http://www.fcc.gov/mb/ovs/csovsceer.html>.

²¹² See *Thirteenth Annual Cable Competition Report*, 24 FCC Rcd at 606-07 para. 135. BSPs are newer firms that are building state-of-the-art, facilities-based networks to provide video, voice, and data services over a single network.

financial or employment information regarding the entities authorized to provide OVS, some of which may not yet be operational. Thus, again, at least some of the OVS operators may qualify as small entities.

6. Electric Power Generators, Transmitters, and Distributors

65. *Electric Power Generators, Transmitters, and Distributors.* This U.S. industry is comprised of establishments that are primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. 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. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry.²¹³ The closest applicable SBA category is “All Other Telecommunications”. The SBA’s small business size standard for “All Other Telecommunications,” consists of all such firms with gross annual receipts of \$32.5 million or less.²¹⁴ For this category, U.S. Census data for 2012 show that there were 1,442 firms that operated for the entire year. Of these firms, a total of 1,400 had gross annual receipts of less than \$25 million.²¹⁵ Consequently, we estimate that under this category and the associated size standard the majority of these firms can be considered small entities.

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

66. In the Report and Order, we require that price cap carriers and fixed competitive ETCs that receive phase-down support certify annually that they have and will use the support they continue to receive in the relevant high-cost and extremely high-cost areas to provide voice telephony service throughout the relevant census blocks at rates that are reasonably comparable to comparable offerings in urban areas. Price cap carriers and fixed competitive ETCs may elect, however, not to receive phase-down support.

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

67. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.²¹⁶ We have considered all these factors subsequent to receiving substantive comments from the public and potentially affected entities. The Commission has also considered the economic impact on small entities, as identified in comments filed in response to the *April 2014 Connect America FNPRM* and IRFA, in reaching its final conclusions and taking action in this proceeding.

68. In the Report and Order, we adopt a transition schedule providing a gradual two-year phase-down for fixed competitive ETCs’ legacy support. Among those carriers, of which many are small entities, few expressed interest in continuing to provide service in areas where they receive legacy support by participating in the CAF Phase II auction. The two-year phase-down schedule resumes the schedule

²¹³ <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

²¹⁴ 13 CFR § 121.201; NAICS Code 517919.

²¹⁵ http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ4&prodType=table.

²¹⁶ 5 U.S.C. § 603(c).

adopted in the *USF/ICC Transformation Order* for competitive ETCs,²¹⁷ and thus eliminates support that is no longer necessary while providing an appropriate adjustment period for affected carriers.

69. As an alternative to this straightforward transition schedule, we have considered implementing a schedule more similar to price cap carriers' transition—i.e., fixed competitive ETCs could continue receiving legacy support in certain auction-eligible areas and quickly stop receiving legacy support associated with auction-ineligible areas. However, this would add complexity to the process with no benefit to fixed competitive ETCs.

70. We also provide an option for price cap carriers and fixed competitive ETCs to elect not to receive phase-down support and be subject to the associated obligations. In doing so, we minimize any impact economic impact to small entities and other carriers. Carriers opting to continue receiving legacy support subject to the phase-down schedule must continue to file a modified annual certification regarding their use of support, but those carriers are not subject to any additional requirements.

Report to Congress:

71. The Commission will send a copy of the Report and Order, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996.²¹⁸ In addition, the Commission will send a copy of the Order, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the Report and Order and FRFA (or summaries thereof) will also be published in the Federal Register.²¹⁹

²¹⁷ See *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17832, para. 519 (2011) (*USF/ICC Transformation Order*), *aff'd sub nom. In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014).

²¹⁸ 5 U.S.C. § 801(a)(1)(A).

²¹⁹ See *id.* § 604(b).

**STATEMENT OF
CHAIRMAN AJIT PAI**

Re: *Connect America Fund*, WC Docket No. 10-90

One of the most exciting Olympic track and field events is the 4x100 meters relay. That's because the difference between gold and silver—or no medal at all—isn't as simple as which country has the fastest set of runners. To win, teams must also execute flawless handoffs of the baton from one runner to the next, an exercise requiring practice and coordination. One botched transfer of the baton, and a team's race is effectively over.

Since January 2017, the FCC has been racing to close the digital divide and expand broadband access in rural America. One important step toward accomplishing that goal was the Connect America Fund (CAF) II Auction, which will result in the award of about \$1.49 billion to provide fixed broadband access in rural areas currently on the wrong side of the digital divide. Moreover, because support has been allocated through a competitive bidding process, American taxpayers will be getting more bang for the buck. This is a concrete example of how the FCC is working to increase rural connectivity through market-based principles and public-private partnerships.

Today's item is important because it is about the transfer of the baton from legacy CAF I support to the CAF II support that was won during the auction. In this *Order*, we establish a seamless transition that will benefit rural Americans. We've also decided to maintain legacy CAF I support in those areas that did not receive any funding from the CAF II auction. In other words, if there is nobody there yet to take the baton, then the runner holding the baton needs to continue the race.

In short, this *Order* provides for a smooth handoff from yesterday's subsidies to a new, more efficient system that will help build tomorrow's rural broadband networks, while minimizing any potential loss of service and disruption to consumers. And it is a key step in the process of beginning to disburse CAF II auction funds to winning bidders so that more Americans can participate in the digital economy wherever they live and work.

We were able to get one leg closer to the finish line thanks to the hard work of Talmage Cox, Christian Hoefly, Sue McNeil, Alexander Minard, Kris Monteith, Ryan Palmer, and Stephen Wang of the Wireline Competition Bureau; Ashley Boizelle, Valerie Hill, Tom Johnson, Billy Layton, Rick Mallen, and Linda Oliver of the Office of General Counsel; and Tavi Carere and Eric Ralph of the Office of Economics and Analytics. Just like the winning runners in an Olympic relay race, their teamwork was critical to achieving today's successful result.

**STATEMENT OF
COMMISSIONER MICHAEL O’RIELLY**

Re: *Connect America Fund*, WC Docket No. 10-90

With the Connect America Fund Phase II auction finally completed, this item takes a logical and appropriate step to end legacy frozen support in areas that were subject to winning auction bids. As a strong supporter of a market-oriented, multi-round reverse auction approach to stretch scarce Universal Service dollars, the rules we adopt today will provide needed certainty and clarity in implementing the phasedown of support funding.

While I support the item, we probably could have done more to bring our existing definition of “unsubsidized competitor” in line with the current marketplace for the purposes of maintaining legacy support. Continuing voice legacy support in areas where competitors provide service using another technology seems backwards-looking and troubling given how many Americans still lack access to broadband. I certainly appreciate the Chairman’s willingness to limit this definition so that it only applies within the context of the high-cost program. On a global scale, we must recognize that in the eyes of many consumers, fixed and mobile services of similar functionality can be substitutes for each other and that the Commission should be working to ensure that our rules are technology-neutral.

Separately, while I agree with the item’s decision to decline adopting a new voice support funding mechanism, it doesn’t strike me as particularly fair to maintain price cap carriers’ unfunded mandate with respect to their high-cost and extremely high-cost areas. It is incumbent on us to ensure that price cap carriers’ obligations are not indefinite and that these unfunded areas become subject to auction as soon as possible.

Speaking of future USF auctions, the completion of the CAF II auction and ensuing transition of support is by no means the end of the road in the Commission’s efforts to bring broadband to unserved Americans. Notwithstanding the significant number of locations with winning bids, approximately nine million Americans remain without *any* 10/1 Mbps service, at least according to our latest report.¹ With the culmination of the CAF II Auction, I am eager to finally seek solutions via the long-awaited Remote Areas Fund auction and work with my colleagues to connect those most difficult to serve.

¹ *Communications Marketplace Report et al.*, GN Docket No. 18-23 et al., Report, FCC 18-181, para. 187, Fig. D-3 (2018).

**STATEMENT OF
COMMISSIONER BRENDAN CARR**

Re: *Connect America Fund*, WC Docket No. 10-90

Closing the digital divide—ensuring that every American has access to next-generation broadband and the opportunity it enables—has been this FCC’s top priority. And since early 2017, FCC leadership has been re-orienting our universal service programs to support this important goal. Today’s order represents another step in that process. In it, we move away from legacy approaches to universal service, so we can transition support to the winners of the FCC’s 1.49 billion-dollar CAF II auction—providers that have committed to bringing broadband to more than 700,000 unserved locations within 10 years. In practical terms, today’s vote will help free up funding so more Americans, in more parts of the country, can benefit from new and expanded broadband networks.

In my time on the Commission, I’ve had the chance to get outside of D.C. and meet with the construction crews that are doing the hard work needed to build this next-generation infrastructure. It’s given me a firsthand look at our universal service programs in action.

I’ve met with construction crews in places like Monroe, Nebraska, who were trenching fiber along a 20-mile stretch of State Highway 22. Their efforts will bring faster and more reliable broadband to over 900 rural households in an area with only 8 residents per square mile.

I met Blake in Utqiagvik, Alaska, which is the northernmost community in the country. It’s surrounded by the Arctic Ocean on three sides and 200 miles of tundra to the south. But with support from the FCC’s universal service program, Blake and his crew were busy stringing aerial fiber throughout the community. And Nate showed me the work he’s done to pull fiber through the town’s “utilidors”—which are climate-controlled tunnels located 13 feet beneath the Alaskan permafrost.

And just last week, I was in Sherman, Texas, a rural community about an hour’s drive north of Dallas. That’s where I met Andy and Luis who run C&C Directional Boring. They’re heading up a crew that’s been turning dirt, putting in new conduit, and pulling fiber, so the community can benefit from next-generation broadband infrastructure. They said their crews and services had been in high demand recently with many families and businesses moving into the community, including a new medical park that’s going up right near the deployment site. With the help of this broadband connection, the new facility will bring high-resolution imaging and other medical services to the community.

So I am glad the FCC is focused on making it easier for these crews and many others to bring more broadband to more Americans. I want to thank the staff of the Wireline Competition Bureau for your work on this decision. It has my support.

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL**

Re: *Connect America Fund*, WC Docket No. 10-90

We have broadband deserts in this country. We have places where networks do not reach and where digital opportunity is hard to find. Many of these locations are rural. But not all. The realities of redlining and harsh economics of service have put some populated places out of reach, too.

The unfortunate truth is that the Federal Communications Commission does not know with precision where these broadband deserts are, who is affected, and how well our policies work to bring connectivity to communities that have been left behind. Our broadband maps are woefully inadequate. They overstate coverage in too many areas and understate it in others. Fixing this problem is not for the faint of heart. But we will never manage the problems we do not measure. So I think this agency needs to repair our maps and improve the data we use to make decisions.

This is not the subject of our effort today. But it hovers in the background. Because here we transition universal service funds available for broadband support from existing providers to new winners in the Connect America Fund auction. In practice, we kick off a process that will result in awarding nearly \$1.5 billion over 10 years for broadband efforts in over 700,000 locations. The details are complex, but to the credit of the Wireline Competition Bureau, they are thoughtfully presented. So I support this decision today.

However, going forward we have a challenge. We cannot hand out these billions and just wait for broadband deserts to miraculously support digital life. We need to check. In other words, we need to audit where these dollars go, what commitments were made, and where deployment takes place. We need to map what was spent and where service resulted.

There are too many communities across this country thirsty for better broadband. I am hopeful that with tools like the one we use here, we can address these broadband deserts. But we need to be mindful that we will only do so effectively if we have accurate data that informs our work. And on that score, we have work to do.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *Connect America Fund*, WC Docket No. 10-90

One day, about twelve years ago, I was getting my hair cut in a barbershop in Kansas City. Like barbershops around the country, we were having a spirited discussion, much of it about sports, and much of it about the Kansas City Chiefs. As tends to happen with debates about sports, everyone had strong opinions, but not everyone seemed to be working with the same set of facts. So, as I'm getting up from my seat, I suggested that we all go home, look it up on the internet, and the next time I came in for a cut we'd figure out who was right. The shop got quiet, and then people began looking at me puzzlingly. It soon became very real to me that I was the only person in this barbershop with a broadband connection at home.

That experience crystalized a point that sticks with me to this very day – access to affordable broadband is a necessity. Without it, the unemployed can't find and apply for jobs; students can't complete their homework; and patients can't connect to their doctors or get health care information. Those without access are disadvantaged in countless other ways that add up to living on the outskirts of today's digital society. Ensuring that everyone in America has access to affordable broadband is one of my top priorities.

The Commission's Universal Service Program is one of the primary ways we can help get broadband deployed everywhere. The recently-completed Connect America Fund II auction is an important step in getting broadband deployed where it is needed and I congratulate the auction winners. They stepped up to provide broadband service in areas where others decided not to. They agreed to build out over the upcoming six years until broadband reaches everywhere in their winning areas. I appreciate these commitments. I'll be watching closely, both to celebrate progress and to ensure that buildout commitments are met.

Today's order takes critical steps toward starting to fund auctions winners and ensuring that Universal Service dollars are used efficiently. These steps bring us closer to achieving the goal of closing the digital divide. However, much work remains to be done, both in rural and urban areas. Rural and remote areas of America are some of the costliest to serve and have less service than urban areas. But make no mistake, there are many urban areas that lack the kind of quality and affordable broadband service needed to take part in digital society. I am committed to finding solutions that will bring quality, affordable broadband everywhere in America.

My thanks to the staff of the Wireline Competition Bureau for your tireless efforts and commitment to getting people connected to broadband and for your work on this item.