

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

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
)	
ETC Annual Reports and Certifications)	WC Docket No. 14-58
)	

REPORT AND ORDER AND FURTHER NOTICE OF PROPOSED RULEMAKING

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I. INTRODUCTION

1. Today we take further steps to implement the Connect America Fund to advance the deployment of voice and broadband-capable networks in rural, high-cost areas, including extremely high-cost areas, while ensuring that rural Americans benefit from the historic technology transitions that are transforming our nation's communications services. We finalize decisions to use on a limited scale Connect America funding for rural broadband experiments in price cap areas that will deploy new, robust broadband to consumers. This Report and Order (Order) establishes a budget for these experiments and an objective, clear cut methodology for selecting winning applications, building on the record from the *Tech Transitions FNPRM*.¹ We describe the application process and announce that formal applications must be submitted by 90 days from release of the Order. We will use these rural broadband experiments to explore how to structure the Phase II competitive bidding process in price cap areas and to gather valuable information about interest in deploying next generation networks in high-cost areas. In the Further Notice of Proposed Rulemaking (FNPRM), we seek comment on how best to maximize the reach of our existing Connect America budget and leverage non-Federal funding to extend broadband to as many households as possible when we implement Phase II.

II. BACKGROUND

2. In the *USF/ICC Transformation Order*, the Commission concluded that it would use a competitive bidding mechanism for Phase II of the Connect America Fund to award support in price cap territories in those states where price cap carriers decline to make a state-level commitment in exchange for model-based support.¹ In the January 2014 *Tech Transitions Order*, the Commission adopted an experiment to test how tailored economic incentives can advance the deployment of next generation networks, both wireline and wireless, in rural, high-cost areas, including Tribal lands.²

3. The Commission sought to gain useful information through these experiments to help inform our policy decisions in various pending proceedings. For example, we sought to address the extent of interest among providers in deploying high-capacity fiber-based services that deliver high speeds to rural

¹ See *Technology Transitions et al.*, GN Docket No. 13-5 et al., Order et al., 29 FCC Rcd 1433, 1462-79, paras. 82-136, 1498-1504, paras. 202-23 (2014) (*Tech Transitions Order and/or FNPRM*).

¹ See *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17725, para. 156 (2011) (*USF/ICC Transformation Order and/or FNPRM*), *aff'd sub nom. In re FCC 11-161*, ___ F.3d ___, 2014 WL 2142106 (10th Cir. May 23, 2014).

² *Tech Transitions Order*, 29 FCC Rcd at 1463, para. 83.

communities.³ In particular, we sought to learn whether providers are willing and able to deliver services with performance characteristics well in excess of the minimum standards that price cap carriers accepting model-based support are required to offer to all funded locations, for at most the same amount of support as calculated by the model.⁴ We also sought to develop a greater understanding of the geographic and demographic characteristics of where service providers (both incumbents and non-incumbents) would choose to offer wireless services at prices reasonably comparable to urban wireline offerings.⁵

4. The Commission adopted a framework for experiments to be conducted in price cap territories.⁶ It stated an expectation that the funding to be made available would not exceed the amount of model-calculated support associated with the relevant geographic area.⁷ The Commission sought comment in the *Tech Transitions FNPRM* on the budget, selection criteria, and additional issues relating to implementation of the rural broadband experiments.⁸

5. In the *Tech Transitions Order*, we invited parties to file non-binding expressions of interest regarding the rural broadband experiments, which have informed us as we finalize the details of how to implement these experiments.⁹ As of May 31, 2014, we had received a total of 1,024 expressions of interest from a wide range of entities, collectively requesting \$11 billion in Federal funding.¹⁰ Of these, nearly 60 percent proposed using fiber-to-the-premises (FTTP) to serve all or most of their proposed service areas. Another 30 percent planned on using fixed wireless technologies to serve either the entire proposed service area, or to augment proposed FTTP or mobile networks. The remaining 10 percent planned on using either mobile wireless, or some other type of technology, such as digital subscriber line (DSL), or hybrid fiber coax (HFC). Forty-four percent of the expressions of interest were from entities that self-identified as either incumbent local exchange carriers (LECs) or competitive LECs; 11 percent were electric utilities, 11 percent were wireless Internet service providers (WISPs), and 11 percent were agencies of state, county or local governments. Entities predominantly self-identifying as Internet service providers (ISPs) constituted four percent, cable companies four percent, mobile carriers two percent, and Tribal entities two percent. The remaining 11 percent were various forms of consortia or research and education networks. We appreciate the interest of numerous stakeholders in these experiments, but remind all parties that in order to compete for funding, they must file a formal application as described more fully below.

³ *Id.* at 1466, para. 94.

⁴ *Id.*

⁵ *Id.* at 1466-67, para. 95.

⁶ *Id.* at 1472, para. 111.

⁷ *Id.* at 1473, para. 112.

⁸ *Tech Transitions FNPRM*, 29 FCC Rcd at 1498-1504, paras. 202-23.

⁹ *See Tech Transitions Order*, 29 FCC Rcd at 1470, para. 105.

¹⁰ *See* Federal Communications Commission, *Rural Broadband Experiments* (updated as of Apr. 25, 2014), <http://www.fcc.gov/encyclopedia/rural-broadband-experiments>. A substantial number of the expressions of interest, however, lacked sufficient information to conduct a detailed analysis. For example, 30 percent of the expressions did not indicate the total funding requested, and 50 percent did not indicate the number of homes to be passed.

III. DISCUSSION

6. We explained in the *Tech Transitions Order* that we must “ensure that all Americans benefit from the technology transitions, and that we gain data on the impact of technology transitions in rural areas, including Tribal lands, where residential consumers, small businesses and anchor institutions, including schools, libraries and health care providers, may not have access to advanced broadband services.”¹ In this Order, we adopt certain parameters and requirements for the rural broadband experiments that will assist us with accomplishing these goals. We expect these experiments to provide critical information regarding which and what types of parties are willing to build networks that will deliver services that exceed our current performance standards for an amount of money equal to or less than the support amounts calculated by the adopted Phase II Connect America Cost Model.² In addition to gathering information relevant to broader questions implicated by technology transitions, we expect these experiments also will inform key decisions that we will be making in the coming months regarding the Connect America Fund. The experiments will not delay implementation of Connect America Phase II or further reforms for rate-of-return carriers. We still expect to implement the offer of model-based support to price cap carriers in the coming months, and we will resolve how the Connect America Fund will address the challenges of providing service to the most remote, difficult to serve areas of the country. In addition, in the coming months, we expect to be considering near-term reforms for rate-of-return carriers, based on the record we will shortly receive in response to the recent *Connect America Fund FNPRM*, while we continue to develop a Connect America Fund for those carriers.

7. We adopt a budget of \$100 million for funding experiments in price cap areas focused on bringing robust, scalable broadband networks to residential and small business locations in rural communities that are not served by an unsubsidized competitor that offers voice and Internet access delivering at least 3 Mbps downstream/768 kbps upstream. As explained in detail below, the funding will be available to serve locations in both high-cost and extremely high-cost areas, thereby advancing our implementation of both Phase II and the Remote Areas Fund. We also determine the objective methodology for selecting projects among the applications we receive for the experiments. Given the manner in which we have structured the budget and the selection criteria, we believe that we will be able to fund a range of diverse projects throughout the country. Finally, we outline the conditions that entities participating in the experiments must meet in order to continue to receive such support, including specific eligibility, build-out and accountability requirements, and establish the measures to ensure compliance with these conditions.³

8. In the *Technology Transitions Order*, we noted our desire to work cooperatively with other governmental entities to advance our shared objectives of ensuring access to broadband services. We

¹ *Tech Transitions Order*, 29 FCC Rcd at 1464, para. 87.

² See *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, 28 FCC Rcd 5301 (Wireline Comp. Bur. 2013) (*CAM Platform Order*); *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, 29 FCC Rcd 3964 (Wireline Comp. Bur. 2014) (*CAM Inputs Order*).

³ The Commission’s rules in Part 1, Subpart AA regarding competitive bidding for universal service support generally apply to the rural broadband experiments to the extent they are not modified for these experiments by the *Tech Transitions Order* and this Order. See 47 C.F.R. §§ 1.21000-1.2004; *Tech Transitions Order*, 29 FCC Rcd 1433. In particular, we remind potential participants that they are subject to the Commission’s rules prohibiting certain communications. See 47 C.F.R. § 1.21002.

noted that we were “particularly interested in how States, localities, Tribal governments, and other non-federal governmental bodies can provide assistance, through matching funds, in-kind contributions or other regulatory approvals and permits, to improve the business case for deployment of next generation networks.”⁴ We will be monitoring the progress of the selected projects and hope that they may serve as case studies for best practices in how coordinated governmental action can improve the business case for the delivery of broadband services in rural, high-cost areas. We also seek comment in the attached Further Notice of Proposed Rulemaking regarding measures we could take in the Phase II competitive bidding process to create incentives for state and other governmental entities to contribute funding to support the extension of broadband-capable networks.

A. Budget

9. In the *Tech Transitions FNPRM*, the Commission sought comment on the amount of support it should make available for the rural broadband experiments.⁵ Here, we adopt a budget of \$100 million for funding experiments. The Commission previously authorized two rounds of \$300 million Connect America Phase I funding to quickly bring broadband to unserved communities in price cap territories.⁶ We now conclude it is appropriate to provide another round of funding in price cap territories that will advance our swift implementation of Phase II.

10. We conclude that adopting a budget of \$100 million for these rural broadband experiments will best balance our priorities and policy goals. Specifically, this budget should solicit meaningful interest among a range of entities that will enable us to examine, on a limited scale, key policy questions we identified in the *Tech Transitions Order*.⁷ We intend to test on a limited scale the use of a competitive bidding process to award support to provide robust broadband to serve fixed locations using both wireline and wireless technologies. Although many parties claim that we should maximize the number of experiments that get funding and advocate adoption of a budget that exceeds the \$100 million we adopt today,⁸ we note that the Commission’s goal is not to fund as many experiments as possible, but rather to

⁴ *Tech Transitions Order*, 29 FCC Rcd at 1467, para. 97.

⁵ *Tech Transitions FNPRM*, 29 FCC Rcd at 1499, para. 204.

⁶ See *USF/ICC Transformation Order*, 26 FCC Rcd at 17712-13, para. 128; *Connect America Fund*, WC Docket No. 10-90, Report and Order, 28 FCC Rcd 7766 (2013).

⁷ *Tech Transitions Order*, 29 FCC Rcd at 1466-67, paras. 94-97. See, e.g., Comments of the Fiber to the Home Council Americas, WC Docket No. 10-90, at 3-5 (filed Mar. 31, 2014) (FTTH Council Mar. 31, 2014 Comments); Comments of the United States Telecom Association, WC Docket No. 10-90, at 4 (filed Mar. 31, 2014) (USTelecom Mar. 31, 2014 Comments); Comments of American Cable Association, WC Docket No. 10-90, at 3-4 (filed Mar. 31, 2014) (ACA Mar. 31, 2014 Comments); Comments of CenturyLink, WC Docket No. 10-90, at 4 (filed Mar. 31, 2014) (CenturyLink Mar. 31, 2014 Comments); Comments of ITTA, WC Docket No. 10-90, at 2-4 (filed Mar. 31, 2014) (ITTA Mar. 31, 2014 Comments).

⁸ See, e.g., Comments of the Alaska Rural Coalition, WC Docket No. 10-90, at 7 (filed Mar. 31, 2014) (ARC Mar. 31, 2014 Comments); Comments of ValleyNet, WC Docket No. 10-90, at 1 (filed Mar. 31, 2014); Comments of BARC Electric Cooperative, WC Docket No. 10-90 et al., at 2-3 (filed Mar. 31, 2014) (BARC Mar. 31, 2014 Comments); Comments of Co-Mo Comm, Inc., WC Docket No. 10-90 et al., at 1 (filed Mar. 31, 2014); Comments of Douglas Service, Inc., WC Docket No. 10-90, at 1 (filed Mar. 31, 2014); Reply Comments of Johnson County REMC, WC Docket No. 10-90, at 1 (filed Mar. 31, 2014); Comments of John Staurulakis, Inc., WC Docket No. 10-90 et al., at 2-5 (filed Mar. 31, 2014); Comments of Midwest Energy Cooperative, WC Docket No. 10-90 et al., at 2

advance implementation of the Connect America Fund.⁹ We are mindful of our commitment not to delay the implementation of Phase II.¹⁰ It could be administratively burdensome to oversee the necessary steps to authorize a large number of experiments, which likely would divert Commission resources from resolving broader policy issues regarding implementation of the Connect America Fund in both price cap and rate-of-return areas.¹¹ Instead, our goal is to quickly gather data from submitted formal proposals about various technologies in different geographic areas to inform our judgment as we address important policy issues regarding how to maintain universal access in rural areas during technology transitions.¹² We expect that what we learn from the formal applications and selection process will inform our decisions in the coming months as to how to implement a Phase II competitive bidding mechanism that will maximize the participation of a variety of entities and use targeted funding to expand efficiently the availability of voice and broadband-capable infrastructure.¹³

11. *Source of Funds.* As we proposed in the *Tech Transitions FNPRM*,¹⁴ the funding for the rural broadband experiments will be drawn from the Connect America reserve account, which is projected to have approximately \$220 million in funding as of the third quarter of 2014 that has not already been allocated to a specific program.¹⁵ We find that using the reserve account to fund the experiments will help achieve the goals the Commission set for the Connect America Fund. Not only are the experiments

(filed Mar. 31, 2014); Comments of the Utilities Telecom Council, WC Docket No. 10-90 et al., at 3-4 (filed Mar. 31, 2014) (UTC Mar. 31, 2014 Comments); Comments of the Vermont Telecommunications Authority, WC Docket No. 10-90 et al., at 2 (filed Mar. 31, 2014) (VTA Mar. 31, 2014 Comments); Comments of Lake Region Electric Cooperative, Inc., WC Docket No. 10-90 et al., at 2 (filed Mar. 28, 2014) (LREC Mar. 28, 2014 Comments); Comments of Atlantic Tele-Network, Inc., WC Docket No. 10-90 et al., at 5 (filed Mar. 31, 2014) (Atlantic Tele-Network Mar. 31, 2014 Comments); Comments of the Rural Independent Competitive Alliance, WC Docket No. 10-90 et al., at 6 (filed Mar. 31, 2014); Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90 et al., at 5-6 (filed Mar. 31, 2014).

⁹ See *Tech Transitions Order and FNPRM*, 29 FCC Rcd at 1471, 1499, paras. 109, 204 (stating that the Commission “expect[s] a relatively small number of projects . . . will be selected for funding” and that the Commission does not “envision using all unallocated funds in the broadband reserve for experiments in rural areas, but rather an amount that is sufficient to enable us to award funding to a limited number of projects that enable evaluation” of the policy questions identified by the Commission).

¹⁰ *Tech Transitions Order*, 29 FCC Rcd at 1467, para. 98.

¹¹ See Comments of NTCA—The Rural Broadband Association, The National Exchange Carrier Association, Inc., and the Eastern Rural Telecom Association, WC Docket No. 10-90 et al., at 4 (filed Mar. 31, 2014) (stating “that the experiments must not divert much-needed funds or attention away from expanding broadband access to all Americans in favor of a few, select projects”).

¹² *Tech Transitions Order*, 29 FCC Rcd at 1467, 1471, paras. 98, 109.

¹³ *Id.* at 1473, para. 112.

¹⁴ *Tech Transitions FNPRM*, 29 FCC Rcd at 1498-99, para. 203.

¹⁵ The reserve account has a balance of \$1.76 billion as of the third quarter of 2014, with \$1.54 billion of those funds already allocated to Connect America Phase I, Tribal Mobility Fund Phase I, and Mobility Fund Phase II. Universal Service Administrative Company, Federal Universal Service Support Mechanisms Fund Size Projections for Third Quarter 2014, at 9-11 (May 2, 2014), <http://www.usac.org/about/tools/fcc/filings/2014/Q3/USAC%203Q2014%20Federal%20Universal%20Service%20Mechanism%20Quarterly%20Demand%20Filing.pdf>.

themselves designed to encourage the deployment of robust networks capable of offering voice and broadband services to consumers in high-cost areas, the experiments will also help us design the Phase II competitive bidding process and the Remote Areas Fund to efficiently achieve this goal throughout the country.¹⁶ Using unallocated support from the reserve account will also ensure that we will not increase the size of the Universal Service Fund or Connect America budget, that we will not increase the contribution burden on consumers, and that we will not divert resources from other universal service programs.¹⁷ We will consider appropriate treatment of any unallocated funds in the future.

B. Support Term

12. We conclude that we will focus the experiments on projects seeking 10 years of recurring support, rather than proposals for projects seeking one-time support. In the *Tech Transitions Order*, the Commission set a general framework for rural broadband experiments. The Commission adopted a support term of “up to ten years” and indicated that it would accept proposals for one-time or recurring support.¹⁸ Subsequently, in April, the Commission adopted a support term of 10 years for the competitive bidding process in the *Connect America Fund Order*.¹⁹ One of our primary objectives for these experiments is to learn how to structure a competitive bidding process for recurring support. We therefore conclude that soliciting proposals for projects with the same 10-year term as will be available to bidders in Phase II will best inform us regarding the level of interest among potential providers in the Phase II competitive bidding process.²⁰ Moreover, permitting entities to define the length of their support terms would add to the complexity of administering the experiments.

C. Eligibility

1. Eligible Areas

13. In the *USF/ICC Transformation FNPRM*, we proposed that census blocks should be the minimum geographic areas for which support will be provided through the Phase II competitive bidding process, and sought comment on whether using census tracts, bidder-defined groups, or another approach

¹⁶ See ARC Mar. 31, 2014 Comments at 7 (stating that “[g]iven the strong interest in the program and great need for fiber deployment to reach rural citizens, it makes sense for the Commission to distribute unallocated Connect America funding rather than continuing to hold those funds in reserve”).

¹⁷ Cf. UTC Mar. 31, 2014 Comments at 4 (urging “the Commission to find creative ways to increase the budget for the rural broadband experiments” and citing as an example “draw[ing] funds from other programs within the universal service fund in addition to the Connect America Fund”); VTA Mar. 31, 2014 Comments at 2-3 (suggesting the Commission “draw future recurring support from future Connect America Funds”).

¹⁸ *Tech Transitions Order*, 29 FCC Rcd at 1476, paras. 124-25.

¹⁹ *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order et al., FCC 14-54, paras. 35-36 (rel. June 10, 2014) (*Connect America Fund Order and/or FNPRM*).

²⁰ See *Tech Transitions Order*, 29 FCC Rcd at 1477, para. 126 (concluding “that providing a longer term of support in the experiment could provide us with valuable information regarding how to elicit greater participation in the Connect America Phase II competitive bidding process in price cap territories, which will help ensure that funding is targeted efficiently to expand broadband-capable infrastructure throughout the country”). We disagree with ITTA’s claim “that it makes little sense to distribute the funding on a recurring basis” if we adopt a budget of \$100 million. ITTA Mar. 31, 2014 Comments at 3. We find that gauging competitive interest in how we intend to structure Phase II, even on a smaller scale, will be helpful when making decisions for competitive bidding process.

would best meet the needs of bidders in the competitive bidding process.²¹ A number of commenters expressed a preference for using the same census blocks that are subject to the offer of model-based support for the Phase II competitive bidding process.²² In the *Tech Transitions Order*, we concluded that proposals for rural broadband experiments in price cap territories would be entertained at the census tract level, with funding provided only for locations in eligible census blocks as determined by the Connect America Cost Model.²³ We did so because we were concerned that making larger geographic areas, such as counties, the minimum geographic area for an experimental proposal potentially could deter participation in this experiment from smaller providers.²⁴ Census blocks where the model calculated an average cost that exceeded the likely extremely high-cost threshold were not excluded from eligibility, allowing applicants to submit proposals to serve locations in these areas if they determined it was economically feasible to do so with the assurance of support.²⁵

14. The rural broadband experiments, in addition to providing robust last-mile broadband service to consumers in rural communities, will be used to test a potential competitive bidding process for Phase II, providing us the opportunity to make any adjustments that may be necessary before full-scale implementation in Phase II. Based on our review of the expressions of interest, we now conclude that these objectives will best be realized by accepting rural broadband experiment proposals in price cap areas at both the census tract level and the census block level. We recognize that some parties may be able to submit cost-effective proposals that would encompass all of the eligible census blocks within a

²¹ See *USF/ICC Transformation FNPRM*, 26 FCC Rcd at 18806, para. 1192.

²² See, e.g., Comments of the American Cable Association, WC Docket No. 10-90 et al., at 8 (filed Jan. 18, 2012); Comments of CenturyLink, WC Docket No. 10-90 et al., at 12-13 (filed Jan. 18, 2012) (CenturyLink Jan. 18, 2012 Comments); Comments of CTIA—The Wireless Association, WC Docket No. 10-90 et al., at 13 (filed Jan. 18, 2012); Comments of Frontier Corporation, WC Docket No. 10-90 et al., at 14-15 (filed Jan. 18, 2012) (Frontier Jan. 18, 2012 Comments); Comments of the National Cable and Telecommunications Association, WC Docket No. 10-90 et al., at 12 (filed Jan. 18, 2012).

²³ *Tech Transitions Order*, 29 FCC Rcd at 1472, para. 111. In some limited circumstances, not all of the locations in a census block will be eligible for support because the cost per location has been calculated on a sub-census-block basis. For example, if only part of a block is served by a given price cap carrier, each carrier's total costs and cost per location are calculated independently. Similarly, if a block is served by multiple wire centers, the cost associated with each wire center is calculated separately. Finally, if a block is served by more than one splitter (node2), the cost is calculated separately. This was done to ensure that a block that includes both low-cost and extremely high-cost locations would not be eligible for support if those costs averaged over the entire block fall into the range where Phase II support is calculated. See CostQuest Associates, Inc., Connect America Cost Model: Model Methodology at 16, n.16 (Apr. 11, 2014), http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0417/DOC-326628A1.pdf. The list of eligible census blocks that the Bureau will release will identify the number of locations that are eligible for funding in each census block.

²⁴ *Tech Transitions Order*, 29 FCC Rcd at 1472, para. 111. Incumbent carriers had argued that the minimum geographic unit for competitive bidding should be a county. See Letter from Jonathan Banks, Senior Vice President Law & Policy, USTelecom, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket No. 10-90 et al. (filed Aug. 29, 2013) (submitting a White Paper titled: "Connect America Fund Phase II: A Proposal for a State-and-County-Based Approach to Reverse Auctions for CAF Phase II Support").

²⁵ *Tech Transitions Order*, 29 FCC Rcd at 1472, para. 111.

tract, and we continue to encourage these parties to file such proposals. For entities whose current operations do not allow them to design projects on this scale that make business sense, we waive the requirement to file proposals at the census tract level.²⁶ By accepting proposals at the census block level, we hope to provide greater flexibility to parties and encourage a greater number of entities to participate in the rural broadband experiments. For example, smaller entities may not be able to serve areas as large as census tracts, but would be interested in submitting proposals for smaller neighborhoods that they may already be well positioned to serve. Permitting applicants to aggregate census blocks themselves, rather than having to work within the pre-defined framework of census tracts, will encourage greater participation among these entities. Moreover, this approach provides an opportunity for entities to engage in an incremental expansion into neighboring areas, allowing parties to leverage economies of scale to provide broadband in an efficient manner that benefits consumers. Finally, allowing rural broadband experiment proposals on the census block level will help us determine whether the census block approach that the Commission proposed to use for the Phase II competitive bidding process is administratively feasible and straightforward for both Commission staff and applicants.

15. Proposals must be for census blocks eligible for funding in the rural broadband experiments with a cost per location exceeding the Connect America Phase II funding threshold (\$52.50), but below the extremely high-cost threshold (\$207.81), and not served by an unsubsidized competitor offering voice service and Internet access providing 3 Mbps downstream/768 kbps upstream as identified by the National Broadband Map.²⁷ We require applicants to commit to serving the total number of locations in a given census block. For instance, if a census block has 100 total locations, with 50 of those locations eligible for funding, an entity must commit to serve 100 locations, with the understanding that the support amount determined by the cost model covers only those 50 eligible locations. Entities also may choose to include additional locations in adjacent census blocks where the average cost per location exceeds the extremely high-cost threshold if they determine that it is economically feasible to do so with the support they are requesting for the eligible census block.²⁸

²⁶ We do not require these entities to file an individual petition for waiver to avail themselves of this option; rather, we will automatically consider any proposal that does not propose to serve all of the eligible census blocks in a given census tract.

²⁷ Thus, we will not entertain proposals to serve census blocks that are shown on the most current version of the National Broadband Map (data as of June 2013) as served by cable or fixed wireless providers offering 3 Mbps downstream and 768 kbps upstream. For purposes of Connect America Phase II, the Wireline Competition Bureau has already released a list and also a map detailing the eligible census blocks, with the number of locations eligible for funding in each block. See *Wireline Competition Bureau Commences Connect America Phase II Challenge Process*, WC Docket Nos. 10-90, 14-93, Public Notice, DA 14-942 (Wireline Comp Bur. rel. June 30, 2014); see also Federal Communications Commission, *Connect America Phase II – Initial Eligible Areas Map* (updated July 7, 2014), <http://www.fcc.gov/maps/fcc-connect-america-fund-phase-ii-initial-eligible-areas-map>. We direct the Bureau to release the amount of support determined by the model for each block, as well as a list of extremely high-cost census blocks and Tribal census blocks eligible for the rural broadband experiments and the number of locations in each of those blocks, within 15 days of release of this Order.

²⁸ Thus, for instance, if \$5,000 in Phase II support is available for a particular high-cost census block with 50 eligible locations, while an adjacent extremely high-cost census block contains seven extremely high-cost locations, with five of those locations physically adjacent to the eligible census block, a bidder could bid \$5,000 and commit to serve 55 locations (50 locations in the eligible census block and five out of seven of the locations in the extremely high-cost block). See *infra* para. 36.

16. In the *Tech Transitions FNPRM*, the Commission sought comment on whether to allow applicants to propose to serve partially-served census blocks, which are not eligible for the offer of model-based support to price cap carriers because they are also served by an unsubsidized competitor.²⁹ After reviewing the record, we conclude that the complexity of implementing such an approach would likely delay implementation of the experiments. As NCTA notes, allowing entities to bid on partially-served census blocks would likely substantially increase the challenges of administering the experiments, given the lack of a reliable source of data on broadband availability below the census block level.³⁰ Further, CenturyLink observes that allowing partially-served blocks would require the Commission to adjust model-based support amounts and conduct a challenge process.³¹ Because doing so would add complexity and time, as well as divert Commission attention and resources, we decline to allow applicants to propose to serve partially-served census blocks. Our focus for the experiments at this point is to advance the deployment of next generation networks to areas unserved by an unsubsidized competitor as quickly and efficiently as possible and to understand how the Phase II competitive bidding process should be best fashioned. Allowing applicants to bid on partially-served census blocks would pose a number of administrative burdens on Commission staff, and the potential obstacles to conducting sub-census block challenges for these experiments outweigh the marginal benefits.

17. We also decide that we will accept rural broadband experiment proposals only from entities that seek to provide service in price cap territories.³² Over the coming months, we will be focused on reviewing the record we will shortly receive regarding near term and longer term reforms to develop a Connect America Fund for rate-of-return carriers. We believe it is prudent to focus our efforts on these issues, rather than confronting the many difficult issues associated with the potential implementation of rural broadband experiments in rate-of-return areas.

18. The Commission sought comment in the *Tech Transitions FNPRM* on whether to adjust the offer of support for a Phase II state-level commitment if rural broadband experiment funding is awarded prior to the offer of model-based support to price cap carriers.³³ A number of commenters supported this proposal.³⁴ We adopt this approach, concluding that it furthers our policy of not providing duplicative support in a given area. Specifically, once winning bidders are identified, the Bureau will remove the relevant census blocks from the list of eligible census blocks and make additional census blocks available by raising the extremely high-cost threshold so as to maintain the overall the Phase II budget.³⁵ We also

²⁹ *Tech Transitions Order*, 29 FCC Rcd at 1503, para. 221.

³⁰ Comments of the National Cable and Telecommunications Association, WC Docket No. 10-90 et al., at 4 (filed Mar. 31, 2014) (NCTA Mar. 31, 2014 Comments).

³¹ CenturyLink Mar. 31, 2014 Comments at 8.

³² To the extent that there is a potential mismatch between the study area boundaries used by the cost model to define the price cap carrier portion of a given census block and the actual boundaries, we prohibit any rural broadband experiment winners from building in the portion of the census block that is served by a rate-of-return incumbent; experiment funding is only to be used in price cap territories.

³³ *Tech Transitions FNPRM*, 29 FCC Rcd at 1503-04, para. 223.

³⁴ See, e.g., CenturyLink Mar. 31, 2014 Comments at 9; ITTA Mar. 31, 2014 Comments at 11; USTelecom Mar. 31, 2014 Comments at 11.

³⁵ *Tech Transitions FNPRM*, 29 FCC Rcd at 1503-04, para. 223 n.348.

determine that we will exclude any area funded through the rural broadband experiments from the Phase II competitive bidding process.

19. We conclude that areas served by competitive eligible telecommunications carriers (ETCs) will be eligible for support in the rural broadband experiments. We note that we received a number of expressions of interest from competitive affiliates of rate-of-return carriers operating out of region in price cap territories, and we recognize that these carriers may be interested in submitting rural broadband experiment proposals, alone or in partnership with other entities.³⁶ We are interested in learning the extent of interest among competitive ETCs to provide fixed voice and broadband services to the home with recurring support, using both wireline and wireless technologies.

20. The Commission has concluded that competitive ETCs awarded support through the Phase II competitive bidding process will cease to receive legacy phase-down support for those specific areas upon receiving its Phase II support.³⁷ This rule will apply to participants in the rural broadband experiments, given the rural broadband experiments represent the first step of implementing a competitive bidding process for Phase II support in price cap territories. We believe it is important to implement the measures that the Commission has already adopted for the Phase II competitive bidding process to the extent possible in these experiments.

2. Applicant Eligibility

21. We concluded in the *Tech Transitions Order* that we would encourage participation in the rural broadband experiments from a wide range of entities—including competitive local exchange carriers, electric utilities, fixed and mobile wireless providers, WISPs, State and regional authorities, Tribal governments, and partnerships among interested entities.³⁸ We were encouraged to see the diversity in the expressions of interest submitted by interested parties. Of the more than 1,000 expressions of interest filed, almost half were from entities that are not currently ETCs, including electric utilities, WISPs, and agencies of state, county or local governments.

22. We remind entities that they need not be ETCs at the time they initially submit their formal proposals for funding through the rural broadband experiments, but that they must obtain ETC designation after being identified as winning bidders for the funding award.³⁹ As stated in the *Tech Transitions Order*, we expect entities to confirm their ETC status within 90 days of the public notice announcing the winning bidders selected to receive funding.⁴⁰ Any winning bidder that fails to notify the Bureau that it has obtained ETC designation within the 90 day timeframe will be considered in default and will not be eligible to receive funding for its proposed rural broadband experiment. Any funding that is forfeited in such a manner will not be redistributed to other applicants. We conclude this is necessary so that we can move forward with the experiments in a timely manner. However, a waiver of this

³⁶ See, e.g., Letter from Michael R. Romano, Senior Vice President, NTCA, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket No. 10-90, at 1 (filed July 1, 2014).

³⁷ *Connect America Fund Order*, FCC 14-54, at paras. 53.

³⁸ *Tech Transitions Order*, 29 FCC Rcd at 1474, para. 116.

³⁹ *Id.* at 1474-75, para. 118.

⁴⁰ *Id.* See also *infra* para. 54.

deadline may be appropriate if a winning bidder is able to demonstrate that it has engaged in good faith to obtain ETC designation, but has not received approval within the 90-day timeframe.⁴¹

23. We sought comment in the *Tech Transitions FNPRM* on whether to adopt a presumption that if a state fails to act on an ETC application from a selected participant within a specified period of time, the state lacks jurisdiction over the applicant, and the Commission will address the ETC application.⁴² Multiple commenters supported this proposal.⁴³ We now conclude that, for purposes of this experiment, if after 90 days a state has failed to act on a pending ETC application, an entity may request that the Commission designate it as an ETC, pursuant to section 214(e)(6).⁴⁴ Although we are confident that states share our desire to work cooperatively to advance broadband, and we expect states to expeditiously designate qualified entities that have expressed an interest in providing voice and broadband to consumers in price cap areas within their states, we also recognize the need to adopt measures that will provide a pathway to obtaining ETC designation in situations where there is a lack of action by the state.⁴⁵

3. Three Types of Experiments

24. The \$100 million budget for the rural broadband experiments in price cap territories will be divided into three separate categories: \$75 million for projects meeting very high performance standards; \$15 million for projects meeting specified minimum performance standards that exceed our current standards; and \$10 million for projects dedicated to serving extremely high-cost locations. Below, we outline the performance standards that entities interested in participating in the rural broadband experiments must meet or exceed in order to be considered for funding in each category.

25. We stated in the *Tech Transitions Order* that our focus for the rural broadband experiments was to deploy robust, scalable networks in rural areas not served by an unsubsidized competitor offering voice service and Internet access that delivers 3 Mbps downstream/768 kbps upstream.⁴⁶ To test whether providers are willing and able to deliver services with performance characteristics in excess of the current minimum standards that price cap carriers accepting model-based support are required to offer to all funded locations, we will require all recipients of funding in the rural broadband experiments to offer, at a minimum, at least one standalone broadband service plan more robust than the Commission's current standard of 4 Mbps downstream/1 Mbps upstream to all locations within the selected census blocks, with a specific amount of usage at a price no higher than the reasonable comparability benchmarks for voice service and broadband service,⁴⁷ and that meets defined quality standards. The extent to which parties file formal proposals committing to meet these standards in the rural broadband experiments might provide

⁴¹ See 47 C.F.R. § 1.3. We expect entities selected for funding to submit their ETC applications to the relevant jurisdiction as soon as possible after release of the public notice announcing winning bids, and will presume an entity to have shown good faith if it files its ETC application within 15 days of release of the public notice. A waiver of the 90-day deadline would be appropriate if, for example, if an entity has an ETC application pending with a state, and the state's next meeting at which it would consider the ETC application will occur after the 90-day window.

⁴² *Tech Transitions FNPRM*, 29 FCC Rcd at 1503, para. 222.

⁴³ See, e.g., ACA Mar. 31, 2014 Comments at 9; LREC Mar. 28, 2014 Comments at 5; UTC Mar. 31, 2014 Comments at 9.

⁴⁴ See 47 U.S.C. § 214(e)(6).

⁴⁵ See *Connect America Fund FNPRM*, FCC 14-54, at paras. 182-83.

⁴⁶ *Tech Transitions Order*, 29 FCC Rcd at 1473, para. 113.

information relevant for the decisions we expect to make in the coming months regarding proposals set forth in the *Connect America Fund FNPRM*.

26. Given the number of providers that submitted expressions of interest for projects of significant size to deploy fiber to the premises, and to ensure that our budget permits the selection of several such projects to ensure diversity, we make the largest amount of funding—\$75 million—available for projects seeking to meet very high performance standards. These projects must propose to deploy a network capable of delivering 100 Mbps downstream/25 Mbps upstream, while offering at least one service plan that provides 25 Mbps downstream/5 Mbps upstream to all locations within the selected census blocks.⁴⁸ Recipients must provide usage and pricing that is reasonably comparable to usage and pricing available for comparable wireline offerings (i.e., those with similar speeds) in urban areas, and latency no greater than 100 milliseconds (ms).

27. We will make \$15 million available for projects where the provider would offer at least one service plan that provides 10 Mbps downstream/1 Mbps upstream to all locations within the selected census blocks. This service plan also must offer at least a 100 GB usage allowance, no more than 100 ms of latency, and meet the reasonable comparability benchmarks for the pricing of voice and broadband.

28. We also are interested in learning more about the extent of provider interest in serving extremely high-cost census blocks, as defined by the Connect America Cost Model. We will make \$10 million available for projects exclusively in such areas that propose to offer services delivering 10 Mbps downstream/1 Mbps upstream, with 100 GB of usage and a price that meets our reasonable comparability benchmarks. Projects seeking funding in this category must propose to serve all the locations within the extremely high-cost block or blocks on which the applicant bids.⁴⁹ These projects also must propose to serve only extremely high-cost census blocks; a project will not become eligible for this category if it proposes to serve one extremely high-cost census block as part of a larger project to serve other eligible census blocks. We expect to receive a number of creative proposals that will inform us as to the types of

⁴⁷ *Connect America Fund FNPRM*, FCC 14-54, at paras. 138-152. The current reasonable comparability benchmark for standalone fixed voice services is \$46.96. See *Wireline Competition Bureau Announces Results of Urban Rate Survey for Voice Services; Seeks Comment on Petition for Extension of Time to Comply with New Rate Floor*, WC Docket No. 10-90, Public Notice, DA 14-384 (Wireline Comp. Bur. rel. Mar. 20, 2014). The Bureau has proposed a methodology for a reasonable comparability benchmark for standalone fixed broadband services that deliver 10 Mbps downstream/1 Mbps upstream at a price ranging from \$74.63 to \$77.99, depending on usage. Under an alternative approach, the benchmark for standalone broadband services delivering 10 Mbps/1 Mbps, irrespective of usage, would be \$84.15. See *Wireline Competition Bureau Announces Posting of Broadband Data from Urban Rate Survey and Seeks Comment on Calculation of Reasonable Comparability Benchmark for Broadband Services*, WC Docket No. 10-90, Public Notice, DA 14-944 (Wireline Comp. Bur. rel. June 30, 2014). The Bureau expects to adopt the reasonable comparability benchmark for fixed broadband services in the coming months; for purposes of the rural broadband experiments, we establish an interim presumption for 10 Mbps downstream/1 Mbps upstream service that an entity can charge no more than \$85 for fixed broadband service, pending adoption of a final benchmark. We expect that usage would be available in both peak and non-peak hours. Participants in Phase II are free to offer bundled service offerings in addition to the required standalone offerings.

⁴⁸ If an entity determines it is economically feasible for it to serve locations in extremely high-cost census blocks in addition to locations in funded census blocks, it will be subject to the same service requirements in those extremely high-cost census blocks. See *infra* para. 36.

⁴⁹ For purposes of the rural broadband experiments, only census blocks where all price cap locations are extremely high-cost will be eligible in this third category.

technologies that entities can most efficiently deploy to serve extremely high-cost areas, while still meeting the proposed minimum performance standards. For example, we hope to learn more about interest in the deployment of various fixed wireless solutions, including broadband services using TV white space and/or hybrid solutions that combine fiber and fixed wireless technologies to offer broadband services in extremely high-cost areas.

29. Satellite providers that are interested in serving extremely high-cost locations may submit proposals for participation in the rural broadband experiments. We recognize, however, that these providers may not be able to satisfy the 100 ms latency standard that we establish for the other two groups. Therefore, we will use other metrics for voice quality in the context of these experiments. Specifically, any winning satellite provider may satisfy our requirements for quality of voice service by demonstrating it can provide voice service that meets a Mean Opinion Score (MOS) of four or greater.

D. Selection Methodology and Bidding Process

1. Selection Criteria

30. In the *Tech Transitions NPRM*, the Commission sought comment on four types of selection criterion for the rural broadband experiments and proposed that cost-effectiveness should be the primary criteria in evaluating which applications to select.⁵⁰ The Commission noted that one potential measure of cost-effectiveness is whether the applicant proposes to serve an area for an amount less than model-based support.

31. Based on further consideration and our review of the record, we conclude that we should select winning bidders based on objective measures of cost-effectiveness, rather than using a more complicated scheme of weighting or scoring applications on multiple dimensions. Because we have structured our selection process to choose experiments from three separate categories, we expect to select a diversity of projects in terms of geography and technologies. Recognizing unique challenges in serving Tribal lands, we provide a bidding credit for entities that propose projects that will serve only Tribal census blocks, which will have the effect of making such projects more cost-effective relative to proposals from other entities. Rather than using subjective criteria to evaluate the financial and technical qualifications of each applicant before selection, we require selected applicants to submit additional information demonstrating that they have the technical and financial qualifications to successfully complete their proposed projects within the required timeframes.

32. We conclude that we should use cost-effectiveness to select applications, and we will calculate this measure in two ways for different categories of applications. As detailed below, for those applications proposing to serve census blocks identified by the Connect America Cost Model as eligible for Phase II support, we will compare requested amounts to model-based support amounts. For applications proposing to serve only census blocks the model identifies as “extremely high-cost,” for which there is no model-determined level of support, we will select applications based on the lowest-cost per location.⁵¹ We find that using these objective, straightforward, and easily measurable criteria will best meet our goals to efficiently distribute support in these experiments and to test on a limited scale a competitive bidding process that can be implemented quickly to inform our decisions regarding how to

⁵⁰ *Tech Transitions FNPRM*, 29 FCC Rcd at 1501, paras. 213-16.

⁵¹ As discussed below, proposals in categories one and two may include locations in census blocks with costs above the extremely high-cost threshold, although no additional support would be provided to serve these locations. See *infra* para. 36.

design the Phase II competitive bidding mechanism. We sought comment in the *Tech Transitions FNPRM* on ways to leverage non-Federal governmental sources of funding, but the record was insufficient for us to determine how best to implement measures that would create incentives for non-Federal governmental entities to assist in advancing universal service. We seek more focused comment in the attached FNPRM on the use of bidding credits in the Phase II competitive bidding process that will occur after the offer of model-based support to price cap carriers.

33. Many commenters agree that cost-effectiveness should be the primary, or even only, criterion in evaluating which applications to select, although some commenters advocate for an approach that would select winning bidders based on the lowest cost per location without comparison to model-based support.⁵² We conclude that we should use cost-effectiveness – defined as requested dollars per location divided by model-based support per location – to select applications in categories one and two. We recognize that we could potentially extend the availability of broadband-capable networks to more locations if we were to use only lowest-cost per location to select projects in all three groups. In addition to using our limited budget for these rural broadband experiments efficiently, however, we also hope to select projects in a variety of geographic areas. Using lowest-cost alone would likely result in selecting proposals for experiments with similar cost characteristics – specifically, those areas that just barely meet the threshold for being “high-cost.” By selecting winning bidders based on the ratio of requested support to support calculated by the cost model, we expect to award funding to projects in areas with varying cost profiles, with greater geographic diversity, which will be informative to our consideration of the impact of technology transitions in different parts of the country. Moreover, comparing the amounts bid to the model-determined support will enable us to test the use of the cost model for purposes of setting reserve prices for future implementation of the Phase II competitive bidding process.

34. Some commenters suggest that we should measure cost-effectiveness in relation to broadband speeds.⁵³ We conclude that the approach we adopt today, however – setting aside the largest portion of our budget for those projects proposing to meet very high performance standards – is a more straightforward method of encouraging the deployment of robust, scalable networks in areas that would be eligible for Phase II support and testing the extent of interest in deploying such networks in these areas. Directly including robustness as a selection criterion would increase the complexity of the competitive bidding process by requiring the Commission to determine how much of a bidding credit should be provided for proposals offering service at different speeds.

35. For purposes of evaluating cost-effectiveness in comparison to the model, among applicants in each of the first two experiment categories, we will calculate the ratio of requested support per location to model-based support per location in the census blocks the applicant proposes to serve. First, we will divide the total amount of support requested for each proposal by ten so we can compare proposals to annual model-based support amounts. Then we will calculate each proposal’s requested support per

⁵² See, e.g., USTelecom Mar. 31, 2014 Comments at 4-5 (arguing that rural broadband experiments should be evaluated solely on cost-effectiveness); Comments of the Competitive Carriers Association, WC Docket No. 10-90, at 7 (filed Mar. 31, 2014) (agreeing that cost-effectiveness should be primary); Atlantic Tele-Network Mar. 31, 2014 Comments at 3; FTTH Council Americas Mar. 31, 2014 Comments at 5; Comments of SPITwSPOTS, Inc, WC Docket No. 10-90, at 4 (filed Mar. 31, 2014); NCTA Mar. 31, 2014 Comments at 8-9.

⁵³ See, e.g., BARC Mar. 31, 2014 Comments at 3; LREC Mar. 28, 2014 Comments at 3; UTC Mar. 31, 2014 Comments at 5-6.

location and divide that number by the model-based support per location.⁵⁴ Using these ratios, we will rank the proposals from the lowest to highest in each category — where the lowest ratio indicates the greatest cost-effectiveness — and select those projects with the lowest ratio within the \$75 million budget for the first category of projects, and within the \$15 million budget for the second category of projects.⁵⁵

36. As discussed above, support recipients are required to offer the requisite service to the total number of locations in the census blocks that they propose to serve, but may choose to add some locations in adjacent census blocks with costs above the extremely high-cost threshold. We anticipate that there may be areas in which a provider can cost-effectively provide service in extremely high-cost census blocks that are adjacent to funded census blocks. To encourage entities to do so, we will permit applicants that commit to serve locations in extremely high-cost census blocks (which receive no model-based support) to add these locations to the calculation of their requested support per location for the project.⁵⁶ The effect of including these extremely high-cost locations would be to lower the support per location of the project and improve the overall cost-effectiveness.⁵⁷

37. For purposes of evaluating proposals in category three, we will calculate the cost per location, and rank these applications on a dollar requested per location basis, from lowest to highest. We will select projects based on the lowest cost per location, until the budget is exhausted.⁵⁸ Parties that submit proposals for both category one or two along with a proposal for category three may identify their category three proposal as contingent on their being a winning bidder for a category one or two proposal. In that case, a party that would otherwise be selected in category three based on its cost-effectiveness score, but that fails to win for a category one or two proposal, would not win; instead, the next most cost-effective proposal in category three would be selected.

38. No census block will receive support from more than one proposal. Accordingly, once a proposal has been selected, any other proposals that would cover any of the census blocks in the selected proposals will no longer be eligible. We do not anticipate that our evaluation criteria will result in ties

⁵⁴ Each proposal's requested support per location will be determined by dividing the total request support by the number of funded locations the entity proposes to serve, even if the proposal includes census blocks where the total number of locations is greater than the number of funded locations. *See supra* para. 14.

⁵⁵ In the event we do not exhaust the entire \$75 million budget for the first category due to per project or per entity funding limits, or insufficient amounts remaining in the budget to fund the next ranked project, we will not roll over any unused funds to the second category. Similarly, we will not roll over any unused funding in the second category to the third category.

⁵⁶ *See supra* n.60 (limiting eligibility of extremely high-cost census blocks to those blocks where all locations are extremely high-cost).

⁵⁷ The cost per location will be lower if the project's cost does not increase significantly to serve those locations over the extremely high-cost threshold, and the requested support per location will be lower as well. For example, assume the cost model estimates the annual support available to serve 100 funded locations is \$10,000, i.e., \$100 per location per year. Bidder A proposes serving those 100 funded locations for \$9,000, or \$90 per location. This scores a 0.9 ($=\$90/\100). Bidder B also proposes to serve the 100 funded locations but additionally will serve 10 extremely high-cost locations in an adjacent census block. Bidder B requests \$9,000 to serve these 110 locations, resulting in \$80.18 per location, for a score of 0.818 ($=\$80.18/\100).

⁵⁸ The Commission sought comment on whether to limit the support available in areas where the average cost per location is higher than the extremely-high-cost threshold to the amount per location equal to that the extremely high-cost threshold. *Tech Transitions NPRM*, 29 FCC Rcd at 1502, para. 220. While we decline to adopt a hard cap for purposes of these experiments, we reserve the right not to select any projects that significantly exceed that threshold.

among winners, but if two or more applications result in identical rankings of cost-effectiveness, we will select the project that proposes to serve the most locations if the budget would not permit funding all the tied proposals. If more than one tied proposal includes the same census block, we would select the project that proposes to serve the most locations. In the unlikely event that tied and overlapping proposals serve the identical number of locations, we will select the supported project randomly.

2. Measures to Ensure Diversity of Projects

39. Given our interest in testing how a variety of entities use Connect America funds in various geographic locations, and deploy different types of technologies, we find that it will be advantageous to award support to a diverse group of projects within the \$100 million budget.⁵⁹ Below, we adopt certain measures that aim to ensure that the projects funded through the rural broadband experiments bring robust broadband networks to the widest range of price cap areas possible.

40. *Funding Limits.* There has been a wide variety in the funding amounts requested by interested entities.⁶⁰ To preclude one entity or one project from exhausting the entire budget, we place limits on the amount of funding that each project and each entity can receive. With these limits, we balance our interest in permitting multiple projects and entities to receive funding, with our interest in learning from projects that request varying levels of support. By adopting these per project and per entity limits and deciding to award support based on cost-effectiveness compared to the model determined support, we expect that the projects that ultimately win support will be geographically diverse.

41. First, we adopt project limits for each experiment category we adopt above to ensure that we award support to multiple projects within each category. We place a limit of \$20 million per project for those projects submitted to the very high performance standards category, a limit of \$7.5 million per project for those projects submitted to the minimum performance standards category, and a limit of \$5 million per project for those projects submitted to the extremely high-cost areas category. We choose these numbers to ensure that we are able to select at least two projects in each category, to provide greater diversity.

42. Second, we adopt an overall limit of \$20 million per entity, including its affiliates.⁶¹ Each entity and its affiliates will be precluded from being awarded more than \$20 million in support across all

⁵⁹ See ACA Mar. 31, 2014 Comments, at 3-4 (suggesting that 25 experiments would be reasonable to administer and “determine the value of new deployment models for robust, scalable broadband networks”); FTTH Council Mar. 31, 2014 Comments, at 4-5 (suggesting that 20 to 30 experiments are “reasonable to administer and will provide a sufficient sample size to test a wide array of business models in areas reflecting a real diversity of geographic and demographic characteristics”).

⁶⁰ See Federal Communications Commission, *Rural Broadband Experiments* (updated as of Apr. 25, 2014), <http://www.fcc.gov/encyclopedia/rural-broadband-experiments>.

⁶¹ An affiliate is defined as a person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with, another person. The term “own” means to own an equity interest (or the equivalent thereof) of more than 10 percent. Person is defined to include an individual, partnership, association, joint-stock company, trust, or corporation. 47 U.S.C. §§ 153(2), (39).

three experiment categories.⁶² This limit also applies in situations where an entity is in more than one consortium.⁶³

43. *Service to Tribal Lands.* In the *Tech Transitions FNPRM*, we sought comment on including as a selection criterion whether applicants propose to offer high-capacity connectivity to Tribal lands.⁶⁴ Rather than a separate selection criterion that we would have to measure against cost-effectiveness, we now conclude that using a bidding credit is more consistent with the type of objective selection criteria we are adopting for the experiments and the Commission's precedent.⁶⁵ This is consistent with our *Connect America Fund FNPRM*, which sought comment on using bidding credits for service to Tribal lands.⁶⁶

44. For the purposes of the rural broadband experiments, we adopt a 25-percent credit for those seeking support for proposed experiments that serve only Tribal census blocks. The credit will effectively reduce the bid amount of qualifying experiments by 25 percent for purpose of comparing it to other bids, thus increasing the likelihood that experiments serving Tribal blocks will receive funding. This credit will be available with respect to eligible census blocks located within the geographic area defined by the boundaries of the Tribal land. As noted above, we direct the Bureau to release the list of census blocks that will be eligible for this credit in the rural broadband experiments within 15 days of releasing this Order.⁶⁷ Because we are focused on swiftly implementing these experiments, we will not entertain any proposals to modify this list.

3. Mechanics of the Bidding Process

45. To participate in the rural broadband experiments, entities must submit a formal application to the Commission.⁶⁸ The formal application must be submitted no later than 90 days from the release of the Order.⁶⁹ As part of this formal application, entities will be required to submit confidential bids requesting a certain amount of support to serve specified census blocks. Additionally, entities will be required to provide information regarding any agreements or joint bidding arrangements with other

⁶² For example, if an entity is awarded \$18 million in the very high performance standards category, that entity and any of its affiliates would be precluded from winning support for another project that exceeds \$2 million, regardless of whether the second project was also submitted in the very high performance standards category, or was submitted in category two or three.

⁶³ For example, if an entity that is part of consortium A wins \$15 million in support for its project because it is one of the most cost-effective projects, and that entity is also part of consortium B (with an entirely different group of entities than consortium A) that submitted a less cost-effective project that requests \$10 million in support, consortium B would be precluded from winning because otherwise the entity that is in both consortia would exceed the \$20 million limit.

⁶⁴ *Tech Transitions FNPRM*, 29 FCC Rcd at 1501, para. 216.

⁶⁵ See *USF/ICC Transformation Order*, 26 FCC Rcd at 17807, para. 430; *Tribal Mobility Fund Phase I Auction Rescheduled for Dec. 19, 2013; Notice and Filing Requirements and Other Procedures for Auction 902*, AU Docket No. 13-53, Public Notice, 28 FCC Rcd at 11628, 11664, paras. 115-19 (Wireless Tel. Bur. and Wireline Comp. Bur. 2013) (*Tribal Mobility Fund Phase I Auction Procedures Public Notice*).

⁶⁶ *Connect America Fund FNPRM*, FCC 14-54, at para. 232.

⁶⁷ See *supra* note 38.

⁶⁸ We expect the Wireline Competition Bureau will implement a process for electronic submission of the formal applications similar to what was used for the Mobility Fund auctions.

parties, disclose any ownership interests in or by Commission-regulated companies, declare whether their project will serve only Tribal census blocks, submit a proposal containing basic information that would be informative to the general public and will be released publicly only if they win support, and certify that they meet certain threshold requirements, including being in compliance with all the statutory and regulatory requirements and being financially and technically capable of meeting the required public interest obligations in each area they seek support.⁷⁰

46. We require all entities submitting proposals to utilize a FCC Registration Number (FRN) to ensure that each application has a unique identifier. Any entity that currently does not have a FRN must first register with the Commission's "Commission Registration System" (CORES), upon which it will be assigned a FRN. In the case of multiple entities forming a partnership to submit a single bid, we require only one entity in the partnership to be registered with a FRN.

47. Entities must specify the type of project for which they are submitting a proposal (i.e., very high performance, minimum performance, or extremely high-cost). Entities may choose to submit multiple proposals in the same category, as well as different proposals in multiple categories. However, in determining who is the winning bidder for funding in each category, proposals will only be compared to proposals in the same category, i.e., a proposal to serve census blocks with very high performance service will only be compared against other proposals in that category if the applicant chose not to submit the proposal in another category. Proposals that do not meet the criteria for selection in one category will not be automatically considered in another group. For example, if an entity proposes to serve certain census blocks with very high performance service, but is not a winning bidder for funding in that category, that project will not be considered for funding in the minimum performance category, even if it might be a winning bidder for that category.

48. Entities must provide the census block IDs for each census block they propose to serve, the number of eligible locations determined by the model in each of those blocks, and the total amount of support they request.⁷¹ We note that, even if an entity is proposing to serve the entire census tract, it must list the IDs of all the census blocks within that tract. As noted above, the Bureau will release the list of eligible census blocks, the associated number of locations eligible for funding in each block, and the associated amount of support by block. The amount of funding made available for any experiment will not exceed the amount of model-calculated support for the given geographic area.⁷² Applications with a

⁶⁹ The contents of the formal application are subject to approval by the Office of Management and Budget under the Paperwork Reduction Act (PRA). We delegate authority to the Bureau to adjust this deadline as necessary to be consistent with the timing of PRA requirements.

⁷⁰ Any entity proposing to serve Tribal land areas must demonstrate they have meaningfully engaged the Tribal government(s) in the areas they plan to serve. See, e.g., *USF/ICC Transformation Order*, 26 FCC Rcd at 17822-24, 17858, 17868-69, at paras. 489-92, 604, 636-37 (adopting and describing the Tribal Engagement Obligation).

⁷¹ As discussed above, entities may include in their proposals locations within extremely high-cost census blocks if they determine it is economically feasible to serve these locations with the amount of support requested. See *supra* para. 36. These entities must also include the census block IDs of those extremely high-cost census blocks, as well as the number of locations they are proposing to serve. We remind entities that the support requested must not exceed the model-determined support for the funded census blocks they are also proposing to serve, even if they choose to serve locations in extremely high-cost census blocks.

⁷² *Tech Transitions FNPRM*, 29 FCC Rcd at 1502, para. 220.

total request for funding that exceeds the model-based support calculation will not be considered. Therefore, we expect entities to consult the list released by the Bureau to ensure that bids on any group of census blocks do not exceed the amount of support calculated by the model to serve those census blocks.

49. The formal proposal should include background information on the applicant and its qualifications to provide voice and broadband service; a description of the proposed project, service area, planned voice and broadband service offerings, and technology to be used; and the number of locations, including community anchor institutions, within the project area.⁷³ As we noted in the *Tech Transitions Order*, rural areas are home to a higher proportion of low-income Americans.⁷⁴ We seek to learn how providers intend to serve low-income consumers if they receive rural broadband experiment support. Thus, the formal proposal should include a description of what Lifeline services the applicant intends to offer if awarded support,⁷⁵ whether it will have a broadband offering for low-income consumers,⁷⁶ and whether it will permit qualifying consumers to apply the Lifeline discount to bundled voice and data services.⁷⁷

50. The information in the formal proposal will not be used to select winning bidders; as discussed above, winning bidders will be selected solely on their numerical score. All bids for the rural broadband experiments will be considered confidential, and bidders should not disclose their bids to other bidders. However, once the Bureau has issued a public notice listing the winning bidders, the winning bidders' proposals will be released to the public. We conclude that making the winning bidders' proposals public will provide an increased level of transparency and enable parties outside the process to hold winning bidders publicly accountable for not fulfilling the requirements of the experiments. However, all other proposals will remain confidential, pending the completion of the Phase II competitive bidding process, in order to prevent these proposals from affecting a potential bidder's behavior in the Phase II competitive bidding process.

4. Post-Selection Review

51. The Wireline Competition Bureau (Bureau) will issue a public notice identifying the winning bidders, as specified above, that may be authorized to receive support and the list of census blocks included in their proposed projects, which are presumptively unserved by an unsubsidized competitor. As

⁷³ In the *Connect America Fund FNPRM*, we sought comment on whether we should exclude from the offer of model-based support areas in which we receive well-developed formal proposals. *Connect America Fund FNPRM*, FCC 14-54, at paras. 220-23. We do not prejudge here whether we may adopt such an approach.

⁷⁴ *Tech Transitions Order*, 29 FCC Rcd at 1464, para. 88.

⁷⁵ We note that all ETCs are required to offer Lifeline services to qualifying low income consumers throughout their designated service areas. 47 C.F.R. § 54.405.

⁷⁶ In the *Tech Transitions FNPRM*, we sought comment on requiring recipients of the rural broadband experiments to offer discounted broadband services to low-income customers. *Tech Transitions FNPRM*, 29 FCC Rcd at 1503, para. 222. Recipients of support should offer a discounted broadband plan to low-income households, but we decline to mandate specific requirements for such plans. Rather, the experiments will be an additional learning opportunity to gather more information about the types of low-cost broadband offerings that providers receiving support to extend broadband are willing to offer to low-income households.

⁷⁷ See 47 C.F.R. 54.401(b) (permitting ETCs to allow qualifying consumers to apply the Lifeline discount to voice and data bundles).

the Commission determined in the *Tech Transitions Order*, the Bureau then will conduct a challenge process similar to the process it used for determining eligible areas for model-based support.⁷⁸ To the extent that a challenge is granted in whole or in part, funding for those locations will be adjusted proportionately.⁷⁹

52. *Technical and Financial Review.* The Bureau will determine whether each selected applicant has demonstrated that it has the technical and financial qualifications to successfully complete the proposed project within the required timeframes and is in compliance with all statutory and regulatory requirements for the universal service support that the applicant seeks. Commission staff will perform a review to ensure that the selected applicants meet our expectations for technical and financial capability to conduct an experiment before any support is provided.

53. The Commission has recognized network security as an imperative in technology transitions.⁸⁰ For broadband networks across the nation to be considered advanced, robust, and scalable, they must also be secure and resilient in the face of rapidly evolving cybersecurity threats. Here, we seek to promote the sustainability of rural broadband through early planning to incorporate effective cybersecurity risk management measures. We commit to support entities selected for these rural broadband experiments with training resources and guidance to that end. Incorporating adequate security early in the design and throughout the deployment of broadband networks is more effective than addressing security problems retrospectively, and ultimately lowers costs by hardening networks against preventable outages and catastrophic failures that could threaten the viability of smaller and/or new market entrants in rural broadband.⁸¹ Small providers in diverse service areas play a key role because any point of weakness in today's interconnected broadband ecosystem may introduce risk into the entire network of interconnected service providers. Security improvements reduce risk to all interconnected service providers, their customers and the nation as a whole. The support that the Commission commits in this Order to provide to selected applicants is limited to sharing information and resources regarding cybersecurity risk management measures that the selected applicants may find beneficial as they plan their deployments. No applicant will be required to make changes to its network design or infrastructure based on such measures, nor will any applicant be rejected for not addressing cyber risk management best practices in its proposal. The Commission's engagement with selected entities should help inform CSRIC's ongoing efforts to remove cybersecurity barriers for small companies competing in the

⁷⁸ See *Tech Transitions Order*, 29 FCC Rcd at 1473, para. 113. The Commission reasoned that it would not be efficient to conduct a challenge to the eligibility of census blocks within a census tract when formal proposals are initially, which could place a burden on outside parties and Commission staff. *Id.*

⁷⁹ For example, if a challenger establishes that one census block in a project actually is served and that census block would be eligible for one tenth of the total model-based support for the proposed areas, the requested support would be reduced by one tenth.

⁸⁰ See *Tech Transitions Order*, 29 FCC Rcd at 1448, para. 43 (observing that “[n]etwork security must be maintained in experiments and as technologies evolve”).

⁸¹ The Commission has a history of working collaboratively with providers of all sizes to encourage the development and implication of sound cybersecurity practices, most notably through multi-stakeholder bodies such as the Communications Security, Reliability and Interoperability Council (CSRIC) and the Technological Advisory Council (TAC), and also was a key participant in the development of the Framework for Improving Critical Infrastructure Cybersecurity related by the National Institute of Standards and Technology in February 2014.

broadband services market, but the Commission will not share any applicant's proprietary or sensitive information related to cybersecurity, or any cybersecurity information that would identify the applicant, with CSRIC or other companies or government agencies.⁸²

54. Within 10 business days of public notice of winning bidders, we require all winning bidders to provide the most recent three consecutive years of audited financial statements, including balance sheets, net income, and cash flow, and to submit a description of the technology and system design used to deliver voice and broadband service, including a network diagram, which must be certified by a professional engineer. Winning bidders proposing to use wireless technologies also must provide a description of spectrum access in the areas for which the applicant seeks support. Within 60 days of public notice of winning bidders, we require all winning bidders to submit a letter from an acceptable bank committing to issue an irrevocable stand-by original letter of credit (LOC) to that entity.⁸³ Finally, each selected applicant is required to provide within 90 days of public notice of winning bidders appropriate documentation of its ETC designation in all the areas for which it will receive support and certify that the information submitted is accurate.⁸⁴ Once the Bureau has determined that the entity is financially and technically qualified to receive experiment support and that the LOC commitment letter is sufficient, it will release a public notice stating that the entity is ready to be authorized for support. Within 10 business days of this public notice, we require that the winning bidder submit an irrevocable stand-by original LOC that has been issued and signed by the issuing bank along with the opinion letter from legal counsel that we describe below. Once the Universal Service Administrative Company (USAC) has verified the sufficiency of the LOC and the opinion letter, the Bureau will issue a public notice authorizing the entity to receive its first disbursement.

55. *Requirements for Letters of Credit.* We require a winning bidder to secure an irrevocable stand-by original LOC for its winning project before support will be disbursed.⁸⁵ Our decision to require entities to obtain a LOC is consistent with the requirements we have adopted for other competitive bidding processes we have conducted to distribute Connect America funds, where both existing providers and new entrants were required to obtain LOCs.⁸⁶ The LOC must be issued in substantially the same form as set forth in the model LOC provided in Appendix A of this Order, by a bank that is acceptable to the

⁸² This would not preclude the Commission from sharing information, however, as required for law enforcement or national security purposes or otherwise required by Federal law.

⁸³ The commitment letter will at a minimum provide the dollar amount of the LOC and the issuing bank's agreement to follow the terms and conditions of the Commission's model LOC, found in Appendix A. The requirements that a bank must meet to be deemed acceptable are described below.

⁸⁴ As discussed above, a winning bidder may file a petition for waiver for this 90-day deadline pursuant to section 1.3 of the Commission's rules if it believes that it will be unable to obtain an ETC designation within this 90-day timeframe due to circumstances outside its control. *See supra* Section III.C.2. *See also* 47 C.F.R. § 1.3. We delegate authority to the Wireline Competition Bureau to act on any such waivers.

⁸⁵ The Commission sought comment on requiring all recipients of Connect America Fund support to post financial security as a condition of receiving support from the Fund, specifically an irrevocable stand-by LOC. *USF/ICC Transformation Order*, 26 FCC Rcd at 18066-68, paras. 1103-16.

⁸⁶ *See USF/ICC Transformation Order*, 26 FCC Rcd at 17810-12, paras. 444-51; *Tribal Mobility Fund Phase I Auction Procedures Public Notice*, 28 FCC Rcd at 11680, para. 187.

Commission.⁸⁷ As explained below, if an entity fails to meet the terms and conditions of the rural broadband experiments after it begins receiving support, including the build-out milestones and performance obligations we adopt in this Order, and fails to cure within the requisite time period,⁸⁸ the Bureau will issue a letter evidencing the failure and declaring a default, which letter, when attached by USAC to a LOC draw certificate, shall be sufficient for a draw on the LOC to recover all support that has been disbursed to the entity.⁸⁹ Once the recipient's support term has ended, the LOC must remain open and renewed to secure the amount of support disbursed for 120 days to allow time to validate that the rural broadband experiment recipients have met the experiment's public service obligations and build-out milestones.

56. As the Commission found when it established Mobility Fund Phase I,⁹⁰ LOCs are an effective means of securing our financial commitment to provide Connect America support. LOCs permit the Commission to protect the integrity of universal service funds that have been disbursed and immediately reclaim support that has been provided in the event that the recipient is not using those funds in accordance with the Commission's rules and requirements to further the objectives of universal service. Moreover, LOCs have the added advantage of minimizing the possibility that the support becomes property of a recipient's bankruptcy estate for an extended period of time, thereby preventing the funds from being used promptly to accomplish our goals.⁹¹ These concerns are relevant to both new entrants and established providers.

57. While our existing accountability measures help ensure that Connect America funds are being used to deploy or sustain broadband and voice-capable networks,⁹² we conclude that additional measures

⁸⁷ See *infra* Appendix A. The rules we adopt today provide specific requirements for a bank to be acceptable to the Commission to issue the LOC. Those requirements vary for U.S. banks and non-U.S. banks.

⁸⁸ See *infra* Sections III.E.1. See also *supra* Section III.C.3;

⁸⁹ See *infra* Section III.F. While such letter may not foreclose an appeal or challenge by the recipient, it will not prevent a draw on the LOC.

⁹⁰ *USF/ICC Transformation Order*, 26 FCC Rcd at 17810-12, para. 444-51.

⁹¹ As the Commission noted in the *USF/ICC Transformation Order*, in a proper draw upon a LOC, the issuer honors a draft under the LOC from its own assets and not from the assets of the debtor who caused the LOC to be issued. Thus, absent extreme circumstances such as fraud, neither the LOC nor the funds drawn down under it are subject to the automatic stay provided by the Bankruptcy Code. See *id.* at 17812, para. 450 (citing 11 U.S.C. § 541 and *Kellog v. Blue Quail Energy, Inc.*, 831 F.2d 586, 589 (5th Cir. 1987)).

⁹² When the Commission proposed requiring LOCs for Connect America recipients generally, a number of commenters suggested that the Commission already has adequate safeguards in place by requiring carriers to receive ETC designation, requiring carriers to meet reporting obligations, or through our general forfeiture powers. See, e.g., Comments of Adtran, Inc., WC Docket No. 10-90 et al., at 18 (filed Jan. 18, 2012) (Adtran Jan. 18, 2012 Comments); Comments of ITTA, WC Docket No. 10-90 et al., at 11-13 (filed Jan. 18, 2012) (ITTA Jan. 18, 2012 Comments); Reply Comments of GVNW Consulting, Inc., WC Docket No. 10-90 et al., at 7 (filed Feb. 17, 2012). None of these measures, however, guarantee that the Commission will be able to recover past support disbursements from a defaulting recipient. Other commenters encouraged the Commission to adopt alternative methods of securing Connect America funds, such as performance bonds, field inspections, or denials of certification. See, e.g., Comments of the Satellite Broadband Providers, WC Docket No. 10-90 et al., at 18 (filed Jan. 18, 2012); Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90 et al., at 15 (filed Jan. 18, 2012);

are necessary to protect the ability of the Commission to recover support from parties that fail to perform. The Commission required winners of the Mobility Fund Phase I and Tribal Mobility Phase I auctions to obtain LOCs, and we see no reason to depart from this practice for the rural broadband experiments.⁹³ We continue to view them as beneficial and our experience has shown that winning bidders are able to obtain LOCs.

58. *LOC Opinion Letter.* Consistent with our requirements for Mobility Fund Phase I and Tribal Mobility Fund Phase I, winning bidders must also submit with their LOCs an opinion letter from legal counsel.⁹⁴ That opinion letter must clearly state, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under the Bankruptcy Code, the bankruptcy court would not treat the LOC or proceeds of the LOC as property of the account party's bankruptcy estate, or the bankruptcy estate of any other rural broadband experiment recipient-related entity requesting issuance of the LOC under section 541 of the Bankruptcy Code.⁹⁵

59. *Issuing Bank Eligibility.* The LOCs for winning bidders must be obtained from a domestic or foreign bank meeting the requirements adopted here for purposes of the rural broadband experiments. The criteria we adopt are largely the same as the requirements the Commission adopted for Mobility Fund Phase I and Tribal Mobility Fund Phase I, although we adopt several modifications to enlarge the potential pool of eligible banks for purposes of these experiments. First, we require that for U.S. banks, the bank must be among the 100 largest banks in the U.S. (determined on the basis of total assets as of the end of the calendar year immediately preceding the issuance of the LOC) and must be insured by the Federal Deposit Insurance Corporation (FDIC) and for non-U.S. banks, the bank must be among the 100 largest non-U.S. banks in the world (determined on the basis of total assets as of the end of the calendar year immediately preceding the issuance of the LOC, determined on a U.S. dollar equivalent basis as of such date). We expand the pool of eligible banks from the top 50 to the top 100 banks for purposes of these rural broadband experiments because we expect the projects to be small in scale,⁹⁶ and thus drawing on the LOC is unlikely to exhaust the assets of any bank in the top 100. We have also seen through our experience with Mobility Fund Phase I and Tribal Mobility Fund Phase I that entities have used a number of banks. Because we expect that a number of smaller entities will be winning bidders and may not have established relationships with some of the largest banks, for purposes of these experiments we find that it

Comments of AT&T, WC Docket No. 10-90 et al., at 31 n.46 (filed Jan. 18, 2012) (AT&T Jan. 18, 2012 Comments); Comments of Alaska Communications Systems Group, Inc., WC Docket No. 10-90 et al., at 14 (filed Jan. 18, 2012); Comments of the Indiana Utility Regulatory Commission, WC Docket No. 10-90 et al., at 7 (filed Jan. 18, 2012) (IURC Jan. 18, 2012 Comments). Based on our experience to date, we conclude that requiring LOCs is an effective means of protecting the government's interests.

⁹³ *USF/ICC Transformation Order*, 26 FCC Rcd at 17810-12, paras. 443-51; *Tribal Mobility Fund Phase I Auction Procedures Public Notice*, 28 FCC Rcd at 11681-82, paras. 188-91.

⁹⁴ See 47 C.F.R. § 54.1007(b). See also *Mobility Fund Phase I Auction Scheduled for Sept. 27, 2012; Notice and Filing Requirements and Other Procedures for Auction 901*, AU Docket No. 12-25, Public Notice 27 FCC Rcd 4725, 4771, para. 171 (Wireless Tel. Bur. and Wireline Comp. Bur. 2012) (*Mobility Fund Phase I Auction Procedures Public Notice*); *Tribal Mobility Fund Phase I Auction Procedures Public Notice*, 28 FCC Rcd at 11680, para. 189.

⁹⁵ 11 U.S.C. § 541.

⁹⁶ See *supra* Section III.D.2.

is beneficial to increase the number of options from which they can choose. We also require that the selected U.S. bank have a credit rating issued by Standard & Poor's of BBB- or better (or the equivalent from a nationally recognized credit rating agency). For non-U.S. banks, we require that the bank has a branch in the District of Columbia or other agreed-upon location in the United States, has a long-term unsecured credit rating issued by a widely-recognized credit rating agency that is equivalent to an BBB- or better rating by Standard & Poor's, and that it issues the LOC payable in United States dollars. By allowing banks to have a BBB- rating instead of an A- rating, we will enlarge the pool of eligible issuing banks, without significantly increasing risk to the universal service fund.

60. To provide more flexibility, we also conclude that winning bidders for the rural broadband experiments may obtain a LOC from agricultural credit banks in the United States that serve rural utilities and are members of the United States Farm Credit System (which is modeled after the FDIC). We find that Farm Credit System Insurance Corporation (FCSIC) insurance provides protection that is equivalent to those indicated by holding FDIC-insured deposits.⁹⁷ Thus, the agricultural credit bank must have its deposits insured by the FCSIC. The agricultural credit bank must also meet the other requirements that we have adopted for U.S. banks, including that they have a long-term unsecured credit rating issued by Standard & Poor's of BBB- or better (or an equivalent rating from another nationally recognized credit rating agency), and that their total assets are equal to or exceed the total assets of any of the 100 largest United States banks.⁹⁸ This will permit rural broadband experiment recipients to obtain LOCs from, for example, CoBank, a bank with which many small rural carriers have a relationship.⁹⁹

61. If a recipient has been issued a LOC from a bank that is no longer able to honor the letter of credit at any point during its support term, that recipient will have 60 days to secure a LOC from another issuing bank that meets our eligibility requirements. We also reserve the right to temporarily cease disbursements of monthly support until the recipient submits to us a new LOC that meets our requirements.

62. *Value of LOC.* When a winning bidder first obtains a LOC, it must be equal to the amount of the first disbursement. Before the winning bidder can receive additional disbursements, it must modify or renew its LOC to ensure that it is valued at the total amount of money that has already been disbursed plus the amount of money that is going to be provided for the next disbursement. To reduce administrative costs, a recipient may choose to renew its LOC on an annual rather than monthly basis so that it is valued at the amount of money to be disbursed in the coming year plus the total disbursements it has received so far.

63. *Procedure for Drawing on LOC.* As described below, the Bureau will notify an entity that it has failed to comply with the terms and conditions of the rural broadband experiments, including public

⁹⁷ The Wireless Telecommunications Bureau reached a similar conclusion in the context of Mobility Fund Phase I. *Mobility Fund Phase I, et al.*, WC Docket No. 10-90, Order, 27 FCC Rcd 13457, 13461, para. 10 (Wireless Tel. Bur. 2012) (*CoBank Waiver Order*).

⁹⁸ This determination will be made on the basis of total assets as of the end of the calendar year immediately preceding the issuance of the LOC.

⁹⁹ The Wireless Telecommunications Bureau granted waiver of the bank eligibility requirements for Mobility Fund Phase I and permitted carriers to obtain LOCs from CoBank. See *CoBank Waiver Order*. CoBank was initially excluded from eligibility because it was not FDIC-insured. *Id.*

interest obligations and build-out milestones, and will provide an opportunity for cure before issuing a finding of default. Once the Bureau has determined that the entity has defaulted, the Bureau Chief will send a letter to the entity to notify it of the default. USAC will then issue the form letter attached as Appendix A of this Order to the issuing bank with the Bureau Chief's letter attached, initiating the draw on the LOC.

64. *Costs of Obtaining LOCs.* Now that we have experience with LOCs in the Mobility Fund Phase I and Tribal Mobility Fund Phase I auction, we are confident that winning bidders will be able to secure LOCs. We note that no winning bidders defaulted in Mobility Fund Phase I and Tribal Mobility Fund Phase I auctions because they were unable to secure a LOC. We recognize that banks charge fees for obtaining LOCs and also may charge renewal fees. But we find that the advantages of LOCs in ensuring that Connect America support can quickly be reclaimed to protect the Universal Service Fund, and that the support is protected from being included in a bankruptcy estate, outweigh the potential costs of LOCs for the winning bidders.¹⁰⁰ And as the Commission noted in the *USF/ICC Transformation Order*, LOCs are regularly used in the course of business, and companies that use existing lenders are able to use multiple forms of financing.¹⁰¹ Moreover, requiring that winning bidders obtain LOCs that only secure the sum of money that has been (and soon will be) disbursed will help alleviate the cost of the LOCs. We also note that applicants can factor in the costs of LOCs when submitting their bids.

65. *Applicability to All Winning Bidders.* Our paramount objective is to establish strong safeguards to protect against misuse of the Connect America Fund.¹⁰² We conclude that requiring all entities to obtain a LOC is a necessary measure to ensure that we can recover support from any recipient that cannot meet the build-out obligations and public service obligations of the rural broadband experiments. We also agree with those commenters that argue that requiring all recipients to obtain a

¹⁰⁰ In response to the *USF/ICC Transformation FNPRM*, a number of commenters suggested that imposing a LOC requirement on Connect America recipients could be costly and may deter parties from seeking Connect America funding. See, e.g., IURC Jan. 18, 2012 Comments at 7; ITTA Jan. 18, 2012 Comments at 11; Frontier Jan. 18, 2012 Comments at 12; Reply Comments of AT&T, WC Docket No. 10-90 et al., at 12 (filed Feb. 17, 2012); Comments of the National Exchange Carrier Association, Inc., National Telecommunications Cooperative Association, Organization for the Promotion and Advancement of Small Telecommunications Companies, and the Western Telecommunications Alliance, WC Docket 10-90 et al., at 43-44 (filed Jan. 18, 2012) (The Rural Associations Jan. 18, 2012 Comments). Some commenters also claimed that banks may require carriers to keep the value of the LOC on deposit with the bank for the time that the LOC is open, and that having open LOCs affect debt ratings and constrain recipients' borrowing capacity. See, e.g., Adtran Jan. 18, 2012 Comments at 16; ITTA Jan. 18, 2012 Comments at 11; Comments of the United States Telecom Association, WC Docket No. 10-90 et al., at 22 (filed Jan. 18, 2012); Comments of United States Cellular Corporation, WC Docket No. 10-90 et al., at 50-51 (filed Jan. 18, 2012) (US Cellular Jan. 18, 2012 Comments); Reply Comments of the National Exchange Carrier Association, Inc., National Telecommunications Cooperative Association, Organization for the Promotion and Advancement of Small Telecommunications Companies, and the Western Telecommunications Alliance, WC Docket No. 10-90, at 51-52 (filed Feb. 17, 2012).

¹⁰¹ *USF/ICC Transformation Order*, 26 FCC Rcd at 17811, para. 446.

¹⁰² See The National Association of State Utility Consumer Advocates, Maine Office of the Public Advocate, the New Jersey Division of Rate Counsel, and the Utility Reform Network, WC Docket No. 10-90 et al., at 59-60 (filed Jan. 18, 2012) (NASUCA et al. Jan. 18, 2012 Comments).

LOC will ensure that all recipients are subject to the same default process if they do not comply with the experiments' terms and conditions.¹⁰³

66. We are not persuaded by arguments that we should only require certain entities to obtain LOCs, particularly recipients that have not met the Commission's rules in the past or cannot meet a specified financial threshold.¹⁰⁴ Compliance with existing universal service rules has no bearing on whether an entity necessarily is financially qualified to undertake the obligations of the rural broadband experiments. Moreover, it is possible that some of the winning bidders for the rural broadband experiments may not have participated in Commission programs before. We find that a LOC provides the safeguard of allowing the Commission to immediately take back support if it turns out that the recipient fails to meet the requirements. The requirement will also impress upon all entities participating in the experiments the significant undertaking to which they are committing.

67. *Tribal Nations and Tribally-Owned Applicants.* Based on our experience in implementing LOCs for Mobility Fund Phase I and Tribal Mobility Fund Phase I, we recognize there may be a need for greater flexibility regarding LOCs for Tribally-owned or -controlled winning bidders. In many situations, requiring a LOC from Tribally-owned entities may be impractical because Tribal Nations are subject to various somewhat unique economic challenges, including the inability to levy income taxes on their citizenry and to collateralize their lands.¹⁰⁵ When title to Tribal lands is vested in the United States or such lands are subject to trust restrictions against encumbrances, Tribal Nations are not in a position to provide them as collateral for such a letter of credit.¹⁰⁶ We find that such situations with respect to Tribal Nations are best handled on a case-by-case basis through the waiver process.¹⁰⁷

68. If any Tribal Nation or Tribally-owned or -controlled applicant for the rural broadband experiments is unable to obtain a LOC, it may file a petition for a waiver of the LOC requirement. Waiver applicants must show that the Tribal Nation is unable to obtain a LOC because of limitations on the ability to collateralize its real estate, that rural broadband experiment support will be used for its intended purposes, and that the funding will be used in the best interests of the Tribal Nation and will not be wasted. Tribal applicants could establish this showing by providing, for example, a clean audit, a business plan including financials, provision of financial and accounting data for review (under protective order, if requested), or other means to assure the Commission that the rural broadband experiment is a viable project. Given the number of expressions of interest filed by Tribally-owned or -controlled entities

¹⁰³ See, e.g., US Cellular Jan. 18, 2012 Comments at 51 (urging the Commission, if it chooses to adopt a LOCs requirement, to apply the requirement "in a uniform manner, so that all funding recipients face the same consequences in the event of non-compliance"). See *infra* Section III.F.

¹⁰⁴ See, e.g., ARC Mar. 31, 2014 Comments at 16; AT&T Jan. 18, 2012 Comments at 30-31; Frontier Jan. 18, 2012 Comments at 11-12; CenturyLink Jan. 18, 2012 Comments at 11.

¹⁰⁵ We note that Standing Rock Telecommunications, Inc., a Tribally-owned entity, was able to obtain a LOC for the Mobility Fund Phase I auction after receiving a four week extension to obtain a bank commitment letter. *Standing Rock Telecommunications, Inc. Request for Limited Extension of Time to Submit Bank Commitment Letter for Mobility Fund Phase I Support*, Order, 28 FCC Rcd 12853 (Wireless Tel. Bur. 2013).

¹⁰⁶ Navajo Nation Telecommunications Regulatory Commission, WC Docket No. 10-90 et al., at 8 n.22 (filed Mar. 31, 2014) (stating that Tribally-owned entities have difficulty obtaining financing instruments "because they are unable to provide collateral, since so many Tribal assets are held in trust by the federal government").

¹⁰⁷ 47 C.F.R. § 1.3.

to serve areas within price cap territories, we conclude that it will be manageable to address this situation on a waiver basis if such entities become winning bidders.

69. *Due Process Concerns.* By virtue of entering into a LOC, the recipient has notice that the Bureau may choose to draw on the LOC if it finds that the recipient has defaulted on its rural broadband experiment obligations or it fails to timely replace an expiring LOC. Because the experiments are purely voluntary, participants that find that these terms and conditions are too burdensome can choose not to participate. By filing an application to be authorized for support with the Commission, an applicant knowingly accepts that the Bureau can exercise its right to recover distributed support by drawing on the LOC in the event of non-compliance. We also adopt a process whereby recipients will have the opportunity for cure if they later come into compliance with the terms and conditions of the rural broadband experiments.¹⁰⁸

70. Instead of having to bring a legal action against the recipient if the rural broadband experiment obligations are not met after the time for cure has passed, the LOC allows the Bureau immediately to reclaim the support. A LOC merely shifts the risk associated with non-compliance from the Commission to the recipient. To the extent that recipients believe that the Bureau has unnecessarily drawn on their LOC, they will have the opportunity to take recourse through the regular Commission review process.

71. Moreover, we are not persuaded that LOCs raise due process concerns.¹⁰⁹ For a LOC, USAC must present the proper draw documentation to the issuing bank demonstrating, *inter alia*, that the terms and conditions of the rural broadband experiments have not been met. The issuing bank will then provide USAC with a sum of money equal to the value of the LOC. As we discuss above, the Bureau will release a letter finding default before USAC draws on the LOC. Providing for a lengthy process that would permit recipients to dispute the Bureau's findings of default prior to seeking recovery would unnecessarily hold up the process of recovering support disbursed for these rural broadband experiments.

E. Conditions for Rural Broadband Experiment Support

72. In the *Tech Transitions Order* the Commission stated that funding for the rural broadband experiments will be "subject to the applicable requirements of sections 214 and 254 of the Act and will be conditioned on complying with all relevant universal service rules that the Commission has adopted or may adopt in the future in relevant rulemaking proceedings"¹¹⁰ The Commission also sought

¹⁰⁸ See NASUCA et al. Jan. 18, 2012 Comments at 60 (stating that they did not oppose the Commission giving recipients the opportunity to cure deficiencies).

¹⁰⁹ Comments of the Blooston Rural Broadband Carriers, WC Docket 10-90 et al., at 11-12 (filed Jan. 18, 2012); The Rural Associations Jan. 18, 2012 Comments at 44-45.

¹¹⁰ *Tech Transitions Order*, 29 FCC Rcd at 1477, para. 128. The Commission noted that such relevant universal service rules included but were not limited to "ETC requirements to the extent that they apply to recipients of high-cost and Lifeline support, reporting requirements, audits, and enforcement mechanisms for non-compliance with rules." *Id.* Similarly, all Connect America recipients, including participants in the rural broadband experiments, are required to demonstrate on an annual basis that they have meaningfully engaged Tribal governments in their supported areas. See *USF/ICC Transformation Order*, 26 FCC Rcd at 17868, para. 637; 47 C.F.R. § 54.313(a)(9). Moreover, all recipients of Connect America support, including participants in the rural broadband experiments, and are expected to engage with community anchor institutions in the network planning stages and are required to report on the community anchor institutions that newly gain access to fixed broadband service in their project areas.

comment on whether it should adopt any rules or requirements specific to the rural broadband experiments.¹¹¹ Here, we adopt several conditions that winning bidders must meet to receive rural broadband experiment support. The conditions we adopt for the purposes of these limited experiments are tailored for ensuring that experiment funds are used for their intended purpose of deploying robust networks to high-cost areas; detecting waste, fraud, and abuse; and permitting us to quickly gather data and other information about the experiments that we can leverage when making key policy decisions regarding both universal service and technology transitions.

1. Build-Out Requirements

73. We require winning bidders to meet certain build-out requirements during their support term. Consistent with the build-out requirements we have already adopted for the Connect America Fund,¹¹² we find that establishing clearly defined build-out requirements will ensure that recipients remain on track to meet their public service obligations and that Connect America funds are being used to deploy robust networks consistent with their intended purpose.

74. *Build-Out Requirements for all Recipients.* As we discuss above, all recipients of rural broadband support will receive support in 120 equal monthly disbursements over a 10-year support term, consistent with the support term we have adopted for the Phase II competitive bidding process.¹¹³ The support term will begin with the first disbursement of support after the entities have been notified that they are the winning bidders and that they have met the requirements outlined above.¹¹⁴ During this support term, the recipients will be required to meet interim build-out requirements consistent with the build-out requirements we have adopted generally for recipients of Connect America Phase II funding.¹¹⁵ By the end of the third year, the recipients must offer service meeting the public service obligations we adopted for the relevant experiment category to at least 85 percent of the number of required locations and submit the required certifications and evidence. By the end of the fifth year, the recipients must offer service meeting the public service obligations we adopted for the relevant experiment category to 100 percent of the number of required locations and submit the required certifications and evidence. Recipients must comply with the terms and conditions of rural broadband experiment support for the full 10-year support term.

75. *Accelerated Disbursement Option.* Although we adopt the above build-out requirements for recipients of the rural broadband experiments to conform to our existing requirements for Phase II, based on our review of the expressions of interest, it appears that some entities may be in a position to complete deployment in the 18 to 24 month timeframe. To provide an additional incentive for parties to build out their projects quickly so that we can learn from these deployments and leverage that knowledge when

USF/ICC Transformation Order, 26 FCC Rcd at 17700-01, para. 102; 47 C.F.R. §§ 54.313(e)(3)(ii), (f)(1)(ii). See also *infra* Section III.E.2.

¹¹¹ *Tech Transitions FNPRM*, 29 FCC Rcd at 1503, para. 222.

¹¹² *USF/ICC Transformation Order*, 26 FCC Rcd at 17701, para. 103.

¹¹³ *Connect America Fund Order*, FCC 14-54, at paras. 34-36.

¹¹⁴ See *supra* Section III.D.4.

¹¹⁵ 47 C.F.R. § 54.310(c).

making policy decisions regarding technology transitions,¹¹⁶ we also provide the option of accelerating disbursement of support for winning bidders in the experiments for those entities that commit to deploying to at least 25 percent of the requisite number of locations within the first 15 months. Entities will be required to indicate whether they are electing this option when they submit their application. If parties elect this option, we will advance 30 percent of their support upfront, at the time they are first authorized to receive funding; the remaining 70 percent will be provided in 120 equal monthly installments over the 10-year term. Parties that elect this option will be required to obtain a LOC for the 30 percent advance payment before funding is authorized. To ensure that these funds are being used in accordance with the objectives of the rural broadband experiments, we require that recipients choosing this option deploy to 25 percent of the number of required locations and submit the required certifications and evidence within 15 months of their first disbursement of support. These recipients then must meet the same build-out obligations that are required of all recipients of rural broadband experiment support (i.e., 85 percent of locations within three years and 100 percent of locations within five years).

2. Accountability Requirements

76. In the *Tech Transitions Order*, the Commission noted that rural broadband experiment support will be conditioned on complying with all relevant universal service fund rules including reporting requirements and audits.¹¹⁷ Here, we provide more details regarding the framework for accountability that we adopt for recipients of the rural broadband experiments. The reports, certifications, and other accountability measures we adopt serve a dual purpose. First, a framework for accountability “is critical to ensure appropriate use of high-cost support” and allows us to detect and deter waste, fraud, and abuse.¹¹⁸ Second, the framework we adopt below will permit us to quickly gather data about how the experiment funds are being put to use, which will inform policy decisions we ultimately make for Phase II and our other universal service programs.

77. *Annual Reports*. All recipients of Connect America support are required to file an annual report pursuant to section 54.313 of the Commission’s rules by July 1st of each year.¹¹⁹ This requirement also applies to recipients of support in the rural broadband experiments. We find there is good cause, however, to waive on our own motion section 54.313(a)(1) of the Commission’s rules for recipients of rural broadband experiment support.¹²⁰ Because we adopt other requirements for the rural broadband experiments recipients that will ensure that we will be kept apprised of their build-out progress, we find that it is unnecessary to require these entities to file a five-year service quality plan.

78. As we require of price cap carriers accepting model-based support, we also require participants in the rural broadband experiments to demonstrate that the services they offer in their project

¹¹⁶ ACA Mar. 31, 2014 Comments at 3-4; Letter from Thomas W. Cohen, Counsel for Fiber to the Home Council Americas, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket No. 10-90, at 1 (filed May 29, 2014).

¹¹⁷ *Tech Transitions Order*, 29 FCC Rcd at 1477, para. 128.

¹¹⁸ *USF/ICC Transformation Order*, 26 FCC Rcd at 17850, para. 573.

¹¹⁹ 47 C.F.R. §§ 54.313(a), (j). All required reports and certifications must be filed in WC Docket No. 14-58. Recipients will need to continue to file these reports until the year after their support term ends. Thus, recipients of will file their last report by July 1st following their tenth year of support.

¹²⁰ See 47 C.F.R. §§ 1.3, 54.313(a)(1).

areas meet the Commission's latency standard. The participants must submit a certification with each annual report certifying that 95 percent or more of all peak period measurements (also referred to as observations) of network round trip latency are at or below 100 ms.¹²¹ Recipients may use the approach adopted in the Bureau's *Phase II Service Obligations Order* to measure latency.¹²²

79. In addition, because these rural broadband experiments represent the first implementation of Phase II of the Connect America Fund, we require participants in the experiments to comply with the existing requirement for Phase II recipients of providing in their annual reports the number, names, and addresses of community anchor institutions to which the recipients newly began providing access to broadband service in the preceding year.¹²³ We conclude this requirement will be a valuable way to monitor how the experiment recipients are engaging with community anchor institutions, and learn how the networks supported by the experiments will impact anchor institutions and the communities they serve.¹²⁴

80. We will also require recipients to file build-out information with their reports. This requirement will enable us to gather data faster on how the geographic and demographic characteristics of certain rural areas affect how experiment recipients build their networks.¹²⁵ This requirement will also help us monitor recipients' progress toward meeting their build-out requirements and that experiment funds are being used for their intended purpose. Specifically, we require all recipients of the rural broadband experiments to file with their annual reports evidence demonstrating to which locations they have deployed facilities.¹²⁶ This information must be current as of the June 1st immediately preceding the July 1st deadline.¹²⁷ Recipients must also submit evidence with the report that demonstrates they are meeting the relevant public service obligations. For instance, recipients may submit marketing materials with their reports that show the voice and broadband packages that are available to each location that meet the relevant public service obligations.¹²⁸ The materials must at least detail the pricing, offered broadband speed, and data usage allowances available in the relevant geographic area.

¹²¹ In lieu of this requirement, any satellite providers that are winning bidders in category three may submit an annual certification that they are delivering service with a MOS of four or better.

¹²² *Connect America Fund*, WC Docket No. 10-90, Order, 28 FCC Rcd 15060, 15069-75, paras. 19-36 (Wireline Comp. Bur. 2013) (*Phase II Service Obligations Order*).

¹²³ 47 C.F.R. § 54.313(e)(3)(ii).

¹²⁴ *Tech Transitions Order*, 29 FCC Rcd at 1467, para. 96. Moreover, we reiterate, as for all recipients of Connect America support, we expect that experiment recipients will likely offer broadband at greater speeds to the community anchor institutions in their project areas and that they will engage with community anchor institutions in the network planning stages. *USF/ICC Transformation Order*, 26 FCC Rcd at 17700-01, para. 102.

¹²⁵ *Tech Transitions Order*, 29 FCC Rcd at 1466, para. 94.

¹²⁶ Recipients should ensure that the submission of this data protects customer privacy consistent with applicable privacy laws and regulations. See, e.g., 47 U.S.C. § 222; 47 C.F.R. §§ 64.2001-64.2011. Providers should also consider the applicability of the Electronic Communications Privacy Act as well as prohibitions related to customer privacy described in 47 U.S.C. § 551. See 18 U.S.C. § 2702(a)(3), (c); 47 U.S.C. § 551. This is not an exhaustive list of statutes and regulations related to subscriber privacy. Each provider must exercise its own due diligence in ensuring its submissions comply with applicable law.

¹²⁷ Thus if an annual report is filed July 1, 2016, the data must include all locations that the recipient has deployed to as of June 1, 2016.

81. To ensure that rural broadband experiment funds are being used for their intended purposes, we also find that it would be helpful to monitor the recipients' progress in deploying their networks prior to the deadline for the first annual report, which we anticipate will be July 2016.¹²⁹ Thus, we will require all recipients to file an interim report on the November 1st after they receive their first disbursement.¹³⁰ This report will only be filed this one time and must describe the status of their project (i.e., whether vendors have been hired, permits have been obtained, construction has begun) and include evidence demonstrating which locations (if any) that the recipients have built out to in their project areas where the recipient is offering at least one voice service and one broadband service that meets the public service obligations adopted above for the relevant experiment category.¹³¹ To the extent locations are newly served by the time of this interim report, recipients must also submit evidence with the report as described above that demonstrates they are meeting the relevant public service obligations, including a certification that demonstrates the service they offer complies with the Commission's latency requirements. This information should be current as of the September 30th immediately preceding the November 1st deadline. Because this is information that recipients will already need to collect to certify compliance with their build-out requirements, the value to the Commission in being able to gather this data on a more frequent basis outweighs the burden that one additional report will impose on experiment recipients.

82. *Certifications.* Like all recipients of Connect America support, all rural broadband experiment recipients that have been designated as ETCs by the Commission are required to file an annual certification pursuant to section 54.314 of the Commission's rules stating that "all federal high-cost support provided to such carrier was used in the preceding calendar year and will be used in the coming calendar year only for the provision, maintenance, and upgrading of facilities and services for which the support is intended."¹³² If an entity selected for a rural broadband experiment is designated an ETC by a state, that state must file this certification on behalf of the entity selected for the rural broadband experiment recipient.¹³³

83. We also require experiment recipients to certify when they have met the build-out requirements defined above.¹³⁴ All recipients must submit a certification to the Commission by the end of their third year of support that they offer service to at least 85 percent of their required number of locations with the required level of service and will need to submit a certification by the end of their fifth year of support that they offer service to 100 percent of their required number of locations with the

¹²⁸ See *supra* Section III.C.3.

¹²⁹ We expect that winning bidders will be identified before the end of 2014 and authorized to receive support in the first half of 2015. Because an entity must submit information and certifications related to the preceding year in its annual report, the first annual report would be due in July 2016.

¹³⁰ Thus recipients that begin receiving support in early 2015 will file this report on November 1, 2015. The data that will need to be submitted must reflect all locations that the recipient has deployed to as of September 30, 2015.

¹³¹ See *supra* Section III.C.3.

¹³² 47 C.F.R. § 54.314(b).

¹³³ 47 C.F.R. § 54.314(a).

¹³⁴ The Commission adopted build-out certification requirements for recipients of Connect America Phase I and Phase II funding, and Mobility Fund Phase I. See 47 C.F.R. §§ 54.313(b)-(c), (e), 54.1008(b); see also *supra*

required level of service.¹³⁵ Additionally, recipients that opt to receive 30 percent of their support upfront must submit a certification to the Commission stating that they have met their 25 percent build-out requirement within 15 months of the first disbursement. With these certifications, all recipients must present the same build-out information that must be included in their annual reports that we describe above: evidence demonstrating that they have deployed facilities to the required number of locations and evidence that demonstrates compliance with the relevant public service obligations, including a certification demonstrating compliance with the Commission's latency requirement. We expect to use a variety of methods to verify that recipients of support are in fact meeting the terms and conditions of the rural broadband experiments, including verification of the build-out evidence that they will submit with their annual reports and certifications.

84. *Compliance Reviews.* We reiterate that all recipients of rural broadband experiment support are subject to compliance reviews and other investigations so that we can detect and deter waste, fraud, and abuse, and ensure that rural broadband experiment support is being used for its intended purpose.¹³⁶

85. *Record Retention.* We also reiterate that rural broadband experiment recipients are subject to the 10 year record retention requirement adopted in the *USF/ICC Transformation Order*.¹³⁷ This requirement will ensure that documents related to the experiments are available to facilitate USAC audits and other oversight measures.

3. Data Gathering

86. When adopting the service-based experiments, the Commission noted that “[t]he need for quality data regarding the effect on customers of adopting next generation technologies is perhaps greater now than ever before,” and held that it intended that the service-based experiments would be “open data” experiments.¹³⁸ In the *Tech Transitions Order*, the Commission sought comment on whether issues discussed in the context of the service-based experiments should also be addressed in the rural broadband experiments.¹³⁹ We find that collecting data from the rural broadband experiments would similarly help us answer some of the key policy questions we identified in the *Tech Transitions Order*.¹⁴⁰ We therefore require that as a condition of receiving funding in the rural broadband experiments, recipients cooperate with the Commission in any efforts to gather data that may help inform future decisions regarding the impact of technology transitions on achievement of our universal access objectives.

87. As the Wireline Competition Bureau reported at the Commission's open meeting on June 13, 2014, a competitive procurement process is underway to select a third party data evaluator to assist the
Section III.E.1.

¹³⁵ See *supra* Section III.E.1.

¹³⁶ *Tech Transitions Order*, 29 FCC Rcd at 1477, para. 126; 47 C.F.R. § 54.320(a).

¹³⁷ *USF/ICC Transformation Order*, 26 FCC Rcd at 17864, paras. 620-21; 47 C.F.R. § 54.320(b).

¹³⁸ *Tech Transitions Order*, 29 FCC Rcd at 1458, para. 73.

¹³⁹ *Tech Transitions FNPRM*, 29 FCC Rcd at 1503, para. 222. The Commission adopted service-based experiments in the *Tech Transitions Order* “to advance new network technologies and learn how best to protect and enhance the core statutory values of public safety, universal access, competition, and consumer protection when the time comes that legacy systems may no longer be available.” *Tech Transitions Order*, 29 FCC Rcd at 1446-62, paras. 37-81.

¹⁴⁰ *Tech Transitions Order*, 29 FCC Rcd at 1466-67, paras. 94-97.

Commission in collecting and analyzing data in connection with service-based experiments and other technology transitions contexts. This third party will be working with the Bureau to develop a research methodology using, among other things, surveying techniques. We believe surveys could be useful in the context of the rural broadband experiments. For example, the issues to be surveyed might include consumer purchasing decisions, speed of adoption of new broadband services, service usage, and customer satisfaction with fixed wireless compared to alternatives, both landline and satellite. To minimize the burden on rural broadband experiment recipients, we expect that they would need only to provide information that will permit the third party data evaluator to identify the locations to survey or certain metrics related to their services, including customer purchase options and service usage. This information might include customer contact information, when the recipient expects such locations might be offered service, and other specifics about the locations served. We note that when recipients submit data to the Commission or its designated third party data evaluator, they should ensure that their submission protects customer privacy consistent with applicable privacy laws and regulations.¹⁴¹

F. Measures to Ensure Compliance

88. In the *Tech Transitions Order*, the Commission stated that support for the rural broadband experiments would be conditioned on “complying with all relevant universal service rules that the Commission has adopted or may adopt in the future in relevant rulemaking proceedings, including . . . enforcement mechanisms for non-compliance with rules.”¹⁴² Here, we adopt specific measures to ensure participants meet the terms and conditions of the rural broadband experiments.

89. The Commission has previously held that funds that are disbursed from the high-cost program in violation of a Commission rule that “implements the statute or a substantive program goal” should be recovered from the recipient.¹⁴³ Thus, here we adopt a process to recover support from recipients that do not comply with the terms and conditions of the rural broadband experiments after they begin receiving support. We also note that we intend to enforce the terms and conditions vigorously. Such measures uphold the integrity of the Fund by ensuring that recipients of high-cost support are using those funds for the purposes for which they are provided.

90. *Trigger for Performance Default.* A performance default will occur if the winning bidder begins receiving support and then fails to meet the terms and conditions of the rural broadband

¹⁴¹ See, e.g., 47 U.S.C. § 222; 47 C.F.R. §§ 64.2001-64.2011. Providers should also consider the applicability of the Electronic Communications Privacy Act as well as prohibitions related to customer privacy described in 47 U.S.C. § 551. See 18 U.S.C. § 2702(a)(3), (c); 47 U.S.C. § 551. This is not an exhaustive list of statutes and regulations related to subscriber privacy. Each provider must exercise its own due diligence in ensuring its submissions comply with applicable law.

¹⁴² *Tech Transitions Order*, 29 FCC Rcd at 1477, para. 128. In the *USF/ICC Transformation Order*, the Commission adopted a rule requiring support reductions in the event that recipients of Connect America support failed to file the required reports and certifications on time. *USF/ICC Transformation Order and FNPRM*, 26 FCC Rcd at 17862, para. 617; 47 C.F.R. §§ 54.313(j), 54.314(d). The Commission also adopted a rule that entities receiving high-cost support, including Connect America support, would “receive reduced support should they fail to fulfill their public interest obligations.” *USF/ICC Transformation Order*, 26 FCC Rcd at 17863, para. 618; 47 C.F.R. § 54.320(c).

¹⁴³ *Comprehensive Review of the Universal Service Fund Management, Administration, and Oversight et al.*, WC Docket No. 05-195 et al., Report and Order, 22 FCC Rcd 16372, 16386, para. 30 (2007).

experiments. For example, if the winning bidder has failed to meet the build-out obligations adopted above,¹⁴⁴ or the winning bidder failed to keep open and renew its LOC as required above,¹⁴⁵ it will be a performance default.¹⁴⁶ A performance default will also occur if the winning bidder does not offer service to the required number of locations that meet the public interest obligations we have adopted for the experiments, including speed, latency, data usage, and reasonably comparable pricing.¹⁴⁷ We expect to verify that recipients of support are in fact meeting the terms and conditions of the rural broadband experiments by verifying the build-out evidence that they will submit with their annual reports and certifications.

91. For purposes of the rural broadband experiments, a Connect America recipient can demonstrate compliance with the speed, latency, data usage, and pricing requirements if it has met the build-out milestones by deploying robust networks that are capable of meeting the required public interest obligations, and its annual reports, certifications, and marketing materials demonstrate that the recipient is offering at least one package to the eligible locations at the required speeds, with a data usage allowance that meets the requirements for these experiments at reasonably comparable prices.¹⁴⁸

92. *Support Reductions and Recovery of Support.* If a recipient begins receiving support, and the Bureau subsequently determines that it fails to meet the terms and conditions of its experiment, the Bureau will issue a letter evidencing the default, and USAC will begin withholding support. For the first six months that the entity is not in compliance, USAC will withhold five percent of the entity's total monthly support. For the next six months that the entity is not in compliance, USAC will withhold 25 percent of the entity's total monthly support. If at any point during the year that the support is being withheld the winning bidder comes into compliance, the Bureau will issue a letter to that effect; the entity then will be entitled to have its full support restored and will be able to recover all the support that USAC withheld.

93. If at the end of this year period, the entity is still not in compliance, the Bureau will issue a letter to that effect, and USAC will draw on the entity's LOC for the recovery of all support that has been

¹⁴⁴ See *supra* Section III.E.1.

¹⁴⁵ See *supra* Section III.D.4.

¹⁴⁶ There are a number of different ways that a default could come to the Commission's attention. For example, the winning bidder may be unable to make the required certifications that it is in compliance, a Commission or USAC compliance review or a Commission investigation may show that the bidder is not in compliance, or an outside party like a customer or competitor may report to the Commission or USAC that the winning bidder has failed to meet the experiment's terms and conditions. In all cases, the Bureau will release a letter finding default before USAC draws on the LOC.

¹⁴⁷ See *supra* Section III.C.3.

¹⁴⁸ As we discuss above, the Wireline Competition Bureau has specified how price cap carriers that accept model-based support may demonstrate that they are meeting the Commission's latency requirements. See *supra* Section III.E.2. See also *Phase II Service Obligations Order*, 28 FCC Rcd at 15068-75, paras. 19-36. Recipients of funding in the rural broadband experiments may use the same approach to demonstrate they are meeting latency requirements. The Wireline Competition Bureau, Wireless Telecommunications Bureau, and Office of Engineering and Technology have not adopted a methodology to test compliance with the Commission's other public interest obligations. *USF/ICC Transformation Order*, 26 FCC Rcd at 17708, para. 112.

authorized.¹⁴⁹ If after USAC recovers the support under the LOC, the winning bidder is able to demonstrate that it has come into compliance with the experiment's terms and conditions at any time before the support period ends, it will be entitled to have its past support restored and will be eligible for any remaining disbursements of authorized support. But if the winning bidder is unable to demonstrate compliance at any point during the support term after its support has been recovered by the Bureau, the entity will not be eligible to have any of its recovered support restored or to receive any remaining disbursements. An entity may only exercise this cure opportunity once. The recovered support, along with the remaining authorized support that has not yet been disbursed, will not be authorized for another experiment.

94. *Forfeiture.* To further impress upon recipients the importance of complying with the rural broadband experiments' terms and conditions, we note that we will enforce these requirements vigorously. The Enforcement Bureau may initiate an enforcement proceeding in the event of a default or after the Wireline Competition Bureau issues a letter evidencing the recipient's default. In proposing any forfeiture, consistent with the Commission's rules, the Enforcement Bureau shall take into account the nature, circumstances, extent, and gravity of the violations.¹⁵⁰

95. *Waiver.* In the event a recipient is unable to meet the terms and conditions of the rural broadband experiments due to circumstances beyond its control (e.g., a severe weather event), that entity may petition for a waiver of the relevant terms and conditions prior to the relevant build-out milestone pursuant to section 1.3 of the Commission's rules.¹⁵¹ The petitioning entity will then have the cure period described above to meet the terms and conditions of the experiment. We encourage entities that submit petitions for waiver to continue to work diligently towards meeting the terms and conditions of their experiments while their petitions are pending. If the petitioning entity is unable to meet the terms and conditions during the relevant cure period, and no decision has been issued a decision on the waiver petition, the Bureau will issue a letter finding default, USAC will draw on the LOC, and the Enforcement Bureau may initiate forfeiture proceedings. If the waiver subsequently is granted, the petitioning entity will have all of the funds that have been recovered restored and will be entitled to receive its subsequent disbursements. We note that a winning bidder's inability to secure the proper permits and other permissions to build its network would not constitute grounds for waiver and will be considered a default if the winning bidder is unable to meet its build-out and public interest obligations due to its inability to secure such permits. We expect that entities choosing to participate in the rural broadband experiments will do their due diligence and determine which permits and other permissions will be required and what steps they will need to take to obtain such permissions before submitting their applications.

¹⁴⁹ See *supra* Section III.D.4.

¹⁵⁰ 47 C.F.R. § 1.80(b)(8).

¹⁵¹ Generally, the Commission's rules may be waived if good cause is shown. 47 C.F.R. § 1.3. The Commission may exercise its discretion to waive a rule where the particular facts make strict compliance inconsistent with the public interest. *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (*Northeast Cellular*). In addition, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis. *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969); *Northeast Cellular*, 897 F.2d at 1166. Waiver of the Commission's rules is appropriate only if both (i) special circumstances warrant a deviation from the general rule, and (ii) such deviation will serve the public interest. *Northeast Cellular*, 897 F.2d at 1166.

96. *Other Consequences for Non-Compliance.* Recipients of funding in the rural broadband experiments will be subject to the Commission's rules related to reductions in support in the event that they fail to meet reporting and certification deadlines.¹⁵² Recipients may also be subject other sanctions for non-compliance with the terms and conditions of the rural broadband experiments or the Commission's rules, including, but not limited to, potential revocation of ETC designation and disqualification from future competitive bidding for universal service support.¹⁵³

IV. FURTHER NOTICE OF PROPOSED RULEMAKING

97. The Commission recognized in the *USF/ICC Transformation Order* that universal service is a shared Federal and state responsibility, and that "it is critical to our reforms' success that states remain key partners even as these programs evolve and traditional roles shift."¹ We sought comment in the *Tech Transitions FNPRM* on how to leverage non-Federal governmental sources of funding for the rural broadband experiments,² but did not receive a sufficient record to enable us to resolve the implementation details associated with this proposal. We remain committed to working with our state and other governmental partners to advance our mutually shared goals of preserving voice service and extending broadband-capable infrastructure to consumers across the nation. We thus wish to further explore how best to maximize the reach of our existing Connect America budget and leverage non-Federal funding to extend broadband to as many households as possible.

98. We now seek more focused comment on how to create inducements for state action to assist in the expansion of broadband. We seek comment on providing bidding credits in the Phase II competitive bidding process that will occur after the offer of model-based support to price cap carriers in order to create incentives for states to share financial responsibility for preserving and extending broadband-capable infrastructure. In particular, we seek comment on providing a bidding credit to any bidder that is leveraging governmental support from non-Federal sources to lower the amount of funding requested from the Connect America Fund. For example, we could provide a 10 percent bidding credit in situations where an applicant has obtained a commitment from a non-Federal government entity to match Federal dollars on a four-to-one basis, and a 5 percent bidding credit an applicant has obtained a commitment to match Federal dollars on an eight-to-one basis.³ If we were to adopt such a bidding credit, what documentation would the bidder need to provide when submitting its bid so that the Commission could confirm its eligibility for the bidding credit? For instance, should the bidder be required to provide

¹⁵² See 47 C.F.R. §§ 54.313(j), 54.314(d). In the *Connect America Fund FNPRM*, the Commission proposed to modify these support reductions. See *Connect America Fund FNPRM*, FCC 14-54, at paras. 318-325. If those proposals are adopted, the rules would apply to recipients of support through the rural broadband experiments as well as other recipients of high-cost support.

¹⁵³ See 47 C.F.R. §§ 1.21004, 54.320.

¹ *USF/ICC Transformation Order*, 26 FCC Rcd at 17671, para. 15.

² *Tech Transitions FNPRM*, 29 FCC Rcd at 1501, para. 215

³ Thus, if a bidder is seeking \$20 million in Federal support and demonstrates the availability of \$5 million of state funding, it would get a 10 percent bidding credit, which effectively lowers its bid to \$18 million for purposes of comparison to other bids. If a bidder is seeking \$20 million in Federal support and demonstrates the availability of \$2.5 million in state funding, it would get a 5 percent bidding credit, which would lower its effective bid to \$19 million for purposes of comparison to other bids.

a letter indicating that non-Federal funding has been authorized, contingent on the entity being a winning bidder?

99. For purposes of awarding such a bidding credit, we propose to consider all forms of non-Federal assistance, including but not limited to support from a state universal service fund, state broadband authority, other state institutions that provide funding for communications infrastructure development, appropriated funds, regional and local governmental authorities, or Tribal government funding. We seek comment on this proposal.⁴

100. In order to qualify for the bidding credit, must the matching funds be in the form of a grant, or should we also provide a credit if the bidder has a commitment for a loan from the relevant state or other non-Federal governmental authority?

101. As an alternative, should we award a bidding credit to any bidder in a state that is a net donor to the universal service fund?⁵ This would be simple to administer and would provide one means of creating greater equity between states in terms of their respective net draws from the fund. If we were to adopt such an approach, we propose to utilize the most recent Universal Service Monitoring Report to determine which states are net donors.

V. PROCEDURAL MATTERS

A. Paperwork Reduction Analysis

102. The Report and Order contains new and modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA). 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 are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002,¹ we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees. We describe impacts that might affect small businesses, which includes most businesses with fewer than 25 employees, in the Final Regulatory Flexibility Analysis (FRFA) in Appendix B, *infra*.

103. The FNPRM contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and OMB to comment on the proposed information collection requirements contained in this document, as required by the PRA. In addition, pursuant to the Small Business Paperwork Relief Act, we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

⁴ We note that for purposes of the Healthcare Connect Fund, we require health care providers to contribute 35 percent of the cost of services and infrastructure, and allow providers to utilize state grants, funding, or appropriations; Federal funding, grants, loans or appropriations except for other Federal universal service funds; Tribal governmental funding; and other grant funding, including private grants, as their required contribution. 47 C.F.R. § 54.633. *See also* TCA Comments, WC Docket 10-90, at 3-4 (filed March 31, 2014) (urging Commission to require that the funding amount requested be no more than 75 percent of the total cost to deploy the network).

⁵ *See* Comments of California Public Utility Commission, WC Docket 10-90, at 5-6 (filed Mar. 28, 2014).

¹ Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4).

B. Congressional Review Act

104. The Commission will send a copy of this Report and Order and Further Notice of Proposed Rulemaking to Congress and the Government Accountability Office pursuant to the Congressional Review Act.²

C. Final Regulatory Flexibility Analysis

105. The Regulatory Flexibility Act of 1980 (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.” Accordingly, we have prepared a FRFA concerning the possible impact of the rule changes contained in the Report and Order. The FRFA is set forth in Appendix B.

D. Initial Regulatory Flexibility Analysis

106. As required by the RFA, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in the FNPRM. The analysis is found in Appendix C. We request written public comment on the analysis. Comments must be filed in accordance with the same deadlines as comments filed in response to the FNPRM, and must have a separate and distinct heading designating them as responses to the IRFA. The Commission’s Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Report and Order and Further Notice of Proposed Rulemaking, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

E. Filing Requirements

107. *Comments and Replies.* Pursuant to sections 1.415 and 1.419 of the Commission’s rules,³ interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS).⁴

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. Because more than one docket number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket number.
- Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
 - All hand-delivered or messenger-delivered paper filings for the Commission’s Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries

² See 5 U.S.C. § 801(a)(1)(A).

³ 47 C.F.R. §§ 1.415, 1.419.

⁴ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of *before* entering the building.

- o Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- o U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

108. *People with Disabilities.* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

109. *Availability of Documents.* Comments, reply comments, and ex parte submissions will be publically available online via ECFS.⁵ These documents will also be available for public inspection during regular business hours in the FCC Reference Information Center, which is located in Room CY-A257 at FCC Headquarters, 445 12th Street, SW, Washington, DC 20554. The Reference Information Center is open to the public Monday through Thursday from 8:00 a.m. to 4:30 p.m. and Friday from 8:00 a.m. to 11:30 a.m.

110. *Additional Information.* For additional information on this proceeding, contact Alexander Minard of the Wireline Competition Bureau, Telecommunications Access Policy Division, Alexander.Minard@fcc.gov, (202) 418-7400.

VI. ORDERING CLAUSES

111. Accordingly, IT IS ORDERED that, pursuant to sections 1, 2, 4(i), 4(j), 214, 218-220, 251, 254 and 303(r) of the Communications Act of 1934, as amended, and section 706 of the Telecommunications Act of 1996, 47 U.S.C. §§ 151, 152, 154(i), 154(j), 214, 218-220, 251, 254, 303(r), 1302 this Report and Order and Further Notice of Proposed Rulemaking in WC Docket No. 10-90 and WC Docket No. 14-58 IS ADOPTED, effective thirty (30) days after publication of the text or summary thereof in the Federal Register, except for those rules and requirements involving Paperwork Reduction Act burdens, which shall become effective immediately upon announcement in the Federal Register of OMB approval.

112. IT IS FURTHER ORDERED, that, pursuant to the authority contained in sections 1, 2, 4(i), 218-220, 214, 254, 303(r), 403 of the Communications Act of 1934 as amended, and section 706 of the Telecommunications Act of 1996, 47 U.S.C. §§ 151, 152, 154(i), 214, 218-220, 254, 303(r), 403, and 1302, and sections 1.1 and 1.421 of the Commission's rules, 47 C.F.R. §§ 1.1, 1.42, NOTICE IS HEREBY GIVEN of the proposals and tentative conclusions described in this Further Notice of Proposed Rulemaking.

113. IT IS FURTHER ORDERED, that pursuant to section 1.3 of the Commission's rules, 47 C.F.R. § 1.3, the Commission waives on its own motion section 54.313(a)(1) of the Commission's rules, 47 C.F.R. § 54.313(a)(1) for all recipients of the rural broadband experiments.

114. IT IS FURTHER ORDERED, that the Commission SHALL SEND a copy of this Report and Order in WC Docket No. 10-90 and WC Docket No. 14-58 to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

⁵ Documents will generally be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

115. 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 in WC Docket No. 10-90 and WC Docket No. 14-58, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch

Secretary

APPENDIX A

Illustrative Form of Letter Of Credit

[Subject to Issuing Bank Requirements]

No. _____

[Name and Address of Issuing Bank]

[Date of Issuance]

[AMOUNT]

[EXPIRATION DATE]

BENEFICIARY

[USAC]

[Address]

LETTER OF CREDIT PROVIDER

[Winning Bidder Name]

[Address]

Ladies and Gentlemen:

We hereby establish, at the request and for the account of [Winning Bidder], in your favor, as required under the [Report and Order, adopted on July 11, 2014 issued by the Federal Communications Commission (“FCC”) in the matter of [Connect America Fund, WC Docket 10-90] (the “Order”), our Irrevocable Standby Letter of Credit No. _____, in the amount of [State amount of Letter of Credit in words and figures. NOTE: The amount of the Letter of Credit shall increase/additional letter(s) of credit shall be issued as additional funds are disbursed pursuant to the terms of the Order], expiring at the close of banking business at our office described in the following paragraph, on [the date which is ___ years from the date of issuance/ or the date which is one year from the date of issuance, provided the Issuing

Bank includes an evergreen clause that provides for automatic renewal unless the Issuing Bank gives notice of non-renewal to USAC by a nationally recognized overnight delivery service, with a copy to the FCC, at least sixty days but not more than 90 days prior to the expiry thereof], or such earlier date as the Letter of Credit is terminated by [USAC] (the “Expiration Date”). Capitalized terms used herein but not defined herein shall have the meanings accorded such terms in the Order.

Funds under this Letter of Credit are available to you against your draft in the form attached hereto as Annex A, drawn on our office described below, and referring thereon to the number of this Letter of Credit, accompanied by your written and completed certificate signed by you substantially in the form of Annex B attached hereto. Such draft and certificates shall be dated the date of presentation or an earlier date, which presentation shall be made at our office located at [BANK ADDRESS] and shall be effected either by personal delivery or delivery by a nationally recognized overnight delivery service. We hereby commit and agree to accept such presentation at such office, and if such presentation of documents appears on its face to comply with the terms and conditions of this Letter of Credit, on or prior to the Expiration Date, we will honor the same not later than the first banking day after presentation thereof in accordance with your payment instructions. Payment under this Letter of Credit shall be made by [check/wire transfer of Federal Reserve Bank of New York funds] to the payee and for the account you designate, in accordance with the instructions set forth in a draft presented in connection with a draw under this Letter of Credit.

Partial drawings are not permitted under this Letter of Credit. This Letter of Credit is not transferable or assignable in whole or in part.

This Letter of Credit shall be canceled and terminated upon receipt by us of the [USAC’s] certificate purportedly signed by two authorized representatives of [USAC] in the form attached as Annex C.

This Letter of Credit sets forth in full the undertaking of the Issuer, and such undertaking shall not in any way be modified, amended, amplified or limited by reference to any document, instrument or agreement referred to herein, except only the certificates and the drafts referred to herein and the ISP (as defined below); and any such reference shall not be deemed to incorporate herein by reference any document, instrument or agreement except for such certificates and such drafts and the ISP.

This Letter of Credit shall be subject to, governed by, and construed in accordance with, the International Standby Practices 1998, International Chamber of Commerce Publication No. 590 (the “ISP”), which is incorporated into the text of this Letter of Credit by this reference, and, to the extent not inconsistent therewith, the laws of the State of New York, including the Uniform Commercial Code as in effect in the State of New York. Communications with respect to this Letter of Credit shall be addressed to us at our address set forth below, specifically referring to the number of this Letter of Credit.

[NAME OF BANK]

[BANK SIGNATURE]

ANNEX A

Form of Draft

To: [Issuing Bank]

DRAWN ON LETTER OF CREDIT No: _____

AT SIGHT

PAY TO THE ORDER OF [USAC] BY [CHECK/WIRE TRANSFER OF FEDERAL
RESERVE BANK OF NEW YORK]

FUNDS TO: _____

Account (_____)

AS [RURAL BROADBAND EXPERIMENT REPAYMENT]

[AMOUNT IN WORDS] DOLLARS AND NO/CENTS

[\$AMOUNT IN NUMBERS]

Universal Service Administrative Company

By: _____

Name:

Title:

ANNEX B

Draw Certificate

The undersigned hereby certifies to [Name of Bank] (the "Bank"), with reference to (a) Irrevocable Standby Letter of Credit No. [Number] (the "Letter of Credit") issued by the Bank in favor of the Universal Service Administrative Company ("USAC") and (b) [paragraph ___] of the [Report and Order, adopted on July 11, 2014 issued by the Federal Communications Commission in the matter of [Connect America Fund, WC Docket 10-90] (the "Order"), pursuant to which [Name of Winning Bidder] (the "LC Provider") has provided the Letter of Credit (all capitalized terms used herein but not defined herein having the meaning stated in the Order), that:

[The [Name of Winning Bidder] has [describe the event that triggers the draw], and is evidenced by a letter signed by the Chief of the [Wireline Competition Bureau] or [his/her] designee, dated _ , 20__ , a true copy of which is attached hereto.] Accordingly, a draw of the entire amount of the Letter of Credit No. _____ is authorized.]

OR

[USAC certifies that given notice of non-renewal of Letter of Credit No. _____ and failure of the account party to obtain a satisfactory replacement thereof, pursuant to the Order, USAC is entitled to receive payment of \$ _____ representing the entire amount of Letter of Credit No. _____.]

IN WITNESS WHEREOF, the undersigned has executed this certificate as of [specify time of day] on the ___ day of _____, 20__.

Universal Service Administrative Company

By: _____

Name:

Title:

ANNEX C

Certificate Regarding Termination of Letter of Credit

The undersigned hereby certifies to [Name of Bank] (the “Bank”), with reference to (a) Irrevocable Standby Letter of Credit No. [Number] (the “Letter of Credit”) issued by the Bank in favor of the Universal Service Administrative Company (“USAC”), and (b) paragraph [____] of the [Report and Order adopted on July 11, 2014 issued by the Federal Communications Commission (“FCC”) in the matter of [Connect America Fund, WC Docket 10-90] (the “Order”), (all capitalized terms used herein but not defined herein having the meaning stated or described in the Order), that:

(1) [include one of the following clauses, as applicable]

(a) The Order has been fulfilled in accordance with the provisions thereof; or

(b) [LC Provider/Winning Bidder] has provided a replacement letter of credit satisfactory to the FCC.

(2) By reason of the event or circumstance described in paragraph (1) of this certificate and effective upon the receipt by the Bank of this certificate (countersigned as set forth below), the Letter of Credit is terminated.

IN WITNESS WHEREOF, the undersigned has executed this certificate as of the ____ day of _____, 20__.

Universal Service Administrative Company

By: _____

Name:

Title:

By: _____

Name:

Title:

COUNTERSIGNED:

Federal Communications Commission

By: _____

Name:

Its Authorized Signatory

APPENDIX B

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980 (RFA),⁰ as amended, an Initial Regulatory Flexibility Analyses (IRFA) was incorporated in the *Further Notice of Proposed Rulemaking (USF/ICC Transformation FNPRM)*.⁰ The Commission sought written public comment on the proposals in the *USF/ICC Transformation FNPRM*, including comment on the IRFA. The Commission also invited parties to file comments on this IRFA in the *Tech Transitions FNPRM*.⁰ The Commission did not receive any relevant comments on the *USF/ICC Transformation FNPRM* IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.⁰

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

2. We explained in the *Tech Transitions Order* that we must “ensure that all Americans benefit from the technology transitions, and that we gain data on the impact of technology transitions in rural areas, including Tribal lands, where residential consumers, small businesses and anchor institutions, including schools, libraries and health care providers, may not have access to advanced broadband services.”⁰ In this Order, we adopt certain parameters and requirements for the rural broadband experiments that will assist us with accomplishing these goals. We expect these experiments to provide critical information regarding which and what types of parties are willing to build networks that will deliver services that exceed our current performance standards for an amount of money equal to or less than the support amounts calculated by the adopted Phase II Connect America Cost Model.⁰ In addition to gathering information relevant to broader questions implicated by technology transitions, we expect these experiments also will inform key decisions that we will be making in the coming months regarding the Connect America Fund.

⁰ 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).

⁰ See *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 18364-95, paras. 1-97 (2011) (*USF/ICC Transformation Order and/or FNPRM*), aff'd sub nom. *In re FCC 11-161*, ___ F.3d ___, 2014 WL 2142106 (10th Cir. May 23, 2014).

⁰ *Technology Transitions et al.*, WC Docket No. 10-90 et al., Order et al., 29 FCC Rcd 1433, 1508, para. 239 (2014) (*Tech Transitions Order and/or FNPRM*).

⁰ See 5 U.S.C. § 604.

⁰ *Tech Transitions Order*, 29 FCC Rcd at 1464, para. 87.

⁰ See *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, 28 FCC Rcd 5301 (Wireline Comp. Bur. 2013) (*CAM Platform Order*); *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, 29 FCC Rcd 3964 (Wireline Comp. Bur. 2014) (*CAM Inputs Order*).

3. We adopt a budget of \$100 million for funding experiments in price cap areas focused on bringing robust, scalable broadband networks to residential and small business locations in rural communities that are not served by an unsubsidized competitor that offers voice and Internet access delivering at least 3 Mbps downstream/768 kbps upstream.⁰ The funding will be available to serve locations in both high-cost and extremely high-cost areas, thereby advancing our implementation of both Phase II and the Remote Areas Fund.⁰ Applications will be due 90 days from the release of this Order. We also determine the objective methodology for selecting projects among the applications we receive for the experiments.⁰ Given the manner in which we have structured the budget and the selection criteria, we believe that we will be able to fund a range of diverse projects throughout the country. Finally, we outline the conditions that entities participating in the experiments must meet in order to continue to receive such support, including specific eligibility, build-out and accountability requirements, and establish the measures to ensure compliance with these conditions.⁰

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

4. There were no relevant comments filed that specifically addressed the rules and policies proposed in the *USF/ICC Transformation FNPRM* IRFA.

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

5. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁰ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁰ In addition, the term “small business” has the same meaning as the term “small-business concern” under the Small Business Act.⁰ A “small-business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁰

⁰ See *supra* Section III.A.

⁰ See *supra* Section III.C.1.

⁰ See *supra* Section III.D.

⁰ See *supra* Sections III.E, III.F.

⁰ See 5 U.S.C. § 603(b)(3).

⁰ See 5 U.S.C. § 601(6).

⁰ 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.”

⁰ See 15 U.S.C. § 632.

6. **Small Businesses.** Nationwide, there are a total of approximately 28.2 million small businesses, according to the SBA.⁰

7. **Wired Telecommunications Carriers.** 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.⁰ According to Census Bureau data for 2007, there were 3,188 firms in this category, total, that operated for the entire year.⁰ Of this total, 3144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more.⁰ Thus, under this size standard, the majority of firms can be considered small.

8. **Local Exchange Carriers (LECs).** Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. 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.⁰ According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers.⁰ Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.⁰ Consequently, the Commission estimates that most providers of local exchange service are small entities that may be affected by the rules and policies proposed in the Order.

9. **Incumbent Local Exchange Carriers (incumbent LECs).** Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to incumbent local exchange services. 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.⁰ According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers.⁰ Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.⁰ Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by rules adopted pursuant to the Order

⁰ See SBA, Office of Advocacy, “Frequently Asked Questions,” http://www.sba.gov/sites/default/files/FAQ_March_2014_0.pdf (accessed July 2014).

⁰ 13 C.F.R. § 121.201, NAICS code 517110.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517110” (issued Nov. 2010).

⁰ See *id.*

⁰ 13 C.F.R. § 121.201, NAICS code 517110.

⁰ See Industry Analysis and Technology Division, Wireline Competition Bureau, , *Trends in Telephone Service*, at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*).

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517110.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

10. 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.”⁰ 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.⁰ We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

11. 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.⁰ 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.⁰ Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.⁰ 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.⁰ In addition, 72 carriers have reported that they are Other Local Service Providers.⁰ Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees.⁰ 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 that may be affected by rules adopted pursuant to the Order.

12. Interexchange Carriers (IXCs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to interexchange services. 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.⁰ According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange

⁰ 5 U.S.C. § 601(3).

⁰ See 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.” See 15 U.S.C. § 632(a); see also 5 U.S.C. § 601(3). SBA regulations interpret “small business concern” to include the concept of dominance on a national basis. See 13 C.F.R. § 121.102(b).

⁰ See 13 C.F.R. § 121.201, NAICS code 517110.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See *id.*

⁰ See *id.*

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517110.

services.⁰ Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees.⁰ Consequently, the Commission estimates that the majority of interexchange service providers are small entities that may be affected by rules adopted pursuant to the Order.

13. 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.⁰ According to Commission data, 193 carriers have reported that they are engaged in the provision of prepaid calling cards.⁰ Of these, an estimated all 193 have 1,500 or fewer employees and none have more than 1,500 employees.⁰ Consequently, the Commission estimates that the majority of prepaid calling card providers are small entities that may be affected by rules adopted pursuant to the Order.

14. Local 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.⁰ According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services.⁰ Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees.⁰ Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by rules adopted pursuant to the Order.

15. 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.⁰ According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services.⁰ Of these, an estimated 857 have 1,500 or fewer employees and 24 have more than 1,500 employees.⁰ Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by rules adopted pursuant to the Order.

16. 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

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517911.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517911.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517911.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁰ According to Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage.⁰ Of these, an estimated 279 have 1,500 or fewer employees and five have more than 1,500 employees.⁰ Consequently, the Commission estimates that most Other Toll Carriers are small entities that may be affected by the rules and policies adopted pursuant to the Order.

17. 800 and 800-Like Service Subscribers.⁰ 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.⁰ 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.⁰ 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 7,867,736.⁰ 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.

18. Wireless Telecommunications Carriers (except Satellite). Since 2007, the SBA has recognized wireless firms within this new, broad, economic census category.⁰ Prior to that time, such firms were within the now-superseded categories of Paging and Cellular and Other Wireless Telecommunications.⁰ Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.⁰ For this category, census data for 2007 show that there were

⁰ See 13 C.F.R. § 121.201, NAICS code 517110.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ We include all toll-free number subscribers in this category, including those for 888 numbers.

⁰ See 13 C.F.R. § 121.201, NAICS code 517911.

⁰ See *Trends in Telephone Service* at Tables 18.7-18.10.

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

⁰ U.S. Census Bureau, 2002 NAICS Definitions, “517211 Paging”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

⁰ 13 C.F.R. § 121.201, NAICS code 517210. The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

1,383 firms that operated for the entire year.⁰ Of this total, 1,368 firms had employment of 999 or fewer employees and 15 had employment of 1000 employees or more.⁰ Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services.⁰ Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.⁰ Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

19. Broadband Personal Communications Service. The broadband personal communications service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined “small entity” for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁰ For Block F, an additional classification 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.⁰ These standards defining “small entity” in the context of broadband PCS auctions have been approved by the SBA.⁰ 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 qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁰ In 1999, the Commission re-auctioned 347 C, E, and F Block licenses.⁰ There were 48 small business winning bidders. In 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction 35.⁰ Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events,

⁰ U.S. Census Bureau, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517210” (issued Nov. 2010).

⁰ *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 “100 employees or more.”

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See generally *Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, GN Docket No. 90-314, Report and Order, 11 FCC Rcd 7824 (1996) (*Broadband PCS Auction Order*); see also 47 C.F.R. § 24.720(b)(1).

⁰ See generally *Broadband PCS Auction Order*; see also 47 C.F.R. § 24.720(b)(2).

⁰ See, e.g., *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5532 (1994).

⁰ See FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 71744 (rel. Jan. 14, 1997). See also *Amendment of the Commission’s Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees*, WT Docket No. 97-82, Second Report and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd 16436 (1997).

⁰ See *C, D, E, and F Block Broadband PCS Auction Closes*, Public Notice, 14 FCC Rcd 6688 (Wireless Tel. Bur. 1999).

concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In 2005, the Commission completed an auction of 188 C block licenses and 21 F block licenses in Auction 58. There were 24 winning bidders for 217 licenses.⁰ Of the 24 winning bidders, 16 claimed small business status and won 156 licenses. In 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction 71.⁰ Of the 14 winning bidders, six were designated entities.⁰ In 2008, the Commission completed an auction of 20 Broadband PCS licenses in the C, D, E and F block licenses in Auction 78.⁰

20. Advanced Wireless Services. In 2008, the Commission conducted the auction of Advanced Wireless Services (“AWS”) licenses.⁰ This auction, which as designated as Auction 78, offered 35 licenses in the AWS 1710-1755 MHz and 2110-2155 MHz bands (AWS-1). The AWS-1 licenses were licenses for which there were no winning bids in Auction 66. That same year, the Commission completed Auction 78. A bidder with attributed average annual gross revenues that exceeded \$15 million and did not exceed \$40 million for the preceding three years (“small business”) received a 15 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed \$15 million for the preceding three years (“very small business”) received a 25 percent discount on its winning bid. A bidder that had combined total assets of less than \$500 million and combined gross revenues of less than \$125 million in each of the last two years qualified for entrepreneur status.⁰ Four winning bidders that identified themselves as very small businesses won 17 licenses.⁰ Three of the winning bidders that identified themselves as a small business won five licenses. Additionally, one other winning bidder that qualified for entrepreneur status won 2 licenses.

21. Narrowband Personal Communications Services. In 1994, the Commission conducted an auction for Narrowband PCS licenses. A second auction was also conducted later in 1994. For purposes of the first two Narrowband PCS auctions, “small businesses” were entities with average gross revenues for the prior three calendar years of \$40 million or less.⁰ Through these auctions, the Commission

⁰ See *C and F Block Broadband PCS Auction Closes; Winning Bidders Announced*, Public Notice, 16 FCC Rcd 2339 (Wireless Tel. Bur. 2001).

⁰ See *Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58*, Public Notice, 20 FCC Rcd 3703 (Wireless Tel. Bur. 2005).

⁰ See *Auction of Broadband PCS Spectrum Licenses Closes; Winning Bidders Announced for Auction No. 71*, Public Notice, 22 FCC Rcd 9247 (Wireless Tel. Bur. 2007).

⁰ *Id.*

⁰ See *Auction of AWS-1 and Broadband PCS Licenses Rescheduled For August 13, 3008, Notice of Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures For Auction 78*, AU Docket No. 08-46, Public Notice, 23 FCC Rcd 7496 (Wireless Tel. Bur. 2008).

⁰ See *id.* Auction 78 also included an auction of Broadband PCS licenses.

⁰ *Id.* at 7521-22.

⁰ See *Auction of AWS-1 and Broadband PCS Licenses Closes, Winning Bidders Announced for Auction 78*, Public Notice, 23 FCC Rcd 12749 (Wireless Tel. Bur. 2008).

⁰ *Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS*, PP Docket No. 93-253, GEN Docket No. 90-314, ET Docket No. 92-100, Third Memorandum Opinion and Order and Further

awarded a total of 41 licenses, 11 of which were obtained by four small businesses.⁰ To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.⁰ 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.⁰ A “very 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 \$15 million.⁰ The SBA has approved these small business size standards.⁰ A third auction was conducted in 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.⁰ Three of these claimed status as a small or very small entity and won 311 licenses.

22. Paging (Private and Common Carrier). In the *Paging Third Report and Order*, we 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.⁰ 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.⁰ According to Commission data, 291 carriers have reported that they are engaged in Paging or Messaging Service.⁰ Of these, an estimated 289 have 1,500 or fewer employees, and two have more than 1,500 employees.⁰ Consequently, the Commission estimates that the majority of paging providers are

Notice of Proposed Rulemaking, 10 FCC Rcd 175, 196, para. 46 (1994).

⁰ See *Announcing the High Bidders in the Auction of Ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674*, Public Notice, PNWL 94-004 (rel. Aug. 2, 1994); *Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787*, Public Notice, PNWL 94-27 (rel. Nov. 9, 1994).

⁰ *Amendment of the Commission’s Rules to Establish New Personal Communications Services*, GEN Docket No. 90-314, ET Docket No. 92-100, PP Docket No. 93-253, Narrowband PCS, Second Report and Order and Second Further Notice of Proposed Rule Making, 15 FCC Rcd 10456, 10476, para. 40 (2000) (*Narrowband PCS Second Report and Order*).

⁰ *Id.*

⁰ *Id.*

⁰ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, SBA (Dec. 2, 1998) (*Alvarez Letter 1998*).

⁰ See *Narrowband PCS Auction Closes*, Public Notice, 16 FCC Rcd 18663 (Wireless Tel. Bur. 2001).

⁰ 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*)

⁰ See *Alvarez Letter 1998*.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

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.⁰ 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.⁰ 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.⁰ 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.⁰

23. 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, the SBA deems a wireless business to be small if it has 1,500 or fewer employees.⁰ The Commission estimates that nearly all such licensees are small businesses under the SBA’s small business size standard that may be affected by rules adopted pursuant to the Order.

24. 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*, we 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.⁰ 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

⁰ See *id.*

⁰ See *Lower and Upper Paging Band Auction Closes*, Public Notice, 16 FCC Rcd 21821 (Wireless Tel. Bur. 2002).

⁰ 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.

⁰ See *Auction of Lower and Upper Paging Bands Licenses Closes*, Public Notice, 25 FCC Rcd 18164 (Wireless Tel. Bur. 2010).

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

⁰ 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*).

preceding three years.⁰ 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.⁰ The SBA has approved these small business size standards.⁰ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.⁰ 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.⁰

25. Specialized Mobile Radio. The Commission awards small business bidding credits in auctions for Specialized Mobile Radio (“SMR”) geographic area licenses in the 800 MHz and 900 MHz bands to entities that had revenues of no more than \$15 million in each of the three previous calendar years.⁰ The Commission awards very small business bidding credits to entities that had revenues of no more than \$3 million in each of the three previous calendar years.⁰ The SBA has approved these small business size standards for the 800 MHz and 900 MHz SMR Services.⁰ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction was completed in 1996.⁰ 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.⁰ The 800 MHz SMR auction for the upper 200 channels was conducted in 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.⁰ A second auction for the 800 MHz band was conducted in 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.⁰

⁰ See *id.* at 11068–69, para. 291.

⁰ See *id.* at 11068–70, paras. 291–95.

⁰ See Letter from Aida Alvarez, Administrator, SBA, to D. Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (Jan. 6, 1998) (*Alvarez to Phythyon Letter 1998*).

⁰ See *Phase II 220 MHz Service Auction Closes*, Public Notice, 14 FCC Rcd 605 (Wireless Tel. Bur. 1998).

⁰ See *Phase II 220 MHz Service Spectrum Auction Closes*, Public Notice, 14 FCC Rcd 11218 (Wireless Tel. Bur. 1999).

⁰ 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

⁰ 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

⁰ See Letter from Aida Alvarez, Administrator, SBA, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (Aug. 10, 1999) (*Alvarez Letter 1999*).

⁰ *FCC Announces Winning Bidders in the Auction of 1,020 Licenses to Provide 900 MHz SMR in Major Trading Areas*, Public Notice, 11 FCC Rcd 18599 (Wireless Tel. Bur. 1996).

⁰ *Id.*

⁰ 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, 11 FCC Rcd 18637 (Wireless Tel. Bur. 1996).

⁰ See *Multi-Radio Service Auction Closes*, Public Notice, 17 FCC Rcd 1446 (Wireless Tel. Bur. 2002).

26. 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 qualified as small businesses under the \$15 million size standard.⁰ In an auction completed in 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded.⁰ Of the 22 winning bidders, 19 claimed small business status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

27. In addition, there are numerous incumbent site-by-site SMR licensees 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 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.⁰ We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is approved by the SBA.

28. 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”)).⁰ 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.⁰ 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 392 incumbent BRS licensees that are considered small entities.⁰

⁰ 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 (Wireless Tel. Bur. 2000).

⁰ See *800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced*, Public Notice, 16 FCC Rcd 1736 (Wireless Tel. Bur. 2000).

⁰ See generally 13 C.F.R. § 121.201, NAICS code 517210.

⁰ *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*, MM Docket No. 94-131 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589, 9593 para. 7 (1995).

⁰ 47 C.F.R. § 21.961(b)(1).

⁰ 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

After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission's rules. The Commission has adopted three levels of bidding credits for BRS: (i) a bidder with attributed average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years (small business) is eligible to receive 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) is eligible to receive 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) is eligible to receive a 35 percent discount on its winning bid.⁰ In 2009, the Commission conducted Auction 86, which offered 78 BRS licenses.⁰ Auction 86 concluded with ten bidders winning 61 licenses.⁰ Of the ten, two bidders claimed small business status and won 4 licenses; one bidder claimed very small business status and won three licenses; and two bidders claimed entrepreneur status and won six licenses.

29. In addition, the SBA's Cable Television Distribution Services small business size standard is applicable to EBS. There are presently 2,032 EBS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.⁰ Thus, we estimate that at least 1,932 licensees are small businesses. Since 2007, Cable Television Distribution Services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."⁰ The SBA defines a small business size standard for this category as any such firms having 1,500 or fewer employees. The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.⁰ Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees applicable standard is SBA's small business size standard.

⁰ 47 C.F.R. § 27.1218. See also *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, 8296 (Wireless Tel. Bur. 2009).

⁰ *Id.* at 8280.

⁰ *Auction of Broadband Radio Service Licenses Closes; Winning Bidders Announced for Auction 86*, Public Notice, 24 FCC Rcd 13572 (Wireless Tel. Bur. 2009).

⁰ The term "small entity" within SBREFA applies to small organizations (nonprofits) 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). We do not collect annual revenue data on EBS licensees.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers" (partial definition); <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

or more.⁰ Thus, under this size standard, the majority of firms can be considered small and may be affected by rules adopted pursuant to the Order.

30. 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.⁰ 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.⁰ 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.⁰ Additionally, the Lower 700 MHz Band had a third category of small business status for Metropolitan/Rural Service Area (“MSA/RSA”) licenses, identified as “entrepreneur” and 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.⁰ The SBA approved these small size standards.⁰ The Commission conducted an auction in 2002 of 740 Lower 700 MHz Band licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)). Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders.⁰ Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.⁰ The Commission conducted a second Lower 700 MHz Band auction in 2003 that included 256 licenses: 5 EAG licenses and 476 Cellular Market Area licenses.⁰ 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.⁰ In 2005, the Commission completed an auction of 5 licenses in the Lower 700 MHz Band, designated Auction 60. There were three winning bidders for five licenses. All three winning bidders claimed small business status.⁰

⁰ See *id.*

⁰ 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).

⁰ See *id.* at 1087-88, para. 172.

⁰ See *id.*

⁰ See *id.* at 1088, para. 173.

⁰ See *Alvarez Letter 1999*.

⁰ See *Lower 700 MHz Band Auction Closes; Winning Bidders Announced*, Public Notice, 17 FCC Rcd 17272 (Wireless Tel. Bur. 2002).

⁰ *Id.*

⁰ See *Lower 700 MHz Band Auction Closes; Winning Bidders Announced*, Public Notice, 18 FCC Rcd 11873 (Wireless Tel. Bur. 2003).

⁰ See *id.*

⁰ *Auction of Lower 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction No. 60*, Public Notice, 20 FCC Rcd 13424 (Wireless Tel. Bur. 2005).

31. In 2007, the Commission reexamined its rules governing the 700 MHz band in the *700 MHz Second Report and Order*.⁰ The *700 MHz Second Report and Order* revised the band plan for the commercial (including Guard Band) and public safety spectrum, adopted services rules, including stringent build-out requirements, an open platform requirement on the C Block, and a requirement on the D Block licensee to construct and operate a nationwide, interoperable wireless broadband network for public safety users.⁰ An auction of A, B and E block licenses in the Lower 700 MHz band was held in 2008.⁰ Twenty winning bidders claimed 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). Thirty three winning bidders claimed very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years). In 2011, the Commission conducted Auction 92, which offered 16 Lower 700 MHz band licenses that had been made available in Auction 73 but either remained unsold or were licenses on which a winning bidder defaulted. Two of the seven winning bidders in Auction 92 claimed very small business status, winning a total of four licenses.⁰

32. **Upper 700 MHz Band Licenses.** In the *700 MHz Second Report and Order*, the Commission revised its rules regarding Upper 700 MHz band licenses.⁰ In 2008, the Commission conducted Auction 73 in which C and D block licenses in the Upper 700 MHz band were available.⁰ Three winning bidders claimed very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years).

33. **700 MHz Guard Band Licensees.** In the *700 MHz Guard Band Order*, we adopted 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.⁰ A “small business” is an entity that, together with its affiliates and controlling principals, has average gross

⁰ See *Service Rules for the 698-746, 747-762 and 777-792 MHz Band, WT Docket No. 06-150, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephone, 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, WT Docket Nos. 96-86, 01-309, 03-264, 06-169, PS Docket No. 06-229, Second Report and Order, 22 FCC Rcd 15289 (2007) (700 MHz Second Report and Order).*

⁰ *Id.*

⁰ See *Auction of 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction 73*, Public Notice, 23 FCC Rcd 4572 (Wireless Tel. Bur. 2008) (*Auction 73 Closure PN*).

⁰ See *Auction of 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction 92*, Public Notice, 26 FCC Rcd 10494 (Wireless Tel. Bur. 2011).

⁰ *700 MHz Second Report and Order.*

⁰ See *Auction 73 Closure PN*.

⁰ See *Service Rules for the 746-764 and 776-794 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) (*700 MHz Guard Band Order*).

revenues not exceeding \$40 million for the preceding three years.⁰ 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.⁰ An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.⁰ Of the 104 licenses auctioned, 96 licenses were sold to 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.⁰

34. 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.⁰ Bidding credits for designated entities were not available in Auction 77.⁰ 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 \$25,002.⁰

35. 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.⁰ 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.⁰

⁰ See *id.* at 5343–45, paras. 106–10.

⁰ See *id.*

⁰ See *700 MHz Guard Band Auction Closes; Winning Bidders Announced*, Public Notice, 15 FCC Rcd 18026 (Wireless Tel. Bur. 2000).

⁰ See *700 MHz Guard Bands Auction Closes; Winning Bidders Announced*, Public Notice, 16 FCC Rcd 4590 (Wireless Tel. Bur. 2001).

⁰ 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 (Wireless Tel. Bur. 2008).

⁰ *Id.* at 6685.

⁰ 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).

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

36. 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.

37. Rural Radiotelephone Service. The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.⁰ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).⁰ 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.⁰ 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 that may be affected by the rules and policies proposed herein.

38. Air-Ground Radiotelephone Service. The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.⁰ We will use SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), i.e., an entity employing no more than 1,500 persons.⁰ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard and may be affected by rules adopted pursuant to the Order.

39. 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.⁰ Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.⁰ Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. 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

⁰ See generally 13 C.F.R. § 121.201.

⁰ The service is defined in 47 C.F.R. § 22.99.

⁰ BETRS is defined in 47 C.F.R. §§ 22.757, 22.759.

⁰ 13 C.F.R. § 121.201, NAICS code 517210.

⁰ See 47 C.F.R. § 22.99.

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

⁰ U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

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 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.⁰ 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.⁰ 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 and may be affected by rules adopted pursuant to the Order.

40. Fixed Microwave Services. Fixed microwave services include common carrier,⁰ private operational-fixed,⁰ and broadcast auxiliary radio services.⁰ At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.⁰ 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 22,015 common carrier fixed licensees and up to 61,670 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 includes some large entities.

⁰ 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).

⁰ See *id.*

⁰ See 47 C.F.R. §§ 101 *et seq.* (formerly, Part 21 of the Commission’s Rules) for common carrier fixed microwave services (except Multipoint Distribution Service).

⁰ Persons eligible under parts 80 and 90 of the Commission’s Rules can use Private Operational-Fixed Microwave services. See 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee’s commercial, industrial, or safety operations.

⁰ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission’s Rules. See 47 C.F.R. Part 74. This service is 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 television pickups, which relay signals from a remote location back to the studio.

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

41. **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.⁰ There are presently approximately 55 licensees in this service. 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). Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁰ Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.⁰ Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus, under this category and the associated small business size standard, the majority of firms can be considered small.

42. **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.⁰ 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.⁰ The SBA has approved these small business size standards.⁰ 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.

43. **Local Multipoint Distribution Service.** Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.⁰ The auction of the 986 LMDS licenses began and closed in 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.⁰ An additional small business size standard for “very small business” was added as an entity that, together with its affiliates, has average

⁰ This service is governed by Subpart I of Part 22 of the Commission's Rules. See 47 C.F.R. §§ 22.1001-22.1037.

⁰ *Id.*

⁰ U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

⁰ 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).

⁰ See *id.*

⁰ See Letter from Aida Alvarez, Administrator, SBA, to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission (Feb. 4, 1998).

⁰ See *Rulemaking to Amend Parts 1, 2, 21, 25, of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, Reallocate the 29.5-30.5 Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, CC Docket No. 92-297, Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making, 12 FCC Rcd 12545, 12689-90, para. 348 (1997).

⁰ See *id.*

gross revenues of not more than \$15 million for the preceding three calendar years.⁰ The SBA has approved these small business size standards in the context of LMDS auctions.⁰ There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. In 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small businesses winning that won 119 licenses.

44. 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.⁰ In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we 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.⁰ 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.⁰ These size standards will be used in future auctions of 218-219 MHz spectrum.

45. 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.⁰ The SBA has approved these definitions.⁰ 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.

46. 1670-1675 MHz Band. An auction for one license in the 1670-1675 MHz band was conducted in 2003. The Commission defined a “small business” as an entity with attributable average annual gross revenues of not more than \$40 million for the preceding three years and thus would be eligible for a 15 percent discount on its winning bid for the 1670-1675 MHz band license. Further, the

⁰ See *id.*

⁰ See *Alvarez to Phythyon Letter 1998*.

⁰ 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).

⁰ 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*).

⁰ See *id.*

⁰ *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).

⁰ See *Alvarez Letter 1998*.

Commission defined a “very small business” as an entity with attributable average annual gross revenues of not more than \$15 million for the preceding three years and thus would be eligible to receive a 25 percent discount on its winning bid for the 1670-1675 MHz band license. One license was awarded. The winning bidder was not a small entity.

47. **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).⁰ 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.

48. **24 GHz – Incumbent Licensees.** This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. For this service, the Commission uses the SBA small business size standard for the category “Wireless Telecommunications Carriers (except satellite),” which is 1,500 or fewer employees.⁰ To gauge small business prevalence for these cable services we must, however, use the most current census data. Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.⁰ Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. The Commission notes that the Census’ use of the classifications “firms” does not track the number of “licenses”. The Commission believes that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent⁰ and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

49. **24 GHz – Future Licensees.** With respect to new applicants in the 24 GHz band, the size standard for “small business” is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.⁰ “Very small business” in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.⁰ The SBA has approved

⁰ The service is defined in section 90.1301 *et seq.* of the Commission’s Rules, 47 C.F.R. § 90.1301 *et seq.*

⁰ 13 C.F.R. § 121.201, NAICS code 517210.

⁰ U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

⁰ Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

⁰ See *Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967 para. 77 (2000) (*24 GHz Order*); see also 47 C.F.R. § 101.538(a)(2).

these small business size standards.⁰ These size standards will apply to a future 24 GHz license auction, if held.

50. **Satellite Telecommunications.** Since 2007, the SBA has recognized satellite firms within this revised category, with a small business size standard of \$15 million.⁰ The most current Census Bureau data are from the economic census of 2007, and we will use those figures to gauge the prevalence of small businesses in this category. Those size standards are for the two census categories of “Satellite Telecommunications” and “Other Telecommunications.” Under the “Satellite Telecommunications” category, a business is considered small if it had \$15 million or less in average annual receipts.⁰ Under the “Other Telecommunications” category, a business is considered small if it had \$25 million or less in average annual receipts.⁰

51. The first category of Satellite Telecommunications “comprises establishments primarily engaged in providing point-to-point 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.”⁰ For this category, Census Bureau data for 2007 show that there were a total of 512 firms that operated for the entire year.⁰ Of this total, 464 firms had annual receipts of under \$10 million, and 18 firms had receipts of \$10 million to \$24,999,999.⁰ Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by rules adopted pursuant to the Order.

52. The second category of Other Telecommunications “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.”⁰ For this category, Census Bureau data for 2007 show that there were a total of 2,383 firms that operated for the entire year.⁰ Of this

⁰ See *24 GHz Order*, 15 FCC Rcd at 16967, para. 77; see also 47 C.F.R. § 101.538(a)(1).

⁰ See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

⁰ See 13 C.F.R. § 121.201, NAICS code 517410.

⁰ *Id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517919.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517410 Satellite Telecommunications”.

⁰ See 13 C.F.R. § 121.201, NAICS code 517410.

⁰ See *id.* An additional 38 firms had annual receipts of \$25 million or more.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517919 Other Telecommunications”, <http://www.census.gov/naics/2007/def/ND517919.HTM>.

⁰ See 13 C.F.R. § 121.201, NAICS code 517919.

total, 2,346 firms had annual receipts of under \$25 million.⁰ Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action.

53. Cable and Other Program Distribution. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.”⁰ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.⁰ According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.⁰ Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees or more.⁰ Thus, under this size standard, the majority of firms can be considered small and may be affected by rules adopted pursuant to the Order.

54. Cable Companies and Systems. 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.⁰ Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.⁰ In addition, under the Commission’s rules, a “small system” is a cable system serving 15,000 or fewer subscribers.⁰ Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517919” (issued Nov. 2010).

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers” (partial definition), <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

⁰ 13 C.F.R. § 121.201, NAICS code 517110.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

⁰ *See id.*

⁰ *See* 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. *See Implementation of Sections of the 1992 Cable Television Consumer Protection and Competition Act: Rate Regulation*, MM Docket Nos. 92-266, 93-215, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 para. 28 (1995).

⁰ These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, “Top 25 Cable/Satellite Operators,” pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, “Ownership of Cable Systems in the United States,” pages D-1805 to D-1857.

⁰ *See* 47 C.F.R. § 76.901(c).

additional 379 systems have 10,000-19,999 subscribers.⁰ Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the Order.

55. Cable System Operators. The Act 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 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000.”⁰ The Commission has determined that an operator serving fewer than 677,000 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.⁰ Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.⁰ 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,⁰ and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

56. Open Video Services. 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.⁰ The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,⁰ OVS falls within the SBA small business size standard covering cable services, which is “Wired Telecommunications Carriers.”⁰ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.⁰ Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees

⁰ WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, “U.S. Cable Systems by Subscriber Size,” page F-2 (data current as of Oct. 2005). The data do not include 718 systems for which classifying data were not available.

⁰ 47 U.S.C. § 543(m)(2); *see also* 47 C.F.R. § 76.901(f) & nn.1–3.

⁰ 47 C.F.R. § 76.901(f); *see FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, 16 FCC Rcd 2225 (Cable Services Bureau 2001).

⁰ These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, “Top 25 Cable/Satellite Operators,” pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, “Ownership of Cable Systems in the United States,” pages D-1805 to D-1857.

⁰ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority’s finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission’s rules.

⁰ 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*).

⁰ *See* 47 U.S.C. § 573.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers”; <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

or more.⁰ Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the Order. In addition, we note that the Commission has certified some OVS operators, with some now providing service.⁰ Broadband service providers (“BSPs”) are currently the only significant holders of OVS certifications or local OVS franchises.⁰ The Commission does not have 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.

57. Internet Service Providers. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.”⁰ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.⁰ According to Census Bureau data for 2007, there were 3,188 firms in this category, total, that operated for the entire year.⁰ Of this total, 3144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more.⁰ Thus, under this size standard, the majority of firms can be considered small. In addition, according to Census Bureau data for 2007, there were a total of 396 firms in the category Internet Service Providers (broadband) that operated for the entire year.⁰ Of this total, 394 firms had employment of 999 or fewer employees, and two firms had employment of 1000 employees or more.⁰ Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the Order.

58. Internet Publishing and Broadcasting and Web Search Portals. Our action may pertain to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

⁰ *See id.*

⁰ A list of OVS certifications may be found at <http://www.fcc.gov/mb/ovs/csovsccer.html>.

⁰ *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.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers” (partial definition), <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

⁰ 13 C.F.R. § 121.201, NAICS code 517110.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517110” (issued Nov. 2010).

⁰ *See id.*

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171103 (issued Nov. 2010).

⁰ *See id.*

services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the Census Bureau has identified firms that “primarily engaged in 1) publishing and/or broadcasting content on the Internet exclusively or 2) operating Web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (and known as Web search portals).”⁰ The SBA has developed a small business size standard for this category, which is: all such firms having 500 or fewer employees.⁰ According to Census Bureau data for 2007, there were 2,705 firms in this category that operated for the entire year.⁰ Of this total, 2,682 firms had employment of 499 or fewer employees, and 23 firms had employment of 500 employees or more.⁰ Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the Order.

59. Data Processing, Hosting, and Related Services. Entities in this category “primarily ... provid[e] infrastructure for hosting or data processing services.”⁰ The SBA has developed a small business size standard for this category; that size standard is \$25 million or less in average annual receipts.⁰ According to Census Bureau data for 2007, there were 8,060 firms in this category that operated for the entire year.⁰ Of these, 7,744 had annual receipts of under \$24,999,999.⁰ Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the Order.

60. All Other Information Services. The Census Bureau defines this industry as including “establishments primarily engaged in providing other information services (except news syndicates, libraries, archives, Internet publishing and broadcasting, and Web search portals).”⁰ Our action pertains to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that size standard is \$7.0 million or less in average annual receipts.⁰ According to Census Bureau data for 2007, there were

⁰ U.S. Census Bureau, “2007 NAICS Definitions: 519130 Internet Publishing and Broadcasting and Web Search Portals,” <http://www.naics.com/censusfiles/ND519130.HTM>.

⁰ See 13 C.F.R. § 121.201, NAICS code 519130.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 519130” (issued Nov. 2010).

⁰ *Id.*

⁰ U.S. Census Bureau, “2007 NAICS Definitions: 518210 Data Processing, Hosting, and Related Services”, <http://www.census.gov/naics/2007/def/NDEF518.HTM>.

⁰ See 13 C.F.R. § 121.201, NAICS code 518210.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 4, “Establishment and Firm Size: Receipts Size of Firms for the United States: 2007 NAICS Code 518210” (issued Nov. 2010).

⁰ *Id.*

⁰ U.S. Census Bureau, “2007 NAICS Definitions: 519190 All Other Information Services”, <http://www.census.gov/naics/2007/def/ND519190.HTM>.

⁰ See 13 C.F.R. § 121.201, NAICS code 519190.

367 firms in this category that operated for the entire year.⁰ Of these, 334 had annual receipts of under \$5.0 million, and an additional 11 firms had receipts of between \$5 million and \$9,999,999.

Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

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

61. In the Order, we establish three experiment types for which we will accept applications.⁰ We allocate \$75 million to projects that must propose to deploy a network capable of delivering 100 Mbps downstream/5 Mbps upstream while offering at least one service plan that provides 25 Mbps downstream/5 Mbps upstream to all locations within the selected census blocks, with no more than 100 milliseconds (ms) of latency. Recipients must provide usage and pricing that is reasonably comparable to usage and pricing available for comparable wireline offerings (i.e., those with similar speeds in urban areas). We also make \$15 million available for projects that would offer at least one service plan that provides 10 Mbps downstream/1 Mbps upstream to all locations within the selected census blocks. This service plan must offer at least 100 GB of usage, no more than 100 ms of latency, and meet the reasonable comparability benchmarks for the pricing of voice and broadband. Finally, we make \$10 million available for projects in extremely high-cost census blocks that propose to offer at least one service plan that provides 10 Mbps downstream/1 Mbps upstream, and 100 GB of usage at a rate that meets the reasonably comparable pricing benchmarks, with latency of 100 ms, or, in the case of satellite providers, a Mean Opinion Score of four or better. If an entity wins support for one of these categories, it will be required to meet these public service obligations, or will be found in default and subject to certain compliance measures as described in the Order.

62. To participate in the rural broadband experiments, entities must submit a formal application to the Commission by no later than 90 days from the release of the Order.⁰ Entities will be required to submit confidential bids requesting a certain amount of support to serve specified census blocks (including the census block ID for each census block they propose to serve, the number of eligible locations determined by the model in each of those blocks, and the total amount of support they request). They will also be required to provide information regarding any agreements or joint bidding arrangements with other parties, disclose any ownership interests in Commission-regulated companies, declare whether their project will serve only Tribal census blocks, submit a proposal containing basic information that will be made public if they win (e.g., background information on the applicant and its qualifications to provide voice and broadband service, a description of the proposed project, service area, planned service offerings including offerings to low-income consumers, and technology to be used; and the number of locations, including community anchor institutions, within the project area), and certify that they meet certain threshold requirements, including being in compliance with all the statutory and regulatory requirements to receive support and being financially and technically capable of meeting the required public interest

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 4, "Establishment and Firm Size: Receipts Size of Firms for the United States: 2007 NAICS Code 519190" (issued Nov. 2010).

⁰ See *supra* Section III.C.3.

⁰ See *supra* Section III.D.3.

obligations in each area they seek support. All entities submitting proposals must also utilize a FCC Registration Number and identify the type of project for which they are submitting a proposal.

63. Winning bidders will be required to demonstrate that they have the technical and financial qualifications to successfully complete their proposed project within the required timeframes and that they are in compliance with all the statutory and regulatory requirements for the universal service support they seek.⁰ The Commission staff will perform a review to ensure that the applications meet our expectations for technical and financial capability. Within 10 business days of public notice of winning bidders, the winning bidders will be required to submit three consecutive years of audited financial statements (including balance sheets, net income, and cash flow), a description of the technology and system design used to deliver voice and broadband service, including a network diagram certified by a professional engineer, and a description of spectrum access in the areas for which applicants seek support for wireless technologies. Within 60 days of public notice of winning bidders, the winning bidders must submit a letter from an acceptable bank committing to issue an irrevocable stand-by original LOC. That LOC must remain open and renewed until 120 days after the end of the tenth year of the support term. Within 90 days of public notice of winning bidders, the winning bidders must provide appropriate documentation of their eligible telecommunications carrier (ETC) designation in all areas for which they will receive support and certify that the information submitted is accurate.

64. Once a winning bidder has been found to have met the Commission's technical and financial requirements and has secured the required ETC designation and LOC commitment letter, the Bureau will release a public notice stating that the entity is ready to be authorized to receive support. Within 10 business days of this public notice, the entity must submit an irrevocable stand-by original LOC that has been issued and signed by the issuing bank along with an opinion letter from legal counsel. Once USAC has verified the sufficiency of the LOC, the Bureau will issue a public notice authorizing the entity to begin receiving support.

65. The winning bidders must meet several conditions to receive rural broadband experiment support.⁰ First, like all recipients of Connect America support, they must meet certain build-out requirements. Recipients must deploy to 85 percent of the required number of their locations within three years of their first disbursement and 100 percent of the required number of their locations within five years of their first disbursement with service meeting the service obligations required by the relevant experiment category. Entities that choose to receive 30 percent of their support upfront must meet an additional build-out requirement of 25 percent of the required number of their locations within 15 months of the first disbursement, and then must meet the same build-out requirements as recipients not requesting upfront support (85 percent of locations within three years and 100 percent within five years). All recipients must submit a certification that they have met these milestones, accompanied by evidence. The evidence may include the evidence that they submit with their November 1st build-out report, as described below.

⁰ See *supra* Section III.D.4.

⁰ See *supra* Section III.E.1.

66. Second, we require that recipients comply with several accountability measures.⁰ Like all recipients of Connect America support, they must file annual reports by July 1st of each year pursuant to section 54.313(a) of the Commission's rules, starting the first July after the year in which they begin receiving support.⁰ These reports must also include a certification regarding their compliance with the Commission's latency standard, or Mean Opinion Score, as applicable; the number, names, and addresses of the community anchor institutions to which they newly began providing access to broadband service in the preceding year; and build-out information including evidence demonstrating which locations they have built out to in their project areas where the recipient is offering services that meet the public service obligations adopted for the relevant experiment category along with evidence that demonstrates they are meeting the public service obligations (e.g., marketing materials that detail the pricing, offered broadband speed, and data usage allowances available in the relevant geographic area).

67. To ensure that we are able to monitor how experiment recipients are using their funds for their intended purposes, we also require them to file a one-time report on November 1st of the year they begin receiving support. This report must describe the status of their project (such as whether vendors have been hired, permits have been obtained, and construction begun) and include evidence demonstrating which locations (if any) to which they have built out to in their project areas where they are offering services that meet the public service obligations for the relevant experiment category, along with evidence that the public service obligations are being met (e.g., marketing materials and a latency certification).

68. Like all recipients of Connect America support, all rural broadband experiment recipients that have been designated as ETCs by the Commission are required to file an annual certification pursuant to section 54.314 of the Commission's rules.⁰ If an entity selected for a rural broadband experiment is designated an ETC by a state, that state must file this certification on behalf of the entity selected for the rural broadband experiment. We also require recipients to certify when they have met the build-out requirements defined above. With these certifications, they must submit the same build-out information that must be included in their annual reports: evidence demonstrating that they have built facilities to serve the required number of locations and evidence that demonstrates compliance with the relevant public service obligations, including a certification demonstrating compliance with the Commission's latency or alternative service quality requirement. All recipients are also subject to random compliance reviews, and will be subject to verification of their build-out compliance. Moreover, recipients are subject to a 10-year record retention requirement.

69. Finally, rural broadband recipients are required to cooperate with the Commission in any efforts to gather data that may help inform future decisions regarding the impact of technology transitions on achievement of our universal access objectives.⁰

⁰ See *supra* Section III.E.2.

⁰ 47 C.F.R. § 54.313(a). In the Order, we waive the require that rural broadband experiment recipients file progress reports on five-year service quality improvement plans. See *supra* Section III.E.2.

⁰ 47 C.F.R. § 54.314.

⁰ See *supra* Section III.E.3

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

70. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its approach, which may include the following four alternatives, among others: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for 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.⁰

71. We adopt a streamlined application process to encourage a wide variety of entities, including small entities, to participate so that we can learn from the applications that are submitted.⁰ We struck a balance between requiring enough information to prompt bidders to take appropriate steps to determine that their projects are financially viable before submitting bids, but also minimizing the resources that entities need to spend upfront in case they do not win support. We do not require that entities undergo a full scale technical and financial review and obtain a LOC and ETC designation until they have been announced as winning bidders. Even after they have been announced winning bidders, the information we require to conduct such a review is information we expect winning bidders will already have on hand (e.g., audited financial statements) or will have developed as a result of planning their project (e.g., a network diagram certified by an engineer and a description of spectrum access).

72. We recognize that some entities, including small entities, may not be able to submit proposals at the census tract level, but would be interested in submitting proposals for smaller neighborhoods that they may already be well positioned to serve. We waive this requirement for those entities, and permit them to submit proposals on the census block level.⁰ Recipients also have the choice of receiving 30 percent of their support upfront.⁰ This option provides the flexibility to all participating entities, including small entities, to receive more support upfront, or to receive their support spread out over a longer period time if they are unable to meet the 15-month interim build-out deadline.

73. We also adopt a bidding credit for entities, many of which may be small entities, who propose projects that will serve only Tribal census blocks.⁰ This 25 percent bidding credit will increase the likelihood that these entities will receive funding. And recognizing the unique challenges that Tribally-owned or -controlled entities may face in obtaining LOCs, we also provide a waiver process for those entities that are unable to obtain a LOC.

74. The accountability measures we adopt are also tailored to ensuring that rural broadband experiment support is used for its intended purpose and so that we can quickly gather data to inform our policy decisions.⁰ The measures we adopt are largely the same measures that are required of all recipients

⁰ 5 U.S.C. § 603.

⁰ See *supra* Section III.D.3.

⁰ See *supra* Section III.C.1.

⁰ See *supra* Section III.E.1.

⁰ See *supra* Section III.D.2.

⁰ See *supra* Section III.E.2.

of Connect America support, including annual reports and certifications. And we find that ensuring that all recipients are accountable in their use of rural broadband experiment support, including small entities, outweighs the burden of filing an extra build-out report on November 1st of their first funding year and of submitting evidence such as marketing materials to demonstrate compliance with public interest obligations with their annual reports, their November 1st build-out report, and with build-out certifications. Recipients are likely to have such information available to them as a regular course of business.

F. Report to Congress

75. 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 1996.⁰ In addition, the Commission will send a copy of the Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the Report and Order (or a summary thereof) will also be published in the Federal Register.⁰

APPENDIX C

Initial Regulatory Flexibility Act Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),⁰ the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Further Notice of Proposed Rulemaking (FNPRM). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the FNPRM provided on the first page of this document. The Commission will send a copy of the FNPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).⁰ In addition, the FNPRM and IRFA (or summaries thereof) will be published in the Federal Register.⁰

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

⁰ 5 U.S.C. § 801(a)(1)(A).

⁰ *See id.* § 604(b).

⁰ *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601–612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

⁰ *See* 5 U.S.C. § 603(a).

⁰ *See id.*

2. The Commission recognized in the *USF/ICC Transformation Order* that universal service is a shared federal and state responsibility, and that “it is critical to our reforms’ success that states remain key partners even as these programs evolve and traditional roles shift.”⁰ We remain committed to working with our state and other governmental partners to advance our mutually shared goals of preserving voice service and extending broadband-capable infrastructure to consumers across the nation. We thus wish to further explore how best to maximize the reach of our existing Connect America budget and leverage non-Federal governmental funding to extend broadband to as many households as possible. In the FNPRM we seek comment on how to create inducements for non-Federal governmental action to assist in the expansion of broadband.⁰ Specifically, we seek comment on providing bidding credits in the Phase II competitive bidding process to any bidder that is leveraging governmental support from non-Federal sources to lower the amount of funding requested from the Connect America Fund.

B. Legal Basis

3. The legal basis for any action that may be taken pursuant to the FNPRM is contained in sections 1, 2, 4(i), 214, 218-220, 254, 303(r), 403 of the Communications Act of 1934 as amended, and section 706 of the Telecommunications Act of 1996, 47 U.S.C. §§ 151, 152, 154(i), 214, 218-220, 254, 303(r), 403, and 1302, and sections 1.1 and 1.421 of the Commission’s rules, 47 C.F.R. §§ 1.1, 1.421.

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

4. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁰ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁰ In addition, the term “small business” has the same meaning as the term “small-business concern” under the Small Business Act.⁰ A “small-business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁰

⁰ See *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17671-72, para. 15 (2011) (*USF/ICC Transformation Order and/or FNPRM*); *aff’d sub nom. In re: FCC 11-161*, ___ F.3d ___, 2014 WL 2142106 (10th Cir. May 23, 2014).

⁰ See *supra* Section IV.

⁰ See 5 U.S.C. § 603(b)(3).

⁰ See 5 U.S.C. § 601(6).

⁰ 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.”

⁰ See 15 U.S.C. § 632.

5. **Small Businesses.** Nationwide, there are a total of approximately 28.2 million small businesses, according to the SBA.⁰

6. **Wired Telecommunications Carriers.** 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.⁰ According to Census Bureau data for 2007, there were 3,188 firms in this category, total, that operated for the entire year.⁰ Of this total, 3,144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more.⁰ Thus, under this size standard, the majority of firms can be considered small.

7. **Local Exchange Carriers (LECs).** Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. 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.⁰ According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers.⁰ Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.⁰ Consequently, the Commission estimates that most providers of local exchange service are small entities that may be affected by the rules and policies proposed in the FNPRM.

8. **Incumbent Local Exchange Carriers (incumbent LECs).** Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to incumbent local exchange services. 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.⁰ According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers.⁰ Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.⁰ Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by rules adopted pursuant to the FNPRM

⁰ See SBA, Office of Advocacy, “Frequently Asked Questions,” http://www.sba.gov/sites/default/files/FAQ_March_2014_0.pdf (accessed July 2014).

⁰ 13 C.F.R. § 121.201, NAICS code 517110.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517110” (issued Nov. 2010).

⁰ See *id.*

⁰ 13 C.F.R. § 121.201, NAICS code 517110.

⁰ See Industry Analysis and Technology Division, Wireline Competition Bureau, *Trends in Telephone Service*, at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*).

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517110.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

9. 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.”⁰ 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.⁰ We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

10. 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.⁰ 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.⁰ Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.⁰ 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.⁰ In addition, 72 carriers have reported that they are Other Local Service Providers.⁰ Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees.⁰ 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 that may be affected by rules adopted pursuant to the FNPRM.

11. Interexchange Carriers (IXCs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to interexchange services. 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.⁰ According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange

⁰ 5 U.S.C. § 601(3).

⁰ See 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.” See 15 U.S.C. § 632(a); see also 5 U.S.C. § 601(3). SBA regulations interpret “small business concern” to include the concept of dominance on a national basis. See 13 C.F.R. § 121.102(b).

⁰ See 13 C.F.R. § 121.201, NAICS code 517110.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See *id.*

⁰ See *id.*

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517110.

services.⁰ Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees.⁰ Consequently, the Commission estimates that the majority of interexchange service providers are small entities that may be affected by rules adopted pursuant to the FNPRM.

12. 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.⁰ According to Commission data, 193 carriers have reported that they are engaged in the provision of prepaid calling cards.⁰ Of these, an estimated all 193 have 1,500 or fewer employees and none have more than 1,500 employees.⁰ Consequently, the Commission estimates that the majority of prepaid calling card providers are small entities that may be affected by rules adopted pursuant to the FNPRM.

13. Local 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.⁰ According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services.⁰ Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees.⁰ Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by rules adopted pursuant to the FNPRM.

14. 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.⁰ According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services.⁰ Of these, an estimated 857 have 1,500 or fewer employees and 24 have more than 1,500 employees.⁰ Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by rules adopted pursuant to the FNPRM.

15. 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

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517911.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517911.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517911.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁰ According to Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage.⁰ Of these, an estimated 279 have 1,500 or fewer employees and five have more than 1,500 employees.⁰ Consequently, the Commission estimates that most Other Toll Carriers are small entities that may be affected by the rules and policies adopted pursuant to the FNPRM.

16. 800 and 800-Like Service Subscribers.⁰ 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.⁰ 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.⁰ 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 7,867,736.⁰ 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.

17. Wireless Telecommunications Carriers (except Satellite). Since 2007, the SBA has recognized wireless firms within this new, broad, economic census category.⁰ Prior to that time, such firms were within the now-superseded categories of Paging and Cellular and Other Wireless Telecommunications.⁰ Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.⁰ For this category, census data for 2007 show that there were

⁰ See 13 C.F.R. § 121.201, NAICS code 517110.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ We include all toll-free number subscribers in this category, including those for 888 numbers.

⁰ See 13 C.F.R. § 121.201, NAICS code 517911.

⁰ See *Trends in Telephone Service* at Tables 18.7-18.10.

⁰ See *id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

⁰ U.S. Census Bureau, 2002 NAICS Definitions, “517211 Paging”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

⁰ 13 C.F.R. § 121.201, NAICS code 517210. The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

1,383 firms that operated for the entire year.⁰ Of this total, 1,368 firms had employment of 999 or fewer employees and 15 had employment of 1000 employees or more.⁰ Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services.⁰ Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.⁰ Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

18. Broadband Personal Communications Service. The broadband personal communications service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined “small entity” for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁰ For Block F, an additional classification 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.⁰ These standards defining “small entity” in the context of broadband PCS auctions have been approved by the SBA.⁰ 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 qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁰ In 1999, the Commission re-auctioned 347 C, E, and F Block licenses.⁰ There were 48 small business winning bidders. In 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction 35.⁰ Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events,

⁰ U.S. Census Bureau, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517210” (issued Nov. 2010).

⁰ *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 “100 employees or more.”

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

⁰ See generally *Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, GN Docket No. 90-314, Report and Order, 11 FCC Rcd 7824 (1996) (*Broadband PCS Auction Order*); see also 47 C.F.R. § 24.720(b)(1).

⁰ See generally *Broadband PCS Auction Order*; see also 47 C.F.R. § 24.720(b)(2).

⁰ See, e.g., *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5532 (1994).

⁰ See FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 71744 (rel. Jan. 14, 1997). See also *Amendment of the Commission’s Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees*, WT Docket No. 97-82, Second Report and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd 16436 (1997).

⁰ See *C, D, E, and F Block Broadband PCS Auction Closes*, Public Notice, 14 FCC Rcd 6688 (Wireless Tel. Bur. 1999).

concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In 2005, the Commission completed an auction of 188 C block licenses and 21 F block licenses in Auction 58. There were 24 winning bidders for 217 licenses.⁰ Of the 24 winning bidders, 16 claimed small business status and won 156 licenses. In 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction 71.⁰ Of the 14 winning bidders, six were designated entities.⁰ In 2008, the Commission completed an auction of 20 Broadband PCS licenses in the C, D, E and F block licenses in Auction 78.⁰

19. Advanced Wireless Services. In 2008, the Commission conducted the auction of Advanced Wireless Services (“AWS”) licenses.⁰ This auction, which as designated as Auction 78, offered 35 licenses in the AWS 1710-1755 MHz and 2110-2155 MHz bands (AWS-1). The AWS-1 licenses were licenses for which there were no winning bids in Auction 66. That same year, the Commission completed Auction 78. A bidder with attributed average annual gross revenues that exceeded \$15 million and did not exceed \$40 million for the preceding three years (“small business”) received a 15 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed \$15 million for the preceding three years (“very small business”) received a 25 percent discount on its winning bid. A bidder that had combined total assets of less than \$500 million and combined gross revenues of less than \$125 million in each of the last two years qualified for entrepreneur status.⁰ Four winning bidders that identified themselves as very small businesses won 17 licenses.⁰ Three of the winning bidders that identified themselves as a small business won five licenses. Additionally, one other winning bidder that qualified for entrepreneur status won 2 licenses.

20. Narrowband Personal Communications Services. In 1994, the Commission conducted an auction for Narrowband PCS licenses. A second auction was also conducted later in 1994. For purposes of the first two Narrowband PCS auctions, “small businesses” were entities with average gross revenues for the prior three calendar years of \$40 million or less.⁰ Through these auctions, the Commission

⁰ See *C and F Block Broadband PCS Auction Closes; Winning Bidders Announced*, Public Notice, 16 FCC Rcd 2339 (Wireless Tel. Bur. 2001).

⁰ See *Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58*, Public Notice, 20 FCC Rcd 3703 (Wireless Tel. Bur. 2005).

⁰ See *Auction of Broadband PCS Spectrum Licenses Closes; Winning Bidders Announced for Auction No. 71*, Public Notice, 22 FCC Rcd 9247 (Wireless Tel. Bur. 2007).

⁰ *Id.*

⁰ See *Auction of AWS-1 and Broadband PCS Licenses Rescheduled For August 13, 3008, Notice of Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures For Auction 78*, AU Docket No. 08-46, Public Notice, 23 FCC Rcd 7496 (Wireless Tel. Bur. 2008).

⁰ See *id.* Auction 78 also included an auction of Broadband PCS licenses.

⁰ *Id.* at 7521-22.

⁰ See *Auction of AWS-1 and Broadband PCS Licenses Closes, Winning Bidders Announced for Auction 78*, Public Notice, 23 FCC Rcd 12749 (Wireless Tel. Bur. 2008).

⁰ *Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS*, PP Docket No. 93-253, GEN Docket No. 90-314, ET Docket No. 92-100, Third Memorandum Opinion and Order and Further

awarded a total of 41 licenses, 11 of which were obtained by four small businesses.⁰ To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.⁰ 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.⁰ A “very 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 \$15 million.⁰ The SBA has approved these small business size standards.⁰ A third auction was conducted in 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.⁰ Three of these claimed status as a small or very small entity and won 311 licenses.

21. Paging (Private and Common Carrier). In the *Paging Third Report and Order*, we 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.⁰ 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.⁰ According to Commission data, 291 carriers have reported that they are engaged in Paging or Messaging Service.⁰ Of these, an estimated 289 have 1,500 or fewer employees, and two have more than 1,500 employees.⁰ 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 Notice of Proposed Rulemaking, 10 FCC Rcd 175, 196, para. 46 (1994).

⁰ See *Announcing the High Bidders in the Auction of Ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674*, Public Notice, PNWL 94-004 (rel. Aug. 2, 1994); *Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787*, Public Notice, PNWL 94-27 (rel. Nov. 9, 1994).

⁰ *Amendment of the Commission’s Rules to Establish New Personal Communications Services*, GEN Docket No. 90-314, ET Docket No. 92-100, PP Docket No. 93-253, Narrowband PCS, Second Report and Order and Second Further Notice of Proposed Rule Making, 15 FCC Rcd 10456, 10476, para. 40 (2000) (*Narrowband PCS Second Report and Order*).

⁰ *Id.*

⁰ *Id.*

⁰ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, SBA (Dec. 2, 1998) (*Alvarez Letter 1998*).

⁰ See *Narrowband PCS Auction Closes*, Public Notice, 16 FCC Rcd 18663 (Wireless Tel. Bur. 2001).

⁰ 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*)

⁰ See *Alvarez Letter 1998*.

⁰ See *Trends in Telephone Service* at Table 5.3.

⁰ See *id.*

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.⁰ 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.⁰ 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.⁰ 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.⁰

22. 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, the SBA deems a wireless business to be small if it has 1,500 or fewer employees.⁰ The Commission estimates that nearly all such licensees are small businesses under the SBA’s small business size standard that may be affected by rules adopted pursuant to the FNPRM.

23. 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*, we 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.⁰ 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.⁰ 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

⁰ See *id.*

⁰ See *Lower and Upper Paging Band Auction Closes*, Public Notice, 16 FCC Rcd 21821 (Wireless Tel. Bur. 2002).

⁰ 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.

⁰ See *Auction of Lower and Upper Paging Bands Licenses Closes*, Public Notice, 25 FCC Rcd 18164 (Wireless Tel. Bur. 2010).

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

⁰ 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*).

years.⁰ The SBA has approved these small business size standards.⁰ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.⁰ 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.⁰

24. Specialized Mobile Radio. The Commission awards small business bidding credits in auctions for Specialized Mobile Radio (“SMR”) geographic area licenses in the 800 MHz and 900 MHz bands to entities that had revenues of no more than \$15 million in each of the three previous calendar years.⁰ The Commission awards very small business bidding credits to entities that had revenues of no more than \$3 million in each of the three previous calendar years.⁰ The SBA has approved these small business size standards for the 800 MHz and 900 MHz SMR Services.⁰ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction was completed in 1996.⁰ 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.⁰ The 800 MHz SMR auction for the upper 200 channels was conducted in 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.⁰ A second auction for the 800 MHz band was conducted in 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.⁰

⁰ See *id.* at 11068–69, para. 291.

⁰ See *id.* at 11068–70, paras. 291–95.

⁰ See Letter from Aida Alvarez, Administrator, SBA, to D. Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (Jan. 6, 1998) (*Alvarez to Phythyon Letter 1998*).

⁰ See *Phase II 220 MHz Service Auction Closes*, Public Notice, 14 FCC Rcd 605 (Wireless Tel. Bur. 1998).

⁰ See *Phase II 220 MHz Service Spectrum Auction Closes*, Public Notice, 14 FCC Rcd 11218 (Wireless Tel. Bur. 1999).

⁰ 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

⁰ 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

⁰ See Letter from Aida Alvarez, Administrator, SBA, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (Aug. 10, 1999) (*Alvarez Letter 1999*).

⁰ *FCC Announces Winning Bidders in the Auction of 1,020 Licenses to Provide 900 MHz SMR in Major Trading Areas*, Public Notice, 11 FCC Rcd 18599 (Wireless Tel. Bur. 1996).

⁰ *Id.*

⁰ 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, 11 FCC Rcd 18637 (Wireless Tel. Bur. 1996).

⁰ See *Multi-Radio Service Auction Closes*, Public Notice, 17 FCC Rcd 1446 (Wireless Tel. Bur. 2002).

25. 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 qualified as small businesses under the \$15 million size standard.⁰ In an auction completed in 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded.⁰ Of the 22 winning bidders, 19 claimed small business status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

26. In addition, there are numerous incumbent site-by-site SMR licensees 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 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.⁰ We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is approved by the SBA.

27. 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”)).⁰ 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.⁰ 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 392 incumbent BRS licensees that are considered small entities.⁰

⁰ 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 (Wireless Tel. Bur. 2000).

⁰ See *800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced*, Public Notice, 16 FCC Rcd 1736 (Wireless Tel. Bur. 2000).

⁰ See generally 13 C.F.R. § 121.201, NAICS code 517210.

⁰ *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*, MM Docket No. 94-131 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589, 9593 para. 7 (1995).

⁰ 47 C.F.R. § 21.961(b)(1).

⁰ 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

After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission's rules. The Commission has adopted three levels of bidding credits for BRS: (i) a bidder with attributed average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years (small business) is eligible to receive 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) is eligible to receive 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) is eligible to receive a 35 percent discount on its winning bid.⁰ In 2009, the Commission conducted Auction 86, which offered 78 BRS licenses.⁰ Auction 86 concluded with ten bidders winning 61 licenses.⁰ Of the ten, two bidders claimed small business status and won 4 licenses; one bidder claimed very small business status and won three licenses; and two bidders claimed entrepreneur status and won six licenses.

28. In addition, the SBA's Cable Television Distribution Services small business size standard is applicable to EBS. There are presently 2,032 EBS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.⁰ Thus, we estimate that at least 1,932 licensees are small businesses. Since 2007, Cable Television Distribution Services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."⁰ The SBA defines a small business size standard for this category as any such firms having 1,500 or fewer employees. The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.⁰ Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees applicable standard is SBA's small business size standard.

⁰ 47 C.F.R. § 27.1218. See also *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, 8296 (Wireless Tel. Bur. 2009).

⁰ *Id.* at 8280.

⁰ *Auction of Broadband Radio Service Licenses Closes; Winning Bidders Announced for Auction 86*, Public Notice, 24 FCC Rcd 13572 (Wireless Tel. Bur. 2009).

⁰ The term "small entity" within SBREFA applies to small organizations (nonprofits) 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). We do not collect annual revenue data on EBS licensees.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers" (partial definition); <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

or more.⁰ Thus, under this size standard, the majority of firms can be considered small and may be affected by rules adopted pursuant to the FNPRM.

29. **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.⁰ 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.⁰ 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.⁰ Additionally, the Lower 700 MHz Band had a third category of small business status for Metropolitan/Rural Service Area (“MSA/RSA”) licenses, identified as “entrepreneur” and 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.⁰ The SBA approved these small size standards.⁰ The Commission conducted an auction in 2002 of 740 Lower 700 MHz Band licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)). Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders.⁰ Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.⁰ The Commission conducted a second Lower 700 MHz Band auction in 2003 that included 256 licenses: 5 EAG licenses and 476 Cellular Market Area licenses.⁰ 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.⁰ In 2005, the Commission completed an auction of 5 licenses in the Lower 700 MHz Band, designated Auction 60. There were three winning bidders for five licenses. All three winning bidders claimed small business status.⁰

⁰ See *id.*

⁰ 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).

⁰ See *id.* at 1087-88, para. 172.

⁰ See *id.*

⁰ See *id.* at 1088, para. 173.

⁰ See *Alvarez Letter 1999*.

⁰ See *Lower 700 MHz Band Auction Closes; Winning Bidders Announced*, Public Notice, 17 FCC Rcd 17272 (Wireless Tel. Bur. 2002).

⁰ *Id.*

⁰ See *Lower 700 MHz Band Auction Closes; Winning Bidders Announced*, Public Notice, 18 FCC Rcd 11873 (Wireless Tel. Bur. 2003).

⁰ See *id.*

⁰ *Auction of Lower 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction No. 60*, Public Notice, 20 FCC Rcd 13424 (Wireless Tel. Bur. 2005).

30. In 2007, the Commission reexamined its rules governing the 700 MHz band in the *700 MHz Second Report and Order*.⁰ The *700 MHz Second Report and Order* revised the band plan for the commercial (including Guard Band) and public safety spectrum, adopted services rules, including stringent build-out requirements, an open platform requirement on the C Block, and a requirement on the D Block licensee to construct and operate a nationwide, interoperable wireless broadband network for public safety users.⁰ An auction of A, B and E block licenses in the Lower 700 MHz band was held in 2008.⁰ Twenty winning bidders claimed 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). Thirty three winning bidders claimed very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years). In 2011, the Commission conducted Auction 92, which offered 16 Lower 700 MHz band licenses that had been made available in Auction 73 but either remained unsold or were licenses on which a winning bidder defaulted. Two of the seven winning bidders in Auction 92 claimed very small business status, winning a total of four licenses.⁰

31. Upper 700 MHz Band Licenses. In the *700 MHz Second Report and Order*, the Commission revised its rules regarding Upper 700 MHz band licenses.⁰ In 2008, the Commission conducted Auction 73 in which C and D block licenses in the Upper 700 MHz band were available.⁰ Three winning bidders claimed very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years).

32. 700 MHz Guard Band Licensees. In the *700 MHz Guard Band Order*, we adopted 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.⁰ A “small business” is an entity that, together with its affiliates and controlling principals, has average gross

⁰ See *Service Rules for the 698-746, 747-762 and 777-792 MHz Band, WT Docket No. 06-150, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephone, 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, WT Docket Nos. 96-86, 01-309, 03-264, 06-169, PS Docket No. 06-229, Second Report and Order, 22 FCC Rcd 15289 (2007) (700 MHz Second Report and Order).*

⁰ *Id.*

⁰ See *Auction of 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction 73*, Public Notice, 23 FCC Rcd 4572 (Wireless Tel. Bur. 2008) (*Auction 73 Closure PN*).

⁰ See *Auction of 700 MHz Band Licenses Closes, Winning Bidders Announced for Auction 92*, Public Notice, 26 FCC Rcd 10494 (Wireless Tel. Bur. 2011).

⁰ *700 MHz Second Report and Order.*

⁰ See *Auction 73 Closure PN*.

⁰ See *Service Rules for the 746-764 and 776-794 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) (*700 MHz Guard Band Order*).

revenues not exceeding \$40 million for the preceding three years.⁰ 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.⁰ An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.⁰ Of the 104 licenses auctioned, 96 licenses were sold to 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.⁰

33. 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.⁰ Bidding credits for designated entities were not available in Auction 77.⁰ 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 \$25,002.⁰

34. 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.⁰ 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.⁰

⁰ See *id.* at 5343–45, paras. 106–10.

⁰ See *id.*

⁰ See *700 MHz Guard Band Auction Closes; Winning Bidders Announced*, Public Notice, 15 FCC Rcd 18026 (Wireless Tel. Bur. 2000).

⁰ See *700 MHz Guard Bands Auction Closes; Winning Bidders Announced*, Public Notice, 16 FCC Rcd 4590 (Wireless Tel. Bur. 2001).

⁰ 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 (Wireless Tel. Bur. 2008).

⁰ *Id.* at 6685.

⁰ 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).

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

35. 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.

36. Rural Radiotelephone Service. The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.⁰ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).⁰ 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.⁰ 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 that may be affected by the rules and policies proposed herein.

37. Air-Ground Radiotelephone Service. The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.⁰ We will use SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), i.e., an entity employing no more than 1,500 persons.⁰ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard and may be affected by rules adopted pursuant to the FNPRM.

38. 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.⁰ Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.⁰ Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. 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

⁰ See generally 13 C.F.R. § 121.201.

⁰ The service is defined in 47 C.F.R. § 22.99.

⁰ BETRS is defined in 47 C.F.R. §§ 22.757, 22.759.

⁰ 13 C.F.R. § 121.201, NAICS code 517210.

⁰ See 47 C.F.R. § 22.99.

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

⁰ U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

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 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.⁰ 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.⁰ 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 and may be affected by rules adopted pursuant to the FNPRM.

39. Fixed Microwave Services. Fixed microwave services include common carrier,⁰ private operational-fixed,⁰ and broadcast auxiliary radio services.⁰ At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.⁰ 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 22,015 common carrier fixed licensees and up to 61,670 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 includes some large entities.

⁰ 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).

⁰ See *id.*

⁰ See 47 C.F.R. §§ 101 *et seq.* (formerly, Part 21 of the Commission’s Rules) for common carrier fixed microwave services (except Multipoint Distribution Service).

⁰ Persons eligible under parts 80 and 90 of the Commission’s Rules can use Private Operational-Fixed Microwave services. See 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee’s commercial, industrial, or safety operations.

⁰ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission’s Rules. See 47 C.F.R. Part 74. This service is 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 television pickups, which relay signals from a remote location back to the studio.

⁰ See 13 C.F.R. § 121.201, NAICS code 517210.

40. **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.⁰ There are presently approximately 55 licensees in this service. 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). Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁰ Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.⁰ Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus, under this category and the associated small business size standard, the majority of firms can be considered small.

41. **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.⁰ 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.⁰ The SBA has approved these small business size standards.⁰ 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 FNPRM.

42. **Local Multipoint Distribution Service.** Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.⁰ The auction of the 986 LMDS licenses began and closed in 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.⁰ An additional small business size standard for “very small business” was added as an entity that, together with its affiliates, has average

⁰ This service is governed by Subpart I of Part 22 of the Commission's Rules. See 47 C.F.R. §§ 22.1001-22.1037.

⁰ *Id.*

⁰ U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

⁰ 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).

⁰ See *id.*

⁰ See Letter from Aida Alvarez, Administrator, SBA, to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission (Feb. 4, 1998).

⁰ See *Rulemaking to Amend Parts 1, 2, 21, 25, of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, Reallocate the 29.5-30.5 Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, CC Docket No. 92-297, Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making, 12 FCC Rcd 12545, 12689-90, para. 348 (1997).

⁰ See *id.*

gross revenues of not more than \$15 million for the preceding three calendar years.⁰ The SBA has approved these small business size standards in the context of LMDS auctions.⁰ There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. In 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small businesses winning that won 119 licenses.

43. 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.⁰ In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we 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.⁰ 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.⁰ These size standards will be used in future auctions of 218-219 MHz spectrum.

44. 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.⁰ The SBA has approved these definitions.⁰ 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.

45. 1670-1675 MHz Band. An auction for one license in the 1670-1675 MHz band was conducted in 2003. The Commission defined a “small business” as an entity with attributable average annual gross revenues of not more than \$40 million for the preceding three years and thus would be eligible for a 15 percent discount on its winning bid for the 1670-1675 MHz band license. Further, the

⁰ See *id.*

⁰ See *Alvarez to Phythyon Letter 1998*.

⁰ 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).

⁰ 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*).

⁰ See *id.*

⁰ *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).

⁰ See *Alvarez Letter 1998*.

Commission defined a “very small business” as an entity with attributable average annual gross revenues of not more than \$15 million for the preceding three years and thus would be eligible to receive a 25 percent discount on its winning bid for the 1670-1675 MHz band license. One license was awarded. The winning bidder was not a small entity.

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).⁰ 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. **24 GHz – Incumbent Licensees.** This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. For this service, the Commission uses the SBA small business size standard for the category “Wireless Telecommunications Carriers (except satellite),” which is 1,500 or fewer employees.⁰ To gauge small business prevalence for these cable services we must, however, use the most current census data. Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.⁰ Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. The Commission notes that the Census’ use of the classifications “firms” does not track the number of “licenses”. The Commission believes that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent⁰ and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

48. **24 GHz – Future Licensees.** With respect to new applicants in the 24 GHz band, the size standard for “small business” is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.⁰ “Very small business” in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.⁰ The SBA has approved

⁰ The service is defined in section 90.1301 *et seq.* of the Commission’s Rules, 47 C.F.R. § 90.1301 *et seq.*

⁰ 13 C.F.R. § 121.201, NAICS code 517210.

⁰ U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

⁰ Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

⁰ See *Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967 para. 77 (2000) (*24 GHz Order*); see also 47 C.F.R. § 101.538(a)(2).

these small business size standards.⁰ These size standards will apply to a future 24 GHz license auction, if held.

49. **Satellite Telecommunications.** Since 2007, the SBA has recognized satellite firms within this revised category, with a small business size standard of \$15 million.⁰ The most current Census Bureau data are from the economic census of 2007, and we will use those figures to gauge the prevalence of small businesses in this category. Those size standards are for the two census categories of “Satellite Telecommunications” and “Other Telecommunications.” Under the “Satellite Telecommunications” category, a business is considered small if it had \$15 million or less in average annual receipts.⁰ Under the “Other Telecommunications” category, a business is considered small if it had \$25 million or less in average annual receipts.⁰

50. The first category of Satellite Telecommunications “comprises establishments primarily engaged in providing point-to-point 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.”⁰ For this category, Census Bureau data for 2007 show that there were a total of 512 firms that operated for the entire year.⁰ Of this total, 464 firms had annual receipts of under \$10 million, and 18 firms had receipts of \$10 million to \$24,999,999.⁰ Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by rules adopted pursuant to the FNPRM.

51. The second category of Other Telecommunications “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.”⁰ For this category, Census Bureau data for 2007 show that there were a total of 2,383 firms that operated for the entire year.⁰ Of this

⁰ See *24 GHz Order*, 15 FCC Rcd at 16967, para. 77; see also 47 C.F.R. § 101.538(a)(1).

⁰ See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

⁰ See 13 C.F.R. § 121.201, NAICS code 517410.

⁰ *Id.*

⁰ See 13 C.F.R. § 121.201, NAICS code 517919.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517410 Satellite Telecommunications”.

⁰ See 13 C.F.R. § 121.201, NAICS code 517410.

⁰ See *id.* An additional 38 firms had annual receipts of \$25 million or more.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517919 Other Telecommunications”, <http://www.census.gov/naics/2007/def/ND517919.HTM>.

⁰ See 13 C.F.R. § 121.201, NAICS code 517919.

total, 2,346 firms had annual receipts of under \$25 million.⁰ Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action.

52. Cable and Other Program Distribution. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.”⁰ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.⁰ According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.⁰ Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees or more.⁰ Thus, under this size standard, the majority of firms can be considered small and may be affected by rules adopted pursuant to the FNPRM.

53. Cable Companies and Systems. 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.⁰ Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.⁰ In addition, under the Commission’s rules, a “small system” is a cable system serving 15,000 or fewer subscribers.⁰ Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517919” (issued Nov. 2010).

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers” (partial definition), <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

⁰ 13 C.F.R. § 121.201, NAICS code 517110.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

⁰ *See id.*

⁰ *See* 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. *See Implementation of Sections of the 1992 Cable Television Consumer Protection and Competition Act: Rate Regulation*, MM Docket Nos. 92-266, 93-215, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 para. 28 (1995).

⁰ These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, “Top 25 Cable/Satellite Operators,” pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, “Ownership of Cable Systems in the United States,” pages D-1805 to D-1857.

⁰ *See* 47 C.F.R. § 76.901(c).

additional 379 systems have 10,000-19,999 subscribers.⁰ Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the FNPRM.

54. Cable System Operators. The Act 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 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000.”⁰ The Commission has determined that an operator serving fewer than 677,000 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.⁰ Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.⁰ 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,⁰ and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

55. Open Video Services. 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.⁰ The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,⁰ OVS falls within the SBA small business size standard covering cable services, which is “Wired Telecommunications Carriers.”⁰ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.⁰ Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees

⁰ WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, “U.S. Cable Systems by Subscriber Size,” page F-2 (data current as of Oct. 2005). The data do not include 718 systems for which classifying data were not available.

⁰ 47 U.S.C. § 543(m)(2); *see also* 47 C.F.R. § 76.901(f) & nn.1–3.

⁰ 47 C.F.R. § 76.901(f); *see FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, 16 FCC Rcd 2225 (Cable Services Bureau 2001).

⁰ These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, “Top 25 Cable/Satellite Operators,” pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, “Ownership of Cable Systems in the United States,” pages D-1805 to D-1857.

⁰ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority’s finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission’s rules.

⁰ 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*).

⁰ *See* 47 U.S.C. § 573.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers”; <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

or more.⁰ Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the FNPRM. In addition, we note that the Commission has certified some OVS operators, with some now providing service.⁰ Broadband service providers (“BSPs”) are currently the only significant holders of OVS certifications or local OVS franchises.⁰ The Commission does not have 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.

56. Internet Service Providers. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.”⁰ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.⁰ According to Census Bureau data for 2007, there were 3,188 firms in this category, total, that operated for the entire year.⁰ Of this total, 3144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more.⁰ Thus, under this size standard, the majority of firms can be considered small. In addition, according to Census Bureau data for 2007, there were a total of 396 firms in the category Internet Service Providers (broadband) that operated for the entire year.⁰ Of this total, 394 firms had employment of 999 or fewer employees, and two firms had employment of 1000 employees or more.⁰ Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the FNPRM.

57. Internet Publishing and Broadcasting and Web Search Portals. Our action may pertain to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

⁰ *See id.*

⁰ A list of OVS certifications may be found at <http://www.fcc.gov/mb/ovs/csovsccer.html>.

⁰ *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.

⁰ U.S. Census Bureau, 2007 NAICS Definitions, “517110 Wired Telecommunications Carriers” (partial definition), <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

⁰ 13 C.F.R. § 121.201, NAICS code 517110.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517110” (issued Nov. 2010).

⁰ *See id.*

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171103 (issued Nov. 2010).

⁰ *See id.*

services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the Census Bureau has identified firms that “primarily engaged in 1) publishing and/or broadcasting content on the Internet exclusively or 2) operating Web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (and known as Web search portals).”⁰ The SBA has developed a small business size standard for this category, which is: all such firms having 500 or fewer employees.⁰ According to Census Bureau data for 2007, there were 2,705 firms in this category that operated for the entire year.⁰ Of this total, 2,682 firms had employment of 499 or fewer employees, and 23 firms had employment of 500 employees or more.⁰ Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the FNPRM.

58. Data Processing, Hosting, and Related Services. Entities in this category “primarily ... provid[e] infrastructure for hosting or data processing services.”⁰ The SBA has developed a small business size standard for this category; that size standard is \$25 million or less in average annual receipts.⁰ According to Census Bureau data for 2007, there were 8,060 firms in this category that operated for the entire year.⁰ Of these, 7,744 had annual receipts of under \$24,999,999.⁰ Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the FNPRM.

59. All Other Information Services. The Census Bureau defines this industry as including “establishments primarily engaged in providing other information services (except news syndicates, libraries, archives, Internet publishing and broadcasting, and Web search portals).”⁰ Our action pertains to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that size standard is \$7.0 million or less in average annual receipts.⁰ According to Census Bureau data for 2007, there were

⁰ U.S. Census Bureau, “2007 NAICS Definitions: 519130 Internet Publishing and Broadcasting and Web Search Portals,” <http://www.naics.com/censusfiles/ND519130.HTM>.

⁰ See 13 C.F.R. § 121.201, NAICS code 519130.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, “Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 519130” (issued Nov. 2010).

⁰ *Id.*

⁰ U.S. Census Bureau, “2007 NAICS Definitions: 518210 Data Processing, Hosting, and Related Services”, <http://www.census.gov/naics/2007/def/NDEF518.HTM>.

⁰ See 13 C.F.R. § 121.201, NAICS code 518210.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 4, “Establishment and Firm Size: Receipts Size of Firms for the United States: 2007 NAICS Code 518210” (issued Nov. 2010).

⁰ *Id.*

⁰ U.S. Census Bureau, “2007 NAICS Definitions: 519190 All Other Information Services”, <http://www.census.gov/naics/2007/def/ND519190.HTM>.

⁰ See 13 C.F.R. § 121.201, NAICS code 519190.

367 firms in this category that operated for the entire year.⁰ Of these, 334 had annual receipts of under \$5.0 million, and an additional 11 firms had receipts of between \$5 million and \$9,999,999.

Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

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

60. In the FNPRM, we seek comment on what documentation a bidder would need to provide when submitting a bid for the Phase II competitive bidding process so that the Commission can confirm its eligibility for the bidding credit.⁰ The Commission seeks comment on possibly requiring applicants to provide a letter indicating that non-Federal funding has been authorized, contingent on the entity being a winner.

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

61. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rules for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.”⁰

62. The FNPRM seeks comment from all interested parties. The Commission is aware that some of the proposals under consideration may affect small entities. Small entities are encouraged to bring to the Commission’s attention any specific concerns they may have with the proposals outlined in the FNPRM.

63. In the FNPRM, we seek comment on how to create inducements for non-Federal governmental action to assist in the expansion of broadband, specifically by providing a bidding credit in the Phase II competitive bidding process to any bidder that is leveraging non-Federal governmental sources of funding to lower the amount of funding requested from the Connect America Fund.⁰ Such an approach may benefit small entities. Small entities may choose to seek out sources of non-Federal governmental funding to help support their projects and gain a competitive advantage for the Phase II competitive bidding process. Recognizing that some small entities lack the ability that many larger companies have to take advantage of economies of scale, the extra funding and the bidding credit may make it possible for small entities to bid for projects that are more cost-effective than those proposed by larger entities.

⁰ U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 4, “Establishment and Firm Size: Receipts Size of Firms for the United States: 2007 NAICS Code 519190” (issued Nov. 2010).

⁰ See *supra* Section IV.

⁰ 5 U.S.C. § 603(c)(1)–(c)(4).

⁰ See *supra* Section IV.

64. We anticipate that we will take into account the unique challenges faced by small entities when deciding whether to adopt a bidding credit, and if so, how it will work and what documentation entities would need to submit to confirm their eligibility for the bidding credit. We encourage small entities to submit comments in response to the FNPRM describing concrete proposals for how the bidding credit can be designed to accommodate small entities.

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

65. None.

**STATEMENT OF
CHAIRMAN TOM WHEELER**

Re: *Connect America Fund, WC Docket No. 10-90, ETC Annual Reports and Certifications, WC Docket No. 14-58.*

Fulfilling our statutory mission to deliver on the promise of universal service in rural America challenges us to think anew, and act anew.

An estimated 15 million Americans don't have access to entry-level broadband in their homes. And far too many anchor institutions like schools, libraries, and hospitals lack sufficient bandwidth to serve the populations that rely on them.

Just last week, I visited the Pueblo of Acoma in central New Mexico, my second visit to Indian Country this year.

The visit illustrated the promise of broadband connectivity to overcome geographic isolation and put a world of information and economic opportunity at the fingertips of citizens in even the most remote communities.

It also demonstrated very clearly that we still have a digital divide in this country, with rural communities, and especially Native Americans disproportionately on the wrong side of that divide, getting bypassed by the Internet revolution.

Acoma is located in Cibola County, where nearly half of residents don't even have access to 3 Mbps broadband. Barely 10 percent have access to 10 Mbps broadband. We must do better.

That's why the Commission's ongoing work to re-orient the universal service fund to support networks capable of robust broadband is so important. The Connect America Fund has already worked to bring broadband to millions of Americans who didn't have it, but there's more to do.

The Commission took an important step forward this January, when we authorized in our Technology Transitions Order experiments to advance the deployment of voice and broadband-capable networks in rural areas with support from the Connect America Fund.

Today's Order builds on what we authorized in January by establishing a budget for the rural broadband experiments, criteria for what we expect from applicants, and an objective, clear-cut methodology for selecting winning applications. These experiments will allow us to explore how to structure the CAF Phase II competitive bidding process in price-cap areas and to gather valuable information about deploying next generation networks in high-cost areas.

Importantly, this is first time the Commission will attempt to use the tool of competition to bring broadband to rural America. Competition holds the promise of better services for rural America at lower costs. In fact, we are setting a much higher standard for what qualifies as broadband in this experiment than the Commission has previously used for CAF – 25/5 Mbps for most of the experiment – and we

expect applicants will bid for less support than we have budgeted for those areas. Better service at lower cost is the result of broadband competition in other areas of the country, and it's time to bring that same dynamic to bear for the benefit of rural America.

We expect to move forward with CAF Phase II with all dispatch, and the lessons learned in these experiments will help us achieve our goal of delivering world-class voice and broadband networks to rural America.

STATEMENT OF
COMMISSIONER MIGNON L. CLYBURN

Re: *Connect America Fund*, WC Docket No. 10-90; *ETC Annual Reports and Certifications*, WC Docket No. 14-58.

Achieving universal broadband will not be easy. Although the private sector has done a commendable job deploying broadband throughout most of this nation, millions of Americans still lack access. But just as this country accepted the challenge and took on the responsibility of providing electricity and telephone service to rural and high cost areas, we will not leave behind those Americans who today find themselves on the wrong side of the digital divide. This is the very essence of our universal service charge: when private sector efforts fall short, we act; because, absent a governmental role, too many communities will remain without.

The FCC's *2011 USF/ICC Transformation Order* adopted a framework to connect unserved communities. The annual budget for areas served by price cap companies is \$1.8 billion a year, and the FCC wisely decided that areas eligible for competitive bidding will receive support for 10 years.

The parameters we adopt today for rural broadband experiments should provide the Commission with valuable data to adopt final rules for the competitive bidding process. In many ways, this is uncharted territory but I believe this is a wise course and is reflective of good governance to conduct the experiments and collect data. The data will help determine the best ways to provide as many Americans as possible with access to affordable, robust networks, while maximizing each dollar of federal universal service support. These experiments will allocate the majority of funds on projects that will deploy networks capable of providing 100 Mbps of capacity, while offering service plans that provide 25 Mbps of capacity. Such connectivity could be life changing.

I am especially pleased that proposals should identify whether entities will offer a low-income broadband plan as part of their experiments and the item makes clear, that once designated as an eligible telecommunications carrier, or ETC, the provider must offer Lifeline service.

I also appreciate that the Commission expressly recognizes the need to work with our state partners to connect more Americans, for universal service is a federal-state partnership. That \$1.8 billion annual budget, as sizable as it may be, is clearly not enough to connect all of those currently without access to broadband. We must take steps to leverage non-federal government funding opportunities with public-private and public-public partnerships, and we must reward government entities that commit to match federal universal service funding.

I believe that incenting states to match federal funding is a win-win, which will connect more Americans, ensure the most efficient use of our federal resources, and enable us to fully embrace the federal-state partnership envisioned by Congress in the Communications Act.

While I would have preferred to include a bidding credit for states that would commit a match tied to federal funding, the record in response to the January Further Notice -- while supportive of the concept -- did not provide sufficient details to do so.

I am pleased, however, that the item seeks comment, on how to work with states, and encourage matching of non-federal funding with bidding credits or other incentives in the competitive bidding process. All stakeholders should act upon this call and submit comments with specific recommendations on whether and how we should do so.

Only by working together will we be able to make the greatest strides towards our goal of providing ubiquitous, affordable, universal broadband to all, and, once again, demonstrate that meeting the critical communications needs of our nation is job one.

I want to thank the dedicated staff of the Wireline Competition Bureau and the Office of Strategic Planning & Policy Analysis for their work on this item, and wish to extend a special congratulations to Carol Matthey to recognize her first Commission meeting as Acting Chief of the Wireline Competition Bureau.

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL**

Re: *Connect America Fund, WC Docket No. 10-90; ETC Annual Reports and Certifications, WC Docket No. 14-58.*

Universal service is a cherished principle. But it is also a challenge. Advancing the deployment of voice and broadband-capable networks in remote communities can mean tough terrain, difficult weather, sparse populations, and real financial constraints. But getting rural, insular, and high-cost areas connected with modern communications is important. More than that, it's the law.

Today, we take a creative look at making sure broadband reaches rural America. We experiment. Or more accurately, we announce rural broadband experiments. Specifically, we announce a framework that will bolster our ongoing work to implement the Connect America Fund by testing new ideas for the delivery of communications service to rural America. Furthermore, we will use this limited experiment to test the broader use of competitive bidding in our universal service programs.

I look forward to seeing the applications that come in. I am excited by the creative possibilities for service in rural areas. But most of all I am mindful that we must learn from this experiment so that it informs our legal obligation to advance universal service going forward.

**STATEMENT OF
COMMISSIONER AJIT PAI**

Re: *Connect America Fund*, WC Docket No. 10-90, *ETC Annual Reports and Certifications*, WC Docket No. 14-58.

It's been almost three years since a bipartisan FCC refocused the Universal Service Fund on next-generation broadband rather than legacy telephone services. After many more orders and much litigation, we are finally beginning to see the light at the end of the tunnel.

Just last month, a unanimous Commission proposed rules for the competitive bidding process for the second phase of the Connect America Fund. And today, we all agree that a test run of that process is in order. By taking this step, we heed the sage proverb first used by Giovanni Florio in 1591: "Measure twice, cut once."

As we measure, I am grateful to my colleagues for adopting several of my proposals. *First*, we structure the rural broadband experiment as a reverse auction where "winning bidders will be selected solely on their numerical score,"⁰ rather than through a more discretionary and subjective process. *Second*, we recognize that effective rural investments require long-term commitments and offer support for a ten-year term, in line with the term of support we adopted in April's *Seventh Recon Order*.⁰ Concurrently, we adopt a strong enforcement framework so that applicants will follow through with those commitments. *Third*, we adopt a bidding credit for anyone willing to provide service on Tribal lands, which we hope will induce many applicants to step forward and deliver high-quality broadband to these underserved consumers. *And fourth*, we make clear that moving forward with these experiments will not slow down our review of rate-of-return universal service policies, such as adopting a stand-alone broadband funding mechanism.

That is not to say that I agree with everything in this order. I would have preferred to structure the auction in a multi-round format so that bidders could evaluate their competition and adjust their bids accordingly. Instead, we will have a single-round auction, which places the onus on bidders to estimate beforehand how much competition there will be and what to bid. We saw in the Mobility Fund Phase I auction the problems that a single-round auction can bring, with some winning bids garnering ten times more support than others. I hope we do not repeat that outcome here. Besides, the Commission proposed a multi-round auction in the *Seventh Recon Order*, and holding one here would be much more useful in evaluating that proposal.⁰ Nevertheless, the perfect is not the enemy of the good, and overall, the item has my support.

⁰ *Order* at para. 49.

⁰ *Connect America Fund, Universal Service Reform – Mobility Fund, ETC Annual Reports and Certifications, Establishing Just and Reasonable Rates for Local Exchange Carriers, Developing an Unified Intercarrier Compensation Regime*, WC Docket Nos. 10-90, 10-208, 14-58, 07-135, CC Docket No. 01-92, Report and Order, Declaratory Ruling, Order, Memorandum Opinion and Order, Seventh Order on Reconsideration, and Further Notice of Proposed Rulemaking, FCC 14-54, para. 35 (June 10, 2014).

⁰ *Id.* at para. 230.

We could not have gotten here without the help of dedicated Commission staff. They reviewed over one thousand expressions of interest in rural broadband experiments and incorporated the lessons from that review into today's order. Thank you, Nick Alexander, Allison Baker, Geoffrey Blackwell, Craig Bomberger, Jonathan Chambers, Rita Cookmeyer, Talmage Cox, Neil Dellar, Rebekah Douglas, Jack Erb, Irene Flannery, Ian Forbes, Jeffery Goldthorp, Diane Griffin Holland, Audra Hale-Maddox, Sherille Ismail, Clete Johnson, Paul LaFontaine, Lisa Fowlkes, Katie King, Douglas Klein, Lauren Kravetz, Heidi Lankau, Jonathan Levy, Eliot Maenner, Marcus Maher, Carol Matthey, Maureen McLaughlin, Gary Michaels, Alexander Minard, Omar Nayeem, Vickie Robinson, Steven Rosenberg, Jim Schlichting, Jay Schwarz, Dana Shaffer, David Simpson, Gilbert Smith, Joseph Sorresso, Gina Spade, Mark Stephens, David Valdez, Mark Walker, Margaret Wiener, and Chin Yoo for all your work on this item. The American public is lucky to have such dedicated public servants at the helm of this ship.

**CONCURRING STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY**

Re: *Connect America Fund*, WC Docket No. 10-90, *ETC Annual Reports and Certifications*, WC Docket No. 14-58.

When the Commission adopted rural broadband experiments in the January *Tech Transitions Order and FNPRM*, I concurred with that part of the decision for several reasons. I was concerned that experiments would distract the Commission from completing the already overdue high-cost reforms, including establishing a Connect America Fund in rate-of-return areas, and connecting unserved and remote parts of the country. I was apprehensive that experiments could be used as a vehicle to reconsider the established structure and terms of the Connect America Fund in price cap areas. And I expressed skepticism about using funding from “reserves” (i.e., money over-collected from consumers) to test out new policies through experiments or other pilot programs. Compared to what was discussed in January, the order adopted today is improved in terms of design and direction due to a great deal of hard work. Nevertheless, I continue to have some of the same concerns, plus a few more, so I must concur again today.

Focusing on the positives first, the competitive bidding process is more objective than the beauty contest that some had contemplated. If there is merit to be found in these experiments at all, it is in further testing the mechanics of auctioning support in high-cost areas so that we can finally adopt rules for the CAF Phase II auction to allocate support in areas that price cap carriers decline to serve. I’m also pleased that the experiments will be open to all types of providers and that the order renews our commitment to move forward with additional high-cost reforms in the coming months.

On the other hand, I am troubled by several parts of the order. First, it adopts a budget of \$100 million, which is at the top end of the range proposed in January. That is far more than what is necessary to run a simple test.

Second, the order sets the minimum broadband performance requirements at the higher speed levels that were proposed in the April *Connect America Fund FNPRM*, but that the Commission has not yet adopted. As I said in April, I’m concerned about increasing the requirements when there are parts of the country that remain completely unserved today.

Third, I am still worried about what conclusions may be drawn from participation in these experiments. For example, if many providers submit bids, will that give the Commission confidence to move forward with the current plan for the Connect America Fund, or will it be used to justify further increasing the broadband performance requirements or adding questionable new conditions? I was not here when the Commission adopted the 2011 reforms, and I may have done some things differently. But at this advanced stage, it is not appropriate to undo the policies and compromises that enabled the Commission to adopt a bipartisan reform order when prior efforts had failed. We need to move forward, tweaking along the way if necessary, thereby providing certainty to all affected and interested parties.

Our constant delays are harmful, especially for build out, because they postpone desperately needed business investment decisions. Providers have been waiting more than two years for resolution on CAF Phase II, Mobility Fund Phase II, the RAF, and a long-term plan for rate-of-return support.

Fourth, I am concerned about the ability to apply rigorous oversight over all recipients that receive experimental funding, including electric co-operatives. Encouraging new entities to enter into this business can put captive consumers at financial risk. If the past has taught us anything it's that running a broadband network—particularly in high-cost, low-density areas—is not easy.

Fifth, I had hoped that we would use this opportunity to begin spending down some of the reserved funds which could help mitigate USF fee increases. As an initial step, I would have focused on the balance of the unallocated funding—approximately \$120 million—but that idea was rejected. We can devote \$100 million from reserves to experiments and \$2 billion from reserves to create a new Wi-Fi program, yet we can't apply any amount to reduce the contribution burden on ratepayers? In 2011, the Commission said that reducing the contribution burden was an option. It is time to start exercising that option.

Finally, while I continue to question the value of the experiments, I appreciate that the Chairman and the staff were able to accommodate several of my suggestions, especially on the issue of cybersecurity. Information sharing is one thing, but imposing cybersecurity requirements and selecting funding recipients based upon those requirements is not something the Commission should do or has the authority to do. These experiments must not be a backdoor way to regulate on cybersecurity. Specifically, I am pleased that we agree that Commission staff may not examine recipients' networks or practices for cybersecurity risks or impose any cybersecurity requirements during this process.

While I am only able to concur with this item, I still hope we can wrap up these *one-time-only* experiments and quickly press forward with the remaining Connect America Fund reforms.