

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

In the Matter of)
)
Establishing a 5G Fund for Rural America) GN Docket No. 20-32

REPORT AND ORDER

Adopted: October 27, 2020

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By the Commission: Chairman Pai and Commissioner Carr issuing separate statements; Commissioners Rosenworcel and Starks Approving in Part, Dissenting in Part and issuing separate statements.

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I. INTRODUCTION

1. Our nation is at the dawn of the 5G era of wireless connectivity. Recently, nationwide mobile wireless providers have deployed 5G networks covering more than 200 million Americans. And today we ensure that all Americans benefit from the country’s 5G future, no matter where they live. We act on our proposal to replace the Mobility Fund Phase II with the 5G Fund for Rural America and make certain that our limited Universal Service Fund dollars are directed to support the deployment of state-of-the-art wireless networks that are more responsive, more secure, and faster than today’s 4G LTE networks. Moreover, by establishing the 5G Fund, we further secure our nation’s leadership in 5G, which will promote technological innovation in the United States, enhance our economic prosperity and protect our national security.

2. Many urban and suburban areas of our nation are already benefiting from the evolution to 5G networks. Nationwide providers have begun deploying 5G service in more populated parts of our country, with even more widely-available 5G service expected in the near future.¹ For example, T-Mobile has made enforceable commitments to the Commission as part of its acquisition of Sprint to deploy 5G service covering 85% of the population in rural areas and 97% of all Americans within three years, with coverage rising to 90% of the population in rural areas and 99% nationwide within six years.² Moreover, it committed to deploy 5G service meeting minimum download speed performance benchmarks of at least 50 Mbps available to 90% of the rural population, with two-thirds of rural

¹ *Every 5G City and Region for Every Major Carrier in the US (Verizon, AT&T, T-Mobile, and Sprint) - Update: Latest T-Mobile and AT&T Markets*, Android Police (July 16, 2020), <https://www.androidpolice.com/2020/07/16/verizon-att-sprint-tmobile-5g-cities/> (listing 5G deployments); see also Sarah Barry James & Taimoor Tariq, *As 5G goes nationwide, US carriers’ capex, spectrum plans come into focus*, S&P Global Market Intelligence (Mar. 5, 2020), <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/as-5g-goes-nationwide-us-carriers-capex-spectrum-plans-come-into-focus-57403396> (detailing plans by AT&T and Verizon Wireless to deliver 5G nationwide in 2020).

² *Applications of T-Mobile US, Inc., and Sprint Corporation For Consent to Transfer Control of Licenses and Authorizations; Applications of American H Block Wireless L.L.C., DBSD Corporation, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. for Extension of Time*, Memorandum Opinion and Order, Declaratory Ruling, and Order of Proposed Modification, 34 FCC Rcd 10578, 10589-91, paras. 26-32 (2019) (*T-Mobile-Sprint Order*).

Americans able to receive download speeds of at least 100 Mbps.³ Late last year, T-Mobile announced that it switched on its 5G network across the nation using low-band spectrum.⁴

3. 5G networks will improve the lives of Americans living and working in rural areas by providing much needed access to telehealth, telework, remote learning opportunities, precision agriculture, and other services and applications. We anticipate that the deployment of 5G-capable networks in rural areas will drive job creation and have a powerful impact on the nation's economy. The framework for the 5G Fund that we adopt today will bring technological innovation and economic benefits to the parts of our country that need them the most. We embark on this new 5G era recognizing that the next decade and beyond hold significant promise for rural America, and we envision that the 5G Fund will be an important catalyst to propel the nationwide deployment of networks capable of closing the digital divide, once and for all.

4. The 5G Fund for Rural America will use multi-round reverse auctions to distribute up to \$9 billion, in two phases, bringing voice and 5G broadband service to those rural areas of our country that, absent subsidies, would be unlikely to see the deployment of 5G-capable networks. Based on lessons learned from the Mobility Fund, and overwhelming record support, we adopt our proposal to determine which areas will be eligible for 5G Fund support through improved mobile broadband coverage data that will be gathered through the Commission's Digital Opportunity Data Collection proceeding. Although this approach will not be the fastest possible path to the Phase I auction, it will allow us to identify with greater precision those areas of the country where support is most needed and will be spent most efficiently.

II. BACKGROUND

5. Since 2011, the Commission has taken numerous steps to comprehensively reform the universal service program to focus our limited funds on ensuring access to fixed and mobile broadband for unserved Americans living in rural, insular, and high cost areas of the country. As part of these efforts, the Commission froze high-cost support being provided to competitive eligible telecommunications carriers (ETCs), commenced a process to phase down this high-cost support over five years, and established a two-phased Mobility Fund to ensure that universal service support for mobile services would be targeted in a cost-effective manner.⁵ The Commission determined it would pause the phase down of the frozen "legacy" high-cost support for competitive ETCs to provide mobile wireless service at the 60% frozen support level in the event that the second phase of the Mobility Fund was not operational by July 1, 2014.⁶ However, the Commission planned to adopt additional mobile broadband public interest obligations as a condition for the continued receipt of such support if the legacy support phase down was paused at any point.⁷

6. In Mobility Fund Phase I, the Commission awarded almost \$300 million, along with an additional \$50 million for Tribal Mobility Fund Phase I, in one-time universal service support through

³ *Id.*

⁴ See *T-Mobile 5G: It's On!*, <https://investor.t-mobile.com/news-and-events/t-mobile-us-press-releases/press-release-details/2019/T-Mobile-5G-Its-On/> (Dec. 2, 2019).

⁵ *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17773, para. 299 (2011) (*USF/ICC Transformation Order*), *aff'd sub nom. In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014).

⁶ See *id.* at 17832, para. 519 (anticipating that any temporary freeze on the phase down of legacy support "would be accompanied by additional mobile broadband public interest obligations"). We use the term "legacy high-cost support" and "legacy support" throughout this item to refer specifically to the high-cost support that was frozen in the *USF/ICC Transformation Order* and is disbursed to competitive ETCs to provide mobile wireless service.

⁷ *Id.*

two reverse auctions.⁸ Before adopting rules for Phase II of the Mobility Fund, Commission staff conducted a review of mobile wireless providers' FCC Form 477 submissions to identify the specific areas of the country that were lacking 4G LTE coverage as well as to examine the efficiency of the distribution of legacy high-cost support.⁹ Staff analysis revealed that almost 75% of legacy high-cost support was being distributed to carriers in areas where 4G LTE service was already being provided by an unsubsidized provider.¹⁰ Furthermore, according to the report, only approximately 20% of the land area of the United States outside of Alaska either lacked 4G LTE service entirely or had 4G LTE service provided only by a subsidized carrier.¹¹ Mobile wireless carriers were therefore receiving approximately \$300 million or more each year in subsidies that were unnecessary to ensure the continued availability of 4G LTE service in those areas.¹²

7. Recognizing the need to redirect universal service funds to target areas of the country that were unlikely to receive 4G LTE service without subsidies, in 2017 the Commission adopted rules to move forward with Mobility Fund Phase II,¹³ and established the framework for a challenge process to resolve disputes about areas that were found to be presumptively ineligible for support.¹⁴ Mobile wireless providers were required to submit 4G LTE coverage maps by January 4, 2018, to be followed by a process in which parties could challenge the submitted coverage maps.¹⁵ In December 2018, after questions over the accuracy of the submitted coverage maps arose, the Commission launched an investigation into the 4G LTE coverage data submitted by some providers and suspended the response phase of the Mobility Fund Phase II challenge process pending the investigation.¹⁶

8. On December 4, 2019, the Rural Broadband Auctions Task Force released a staff report on the results of that investigation.¹⁷ Staff determined that the Mobility Fund Phase II coverage maps submitted by certain carriers overstated actual coverage and did not reflect on-the-ground performance in many instances.¹⁸ The staff report recommended that the Commission terminate the challenge process,

⁸ *Connect America Fund; Universal Service Reform – Mobility Fund*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 2152, 2154, para. 5 (2017) (*Mobility Fund Phase II Report and Order*).

⁹ FCC, Wireless Telecommunications Bureau, *Working Toward Mobility Fund II: Mobile Broadband Coverage Data and Analysis* (2016), https://apps.fcc.gov/edocs_public/attachmatch/DOC-341539A1.pdf (2016 *Mobility Fund Phase II Staff Report*).

¹⁰ *2016 Mobility Fund Phase II Staff Report* at 25, Table 4b (calculating the amount of competitive ETC support in census blocks where one or more carriers offer unsubsidized 4G LTE coverage over the entire block, allocating support using the road miles method).

¹¹ *Id.* at 15, 16, 25, para. 28, Tables 3-i, 4b.

¹² *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2156, para. 10.

¹³ *Id.*

¹⁴ *Connect America Fund; Universal Service Reform – Mobility Fund*, Order on Reconsideration and Second Report and Order, 32 FCC Rcd 6282, 6282, 6296-314, paras. 1, 27-64 (2017) (*Mobility Fund Phase II Challenge Process Order*).

¹⁵ *Procedures for the Mobility Fund Phase II Challenge Process*, Public Notice, 33 FCC Rcd 1985, 1986, para 2 (WCB/WTB 2018) (*Mobility Fund Phase II Challenge Process Procedures Public Notice*).

¹⁶ See News Release, FCC, FCC Launches Investigation into Potential Violations of Mobility Fund Phase II Mapping Rules (Dec. 7, 2018) (*Mobility Fund Phase II Coverage Map Investigation News Release*).

¹⁷ See Rural Broadband Auctions Task Force, *Mobility Fund Phase II Coverage Maps Investigation Staff Report* (2019) (*Mobility Fund Phase II Investigation Staff Report*), available at <https://docs.fcc.gov/public/attachments/DOC-361165A1.pdf>.

¹⁸ *Id.* at 2, para. 4. Two of the carriers that were the subject of the investigation raised specific objections to certain aspects of the *Mobility Fund Phase II Investigation Staff Report*. See generally Letter from David Lafuria, Counsel for U.S. Cellular, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 19-367 (Jun. 18, 2020) (U.S. Cellular (continued....))

concluding that the coverage maps were not a sufficiently reliable or accurate basis upon which to complete the challenge process as designed.¹⁹

9. On April 23, 2020, we adopted the *5G Fund NPRM*, which proposed to terminate the planned Mobility Fund Phase II auction and replace it with a 5G Fund for Rural America, using multi-round reverse auctions to distribute up to \$9 billion to bring voice and 5G broadband service to rural areas of our country that are unlikely to see unsubsidized deployment of 5G-capable networks.²⁰ We further proposed to modernize frozen mobile legacy support in order to ensure that advanced networks are deployed in areas served by providers continuing to receive legacy support.

III. DISCUSSION

10. To meet our obligation of ensuring that all Americans have access to services reasonably comparable to those in urban areas and to achieve our goal of ensuring that all Americans experience the benefits of next-generation 5G technology, we now adopt a path forward for the 5G Fund for Rural America. The rapid pace of deployment of 5G networks in many parts of the country, combined with T-Mobile's commitment to cover 90% of rural Americans with its 5G network, supports our conclusion that it is no longer the time to begin a 10-year support program to deploy 4G LTE networks. We adopt our proposals to replace Mobility Fund Phase II with the 5G Fund for Rural America and to distribute up to \$9 billion in universal service support to bring mobile voice and 5G broadband service to rural areas of our country.²¹ We also adopt our proposals to impose 5G public interest obligations and performance requirements on carriers continuing to receive legacy mobile high-cost support to help ensure that the areas they serve enjoy the benefits that 5G promises. Our actions here will ensure that rural communities can connect to the digital economy and benefit from the opportunities for enhanced education, employment, healthcare, and civic and social engagement that access to advanced mobile broadband communications can provide.

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Investigation Staff Report *Ex Parte* Letter); Letter from Cathleen A. Massey, Vice President, Federal Regulatory Affairs, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 19-367 (Feb. 17, 2020); *but see* Letter from Caressa D. Bennet, General Counsel, RWA, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 19-367 (Mar. 31, 2020) (rebutting objections raised in T-Mobile's *ex parte* letter). Without addressing the specific objections raised by either T-Mobile or U.S. Cellular, we note that U.S. Cellular's own independent test data show that 4G LTE speeds in Vermont met the 5 Mbps requirement only 74% of the time, below the minimum 80% cell edge probability required of the Mobility Fund Phase II coverage data. U.S. Cellular Investigation Staff Report *Ex Parte* Letter at 10-11.

¹⁹ *Mobility Fund Phase II Investigation Staff Report* at 2, para. 6 (“The Mobility Fund Phase II Challenge Process was designed to resolve coverage disputes regarding generally reliable maps; it was not designed to correct generally overstated maps.”).

²⁰ *Establishing a 5G Fund for Rural America*, Notice of Proposed Rulemaking and Order, 35 FCC Rcd 3994, 3996, para. 2 (2020) (*5G Fund NPRM* or *5G Fund Order*).

²¹ In adopting our proposal to replace Mobility Fund Phase II with the 5G Fund, we terminate the Mobility Fund Phase II challenge process and dismiss as moot several petitions for waiver in that proceeding which are unnecessary to address given the termination of the Mobility Fund Phase II challenge process. *See generally* Petition of Missouri RSA 5 Partnership d/b/a Chariton Valley Wireless Services to Correct Mobility Fund Phase II Map of Presumptively Eligible and Ineligible Areas and to Extend Challenge Process Filing Window, WC Docket No. 10-90, WT Docket No. 10-208 (filed Nov. 26, 2018), <https://www.fcc.gov/ecfs/filing/1126348011729>; Petition of Jeanne Dietsch for Waiver to Accept Certain Mobility Fund Challenge Records, WC Docket No. 10-90, WT Docket No. 10-208 (filed Nov. 27, 2018), <https://www.fcc.gov/ecfs/filing/1128124623248>; Vermont Department of Public Service Request for Limited Waiver of Mobility Fund Phase II Designated Handset Requirements, WC Docket No. 10-90, WT Docket No. 10-208 (filed Jun. 28, 2019), <https://www.fcc.gov/ecfs/filing/10628125128562>.

A. Collecting New Mobile Coverage Data Before Funding 5G in Rural America

11. We adopt our proposal, known in the *5G Fund NPRM* as Option B, to award 5G Fund support based on new, more precise, verified mobile coverage data collected through the Commission's Digital Opportunity Data Collection.²² While the Commission continues to lack a congressional appropriation necessary to implement the new data collection, we believe—and the record supports our view—that the risk of any delay in holding an auction is outweighed by the ability to target auction support with greater precision. That risk is further mitigated by the public interest obligations we adopt for competitive ETCs that receive legacy high-cost support for mobile wireless services.

12. In proposing to establish a 5G Fund for Rural America, we sought comment on two different options to determine the areas that would be eligible for support in the Phase I auction: one would be based upon existing governmental data on the ruralness of an area and allow us to proceed more quickly to the auction,²³ and the other would be based upon new mobile coverage data but would, by necessity, delay the start of the auction.²⁴ These two approaches represented a fundamental tradeoff between more precisely targeting support to areas that need it and the time required to collect, process, and analyze the data necessary for such precision.²⁵ In the *5G Fund NPRM*, we estimated that basing 5G Fund eligibility on the new collection of mobile coverage data would add 18-24 months to the process of preparing for an auction, even if Congress were to appropriate funds sufficient to implement the statute, which it still has not done.²⁶

13. Most commenters urge us to collect new mobile coverage data prior to holding the 5G Fund Phase I auction,²⁷ with some citing in particular the findings of the *Mobility Fund Phase II Investigation Staff Report*.²⁸ We agree that requiring new mobile coverage data will result in a better understanding of the unserved areas most in need of our limited universal service funds than existing data.

²² See *5G Fund NPRM*, 35 FCC Rcd at 4007-08, paras. 37-39.

²³ *5G Fund NPRM*, 35 FCC Rcd at 4003-07, paras. 24-36. Under the Option A approach, we sought comment on identifying the areas eligible for 5G Fund support based upon a combination of a) U.S. Census Bureau data classifying census blocks as rural, and b) the areas classified in the U.S. Department of Agriculture's Rural-Urban Commuting Area (RUCA) dataset as having RUCA codes 5 through 10. Under this definition, approximately 67% of the land area of the United States would have been eligible for support, excluding Alaska, Puerto Rico, and the U.S. Virgin Islands. *Id.* at 4003-05, paras. 26, 29.

²⁴ *5G Fund NPRM*, 35 FCC Rcd at 4007-08, paras. 37-39. Under Option B, we sought comment on identifying the areas eligible for 5G Fund support based upon a new collection of mobile coverage data through the Digital Opportunity Data Collection and defining as eligible any areas that such data show lack unsubsidized 4G LTE coverage. *Id.* at 4007-08, paras. 37-38.

²⁵ *5G Fund NPRM*, 35 FCC Rcd at 4002, paras. 21-22.

²⁶ *5G Fund NPRM*, 35 FCC Rcd at 4007, para. 37 & n.68.

²⁷ See CTIA Comments at 5 (“In order to make such funding available effectively and without delay, the Commission should move expeditiously to determine the areas eligible for 5G Fund support based on a new coverage data collection as required by the Broadband DATA Act.”); Massachusetts Department of Telecommunications and Cable Comments at 9-10; California Public Utilities Commission at 2-3; Verizon Comments at 5-8; National Association of Regulatory Utility Commissioners Comments (NARUC Comments) at 4; Institute for the Wireless Internet of Things at Northeastern University Comments at 7; Healthcare Information and Management Systems Society Comments at 2-3; Next Century Cities Comments at 9-12; Vermont Department of Public Service Comments at 5; Sarah Oh Comments at 3-4 (“[t]he need for careful study of broadband data has become acute as the stakes are higher than ever to narrow the digital divide . . . [t]he time is right to enhance the study of universal service and the digital divide . . .”).

²⁸ CCA Comments at 4-5; NARUC Comments at 4; Next Century Cities Comments at 11.

14. We disagree with those comments arguing that the Broadband Deployment Accuracy and Technological Availability (Broadband DATA) Act expressly prohibits the award of 5G Fund support until after collecting new mobile coverage data,²⁹ precluding Option A.³⁰ The Broadband DATA Act requires the Commission to collect mobile coverage data generated using standardized parameters and, from these data, release mobile broadband deployment maps.³¹ “[A]fter creating the maps[,]” the statute requires the Commission to use those maps when awarding new funding to deploy broadband service.³² We agree with RWA that the language of the Broadband DATA Act does not prevent us from awarding support prior to creating the mobile broadband deployment maps in the Digital Opportunity Data Collection.³³ As RWA notes, the plain wording of the statute is clear that the Commission “is required to use new maps to award funding, but only ‘after’ such maps are created.”³⁴ We therefore conclude that the statute does not yet impose any limitations on the data we may use to award new funding.

15. Several commenters support moving forward quickly with the 5G Fund Phase I auction based on existing U.S. Census Bureau and U.S. Department of Agriculture data under our Option A proposal, or some variant of it.³⁵ We recognize the pressing need to bring 5G to unserved rural areas; however we agree with the concerns raised by some commenters that reliance upon 10-year-old U.S. Department of Agriculture data as a proxy for rurality and to award funding that will continue for an additional 10 years risks both directing support to areas where support is not needed and also missing areas where support is needed.³⁶ Option B will allow us to more efficiently allocate 5G Fund support by identifying areas that are already served by an unsubsidized provider and thus should not be ineligible for support. Establishing eligibility under Option A using a degree of rurality would not have allowed us target funds in this manner. We conclude, therefore, that on balance it is not in the public interest to follow the Option A approach.³⁷ We will take all appropriate steps to implement Option B as quickly as we can without jeopardizing the quality or accuracy of the new data we will collect.

²⁹ See 47 U.S.C. § 642(c)(2)(B) (requiring the Commission to, after creating broadband availability maps required by the statute, use such maps “when making any new award of funding with respect to the deployment of broadband internet access service intended for use by residential and mobile customers”).

³⁰ CCA Comments at 6-8; Coalition of Rural Wireless Carriers Comments at 8-9 (CRWC Comments); NARUC Comments at 4. The Coalition of Rural Wireless Carriers (CRWC) is composed of Cellular South Licenses, LLC d/b/a CSpire, United States Cellular Corporation, Smith Bagley, Inc., Carolina West Wireless, Inc., East Kentucky Network, LLC d/b/a Appalachian Wireless, Cellular Network Partnership, a Limited Partnership, d/b/a Pioneer Cellular, and Union Telephone Company d/b/a Union Wireless.

³¹ 47 U.S.C. § 642(b)(2)(B).

³² *Id.* § 642(c)(2)(B).

³³ RWA Reply Comments at 6-7; *see also* 5G Fund NPRM, 35 FCC Rcd at 4006-07, para. 36.

³⁴ RWA Reply Comments at 6.

³⁵ AST&Science LLC Comments at 24 (AST&Science Comments) (“AST strongly supports Option A and urges the Commission to strive to commence Phase I of the 5G Fund auction as soon as practicable.”); New York State Public Service Commission Comments at 2-3 (supporting the use of RUCA codes to determine eligible areas, as in Option A, but proposing to expand the definition to include RUCA codes 4 through 10); RWA Comments at 1-8 (proposing a three-phase “hybrid” approach, with support awarded during Phase I consistent with Option A); *cf.* 5G Fund Supporters Comments at 4-7 (proposing an alternate approach with an “Initial Tranche” of support awarded to rural communities of color and Tribal lands, followed by a “Second Tranche” based upon new mapping data).

³⁶ See CRWC Comments at 10-12; California Public Utilities Commission Comments at 4; Vermont Department of Public Service Comments at 7-8. As CCA notes, “[c]ommencing the ten-year 5G Fund without new maps also would mean that the Commission wouldn’t match the funding to the problem until at least 2031.” CCA Comments at 9.

³⁷ We also decline to adopt the 5G Fund Supporters’ proposal for an “Initial Tranche” of support targeted at particular historically disadvantaged communities that this commenter contends should be given priority because of
(continued....)

16. While urging us to first collect new mobile coverage data, many commenters supporting Option B make various suggestions for expediting the Phase I auction.³⁸ We agree on the need to move quickly toward an auction and will take steps to minimize the delay caused by our decision. However, we disagree with suggestions that we should collect new mobile coverage data prior to implementation of the Digital Opportunity Data Collection.³⁹ We are unconvinced that those approaches would provide reliable coverage data in a shorter timeframe. In particular, while carriers may have experience generating and submitting mobile coverage data as part of their required FCC Form 477 filings, or as part of the one-time collection of 4G LTE coverage data for Mobility Fund Phase II, we would need to develop the processes and IT systems necessary to allow for the submission and verification of mobile coverage data and allow for a public-facing challenge process regardless of whether or not the collection is implemented through the Digital Opportunity Data Collection. Although we have recently adopted new requirements for the Digital Opportunity Data Collection stemming from the Broadband DATA Act,⁴⁰ the Commission still lacks funding to implement the statute's requirements. Implementation of any alternative data collection and public challenge process would run into the same logistical and funding hurdles, and staff estimates it would take at least as long to complete. Such arguments also overlook the fact that we originally tasked the Universal Service Administrative Company (USAC) with implementation of the Digital Opportunity Data Collection,⁴¹ work which came to a halt when Congress expressly prohibited the Commission from delegating responsibility for these tasks to USAC in the Broadband DATA Act.⁴²

B. Determining Eligible Areas Using Updated Mobile Coverage Data

17. We will determine the areas eligible for support in the 5G Fund Phase I auction based upon where new mobile coverage data submitted in the Digital Opportunity Data Collection show a lack of unsubsidized 4G LTE and 5G broadband service by at least one service provider, broadly in line with our Option B proposal.⁴³ While most providers are still in the early stages of deploying their 5G networks

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similar concerns about the accuracy of available data. 5G Fund Supports Comments at 4-7. Concerns that directing support toward areas that are simply rural will result in carriers “prioritizing often-wealthy ranches ahead of impoverished rural communities of color[.]” *id.* at 5 n.18, are better addressed through our use of an adjustment factor, which we adopt below, that considers both the particular business case for an area as well as the terrain.

³⁸ See, e.g., CRWC Comments at 13-14 (proposing a timeline to collect coverage data through the Digital Opportunity Data Collection in 2021 and conduct an auction in early 2022); CCA Comments at 10 (asserting that, given mobile wireless carriers’ familiarity with recent collections of similar propagation map data, the Commission could “reasonably expect to implement a mapping process and conduct an auction within 12-18 months.”); Verizon Comments at 7 (suggesting that the Phase I auction could occur in mid-2022).

³⁹ For example, CRWC suggests that “the Commission was well on its way to implementing the [Digital Opportunity Data Collection] long before the [Broadband DATA Act] was enacted, and nothing in [that statute] directs” us to stop this process. CRWC Comments at 16; see also California PUC Comments at 3 (suggesting that the Commission collect coverage data from states); Massachusetts Department of Telecommunications and Cable Comments at 9-10 (suggesting a one-time collection of 4G LTE coverage data consistent with the Broadband DATA Act propagation modelling requirements).

⁴⁰ See generally *Establishing the Digital Opportunity Data Collection*, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460 (2020) (*Digital Opportunity Data Collection Second Order and Further Notice*).

⁴¹ *Establishing the Digital Opportunity Data Collection*, Report and Order and Second Further Notice of Proposed Rulemaking, 34 FCC Rcd 7505, 7509, para. 11 (2019) (*Digital Opportunity Data Collection Order and Further Notice*).

⁴² 47 U.S.C. §§ 645(a), 646(c)(2).

⁴³ *5G Fund NPRM*, 35 FCC Rcd at 4008, para. 38. In determining which areas are subsidized for this purpose, we will use Geographic Information Systems (GIS) data from USAC delineating the boundaries of the subsidized service areas of each competitive eligible telecommunications carrier (ETC) receiving mobile legacy high-cost support. See *id.* at 4017, para. 71 & n.104.

in rural areas, we expect that a new collection of mobile coverage data in 2021 or 2022 will show significant 5G broadband deployments. Because these areas will have already seen deployment of 5G without subsidy, we will exclude such areas from eligibility consistent with our longstanding policy of avoiding overbuilding competitive networks. Moreover, we will also exclude from eligibility those areas where new coverage data gathered in the Digital Opportunity Data Collection show unsubsidized 4G LTE networks have been deployed. Given the rapid state of competitive 5G deployment in the marketplace, combined with enforceable merger commitments from T-Mobile, we believe that subsidizing 5G deployments where unsubsidized 4G LTE networks have been deployed is unnecessary and risks preempting reasonably near-term 5G deployments we could expect in those areas.

18. Commenters that support Option B also generally support our proposal to define as eligible those areas where new coverage data show a lack of 4G LTE broadband service.⁴⁴ However, one commenter suggests also making eligible under Option B those areas that historically lacked 4G LTE service.⁴⁵ Given the potential for allocating inefficient support to areas more likely to see competitive 5G deployments and concerns over the accuracy of historical FCC Form 477 and Mobility Fund Phase II 4G LTE mobile coverage data,⁴⁶ we are unconvinced that there is a meaningful basis upon which to allocate support to some areas otherwise served by unsubsidized 4G LTE networks. We likewise decline to prioritize any areas based upon historical 3G and 4G LTE coverage data.⁴⁷ While we proposed a similar approach in the context of Option A,⁴⁸ we conclude that such prioritization is unnecessary in light of our decision to base eligibility on more precise Digital Opportunity Data Collection maps. Moreover, our concerns with developing a meaningful way to incorporate less reliable historical data sources into our eligibility determinations are equally applicable. There is likely significant overlap between areas that have historically lacked 3G or 4G LTE service and the areas that currently lack unsubsidized 4G LTE service, more than 10 years after the technology was first deployed.⁴⁹

19. We adopt our proposal to exclude from eligibility for the 5G Fund those areas in Alaska, for which high-cost support is provided via the mobile portion of the Alaska Plan,⁵⁰ as well as areas in Puerto Rico and the U.S. Virgin Islands where the Commission has already provided high-cost support,

⁴⁴ See Verizon Comments at 5-6; NARUC Comments at 5; Massachusetts Department of Telecommunications and Cable Comments at 4-5; CRWC Comments at 16. *But see* Letter from Richard A. Ruhl, General Manager, Cellular Network Partnership d/b/a Pioneer Cellular, John Lightle, CEO, Nex-Tech Wireless LLC, Eric Woody, CTO, Union Telephone Company d/b/a Union Wireless, Justin E. Hinkle, President, Smith Bagley, Inc., W. Allen Gillum, CEO, East Kentucky Network, LLC d/b/a Appalachian Wireless, and Francis J. DiRico, President, NE Colorado Cellular d/b/a Viaero Wireless, to Marlene H. Dortch, Secretary, FCC at 1-3 (filed Oct. 19, 2020) (requesting the Commission to define as eligible any areas that lack only unsubsidized 5G broadband service); Letter from Carri Bennet, General Counsel, RWA, to Marlene H. Dortch, Secretary, FCC at 3 (filed Oct. 20, 2020) (RWA Oct. 20 *Ex Parte* Letter).

⁴⁵ Next Century Cities Comments at 6 (“Next Century Cities agrees with the Commission’s Option B to base eligibility for rural 5G deployment funds on areas that have not historically had 4G LTE service, and where mapping data shows there is a lack of 5G service as well.”).

⁴⁶ See, e.g., NARUC Comments at 3 (asserting that “[t]here are a host of problems with Form 477 data that has led to ISPs overstating coverage” and that “[t]he anecdotal evidence of the [Form 477] map’s inaccuracy is pervasive”); see also *Mobility Fund Phase II Investigation Staff Report* at 52, para. 74 (“Our analysis and speed tests suggest that the submitted MF-II coverage maps did not match actual coverage in many instances.”).

⁴⁷ CRWC Comments at 12; California Public Utilities Commission Comments at 3-4; NARUC Comments at 8.

⁴⁸ *5G Fund NPRM*, 35 FCC Rcd at 4006, paras. 33-35.

⁴⁹ Moreover, we believe that use of an adjustment factor that considers terrain and potential business case will provide adequate prioritization to ensure historically underserved or unserved areas will receive support in the Phase I auction. See *infra* Section III.C.7.

⁵⁰ See *Alaska Plan Order*, 31 FCC Rcd at 10164, para. 75.

including support for 5G mobile broadband,⁵¹ a proposal that RWA supports.⁵² We disagree with commenters suggesting that the Commission include Alaska in the roll out of the 5G Fund.⁵³ The Commission established the Alaska Plan in 2016 for a 10-year term, apart from earlier efforts to reform the mobile high-cost program due to the “uniquely challenging operating conditions” in Alaska.⁵⁴ Moreover, we do not believe the framework that we adopt for the 5G Fund is appropriate for Alaska given the unique circumstances faced by carriers deploying mobile services in that state, and because it would undermine the comprehensive support mechanism the Commission adopted to address those challenges.

C. Framework for the 5G Fund

20. We adopt the basic framework we proposed for the 5G Fund for Rural America,⁵⁵ with a few specific modifications to the requirements we proposed for competitive ETCs receiving legacy high-cost support for mobile wireless service. We will require both legacy high-cost support recipients and 5G Fund auction support recipients to meet public interest obligations to provide voice and 5G broadband service, and to satisfy distinct, measured performance requirements as a condition of receiving support. Recipients of both legacy high-cost support and 5G Fund auction support must meet minimum baseline performance requirements for data speed, latency, and data allowance, including: (1) deploying 5G networks that meet at least the 5G-NR (New Radio) technology standards developed by the 3rd Generation Partnership Project with Release 15 (or any successor release that may be adopted by the Office and Bureau after appropriate notice and comment) with median download and upload speeds of at least 35 Mbps and 3 Mbps with minimum cell edge download and upload speeds of 7 Mbps and 1 Mbps;⁵⁶ (2) meeting end-to-end round trip data latency measurements of 100 milliseconds or below; and

⁵¹ See generally *PR-USVI Fund Report and Order*.

⁵² RWA Comments at 8-9.

⁵³ Council of Athabaskan Tribal Governments Comments at 2; Mount Sanford Tribal Consortium Comments at 2.

⁵⁴ *Connect America Fund; Universal Service Reform – Mobility Fund; Connect America Fund – Alaska Plan*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139, 10140, para. 2 (2016) (*Alaska Plan Order*) (quoting the *USF/ICC Transformation Order*, 26 FCC Rcd at 17829, para. 507). The Commission has recognized that carriers in Alaska “face unique circumstances including Alaska’s large size, varied terrain, harsh climate, isolated populations, shortened construction season, and lack of access to infrastructure that make it challenging to deploy voice and broadband-capable networks.” *Id.* at 10141-42, para. 6. Moreover, the Commission explained that because it “adopt[ed] the Alaska Plan for mobile carriers as an Alaska-specific substitute mechanism for mobile high-cost support, . . . there will be no support provided under Mobility Fund Phase II or Tribal Mobility Fund Phase II for mobile services within Alaska.” *Id.* at 10171, para. 98. Since we today establish the 5G Fund to replace Mobility Fund Phase II, we similarly conclude that the Alaska Plan should remain the sole high-cost support mechanism for mobile carriers in Alaska.

⁵⁵ *5G Fund NPRM*, 35 FCC Rcd at 4008-16, paras. 41-67.

⁵⁶ We acknowledge receipt of 1,430 filings in the 5G Fund for Rural America docket that opposed our proposal to support the deployment of 5G service, of which approximately 95% cited concerns about the safety or health impacts of 5G mobile wireless technology, out of more than three thousand comments, reply comments, and *ex parte* filings. We note that we are considering changes to our rules regarding the safety of human exposure to certain radiofrequencies in a separate proceeding, see *Targeted Changes to the Commission’s Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields*, ET Docket No. 19-226, Notice of Proposed Rulemaking, 34 FCC Rcd 11687 (2019), and that concerns about the safety of 5G technology are best resolved in that proceeding. We also note that 5G is a technology and carriers can deploy 5G service using many different spectrum bands, not necessarily using the mid-band or millimeter wave (mmWave) spectrum that appear to be of concern to most of these parties. We therefore disagree with commenters that oppose adoption of the 5G Fund, or our proposal to require deployment of 5G networks, due to concerns better addressed in a separate, dedicated proceeding. See also Radio Frequency Safety, <https://www.fcc.gov/rfsafety> (last visited Aug. 28, 2020).

(3) offering at least one service plan that includes a minimum monthly data allowance that is equivalent to the average United States subscriber data usage.⁵⁷

21. These performance requirements, along with public interest obligations for reasonably comparable rates, collocation, and voice and data roaming, will ensure that rural areas receive service comparable to high-speed, mobile broadband service available in urban areas. We also adopt interim and final 5G service deployment milestones for 5G Fund auction support recipients, and reporting requirements to monitor the progress of all recipients in meeting the distinct performance requirements that we adopt.

1. Establishing a Two-Phased 5G Fund for Rural America

22. We adopt our proposal to award support from the 5G Fund for Rural America through a competitive reverse auction in two phases.⁵⁸ In Phase I, we will target support nationwide to all eligible rural areas that lack unsubsidized 4G LTE and 5G broadband service, and in Phase II we will focus support to specifically target the deployment of technologically innovative 5G networks that facilitate precision agriculture.

23. We conclude that a reverse auction is the appropriate mechanism for allocating scarce universal service resources to the carriers that will use them most efficiently. The Commission has long endorsed competitive bidding for distributing support. In the *USF/ICC Transformation Order*, the Commission recognized the value of competitive bidding for awarding award high-cost support, both fixed and mobile, noting that a reverse auction “is the best available tool for identifying” areas where support can make the largest difference, as well as the associated support amounts.⁵⁹

24. Our experience using competitive bidding in the Mobility Fund Phase I, Tribal Mobility Fund Phase I, and Connect America Fund Phase II auctions confirms the Commission’s prediction that it is the most efficient and effective mechanism for awarding universal service support. An auction mechanism allows us to distribute support in a transparent, speedy, and efficient manner, and provides a straightforward means of identifying those providers that are willing to provide 5G service at the lowest cost to the Universal Service Fund by determining support levels that winning bidders are willing to accept in exchange for the public interest obligations and performance requirements we impose.

25. Consistent with our decision to base eligibility on new, granular Digital Opportunity Data Collection mobile broadband coverage data, as well as our decision to adopt 5G performance requirements and public interest obligations for legacy high-cost recipients, we decline to adopt RWA’s proposal for a three-phase approach that would award support to certain existing legacy high-cost

⁵⁷ We adopt performance goals and measures for the 5G Fund similar to those that the Commission has implemented in recent high-cost support proceedings and direct the Office and Bureau to adopt others. Designing and adopting oversight and accountability measures when adopting a new or modified universal service program not only ensures that the Commission meets its obligations under the Act, but also facilitates our compliance with government-wide obligations for the efficient and effective design and implementation of federal programs. *See, e.g.*, Government Performance and Results Act of 1993, Pub. L. No. 103-62, 107 Stat. 285 (1993) (requiring federal agencies to develop strategic plans with long-term, outcome-related goals and objectives, develop annual goals linked to the long-term goals, and measure progress toward the achievement of those goals in annual performance plans and to report annually on their progress in program performance reports), *amended by* GPRA Modernization Act of 2010, Pub. L. No. 111-352, 124 Stat. 3866 (2011).

⁵⁸ *5G Fund NPRM*, 35 FCC Rcd at 4009, para. 42.

⁵⁹ *USF/ICC Transformation Order*, 26 FCC Rcd at 17781, para. 322. In the existing mobile legacy high-cost support program, on the other hand, neither the areas for which legacy support is currently disbursed nor the amount of support carriers receive have a direct nexus to the areas most in need of support or the amount needed to provide service therein.

recipients.⁶⁰ Under RWA's proposal, the 5G Fund would create a \$1.5 billion "Phase 0" for current legacy support recipients with 500,000 or fewer subscribers so that those carriers could build out 5G in areas eligible under Option A before proceeding to an auction with remaining funds.⁶¹ NTCA supports RWA's three-phase proposal, but proposes that the Commission should base eligible areas for both the Phase I and Phase II auctions on Option B.⁶²

26. RWA argues that its approach would provide certainty to small rural carriers and promote faster 5G deployment,⁶³ while NTCA claims that its approach can leverage existing high-cost support recipients' networks.⁶⁴ Based on the record before us, and our experience with competitive bidding mechanisms, we are not convinced that this approach would be a more efficient or effective means of awarding support than an auction. We are unpersuaded that a three-phase approach improves our ability to better target support or to significantly accelerate 5G deployment in rural areas. While we do not doubt that recipients of mobile legacy high-cost support have been "good stewards of universal service funds"⁶⁵ as NTCA states, neither proposal is consistent with our decade-long efforts to reform universal service high-cost support. Moreover, to the extent RWA and NTCA are correct that carriers receiving legacy high-cost support can deploy 5G networks in their service areas more efficiently, we anticipate they will have an advantage against bidders that do not already serve those eligible areas in the auction.

27. We agree with AT&T that implementing a Phase 0 approach risks continuing to provide legacy high-cost support to fund service in areas that may already have unsubsidized 4G LTE (or even 5G) service from one or more providers.⁶⁶ Further, we agree with T-Mobile that setting aside funds for a limited subset of providers would be an inefficient use of our scarce resources,⁶⁷ and could limit our ability to expand 5G coverage to as many unserved areas as possible.⁶⁸ This concern is amplified by the fact that we would risk overpaying for 5G networks in some areas that another provider (or even the same legacy support recipient) would be willing to serve for less support through an auction.

2. Budget

28. We adopt a budget of \$9 billion for the 5G Fund, to be awarded in two phases: up to \$8 billion for Phase I, of which we will reserve \$680 million of support for service to Tribal lands, and at least \$1 billion in Phase II, as well as any unawarded funds from Phase I. We further adopt our proposal to repurpose the Mobility Fund Phase II budget for the 5G Fund.⁶⁹

⁶⁰ RWA Comments at 1-8; NTCA Comments at 4-7. Several small legacy high-cost support recipients separately support the RWA or NTCA proposals. See Letter from Jana Wallace, CEO, Panhandle Telecommunication Systems, Inc., to Marlene H. Dortch, Secretary, FCC at 1 (filed Sep. 11, 2020); Letter from Richard Ruhl, General Manager, Cellular Network Partnership d/b/a Pioneer Cellular, to Marlene H. Dortch, Secretary, FCC at 1 (filed Sep. 17, 2020); Letter from Mike Higgins, Jr., General Manager, CT Cube d/b/a West Central Wireless, to Marlene H. Dortch, Secretary, FCC at 1 (filed Sep. 17, 2020); Letter from Todd Houseman, General Manager and CEO, United Wireless Communications, Inc., to Marlene H. Dortch, Secretary, FCC at 1 (filed Sep. 17, 2020); Letter from John C. Nettles, President, Pine Belt Cellular, Inc., to Marlene H. Dortch, Secretary, FCC at 1 (filed Sep. 24, 2020). *But see* AT&T Reply Comments at 6-7 (opposing RWA's proposal).

⁶¹ RWA Comments at 1-2.

⁶² NTCA Comments at 4-7.

⁶³ RWA Comments at 7.

⁶⁴ NTCA Comments at 5.

⁶⁵ *Id.*

⁶⁶ AT&T Reply Comments at 3.

⁶⁷ T-Mobile Reply Comments at 2, 7-9.

⁶⁸ *Id.* at 8-9.

⁶⁹ *5G Fund NPRM*, 35 FCC Rcd at 4009, para 43. No commenters opposed this proposal.

29. Given the apparent overstatement of coverage data the Commission staff investigation discovered,⁷⁰ we anticipate that the more precise and granular mobile broadband coverage data that will become available in the Digital Opportunity Data Collection proceeding will show that the number of areas unserved by unsubsidized 4G LTE is greater than the Commission originally estimated, and the number of areas unserved by 5G will likewise be substantial.⁷¹ The deployment of networks capable of providing this 5G service undoubtedly will be expensive, particularly given the need to build high quality infrastructure beyond just our rural roadways. We therefore conclude that significantly more funds than those budgeted for Mobility Fund Phase II will be necessary to achieve our rural 5G goals. By repurposing the entire \$4.53 billion budget originally adopted for Mobility Fund Phase II, and essentially doubling our financial commitment to deploying mobile broadband in rural areas, we will have a greater likelihood of achieving the Commission's goals while incentivizing carriers to participate in the auction.⁷²

30. In establishing the total budget for the 5G Fund, we are mindful that the cost of universal service programs is ultimately borne by the consumers and businesses that pay to fund these programs, and we have a corresponding obligation to exercise fiscal responsibility by avoiding excessive subsidization and overburdening communications consumers.⁷³ With this in mind, we adopt a 5G Fund budget that seeks to balance the various competing objectives in section 254 of the Communications Act of 1934, as amended (the Act),⁷⁴ including the objective of providing support that is sufficient, but not so excessive so as to impose an undue burden on consumers and businesses.⁷⁵

⁷⁰ See, e.g., *Mobility Fund Phase II Investigation Staff Report* at 52, para. 74.

⁷¹ Insofar as almost two years have passed since the Commission ceased the Mobility Fund II challenge process, however, we note that some carriers will have expanded their 4G LTE footprint; therefore, all of the areas that were eligible for a Mobility Fund II auction may not be eligible for a 5G Fund Phase I auction.

⁷² See *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2160, para. 23; *Connect America Fund; Universal Service Reform – Mobility Fund*, Second Order on Reconsideration, 33 FCC Rcd 2540, 2548-51, paras. 14-19 (2018) (*Mobility Fund Phase II Second Order on Reconsideration*); see also *PR-USVI Fund Report and Order*, 34 FCC Rcd at 9165, para. 110 n.373 (adopting the Uniendo a Puerto Rico and the Connect USVI Fund as comprehensive alternative plans for high-cost mobile support).

⁷³ Courts have recognized that over-subsidizing universal service programs can actually undermine the statutory principles set forth in section 254(b) of the Communications Act of 1934, as amended. See, e.g., *Qwest Communications Int'l, Inc. v. FCC*, 398 F.3d 1222, 1234 (10th Cir. 2005) (“[E]xcessive subsidization arguably may affect the affordability of telecommunications services, thus violating the principle in § 254(b)(1).”) (citing *Qwest Corp. v. FCC*, 258 F.3d 1191, 1200 (10th Cir. 2001)); *Rural Cellular Ass’n v. FCC*, 588 F.3d 1095, 1102 (D.C. Cir. 2009) (agreeing that the concept of sufficiency can reasonably encompass “not just affordability for those benefited, but fairness for those burdened” and that the Commission “must consider not only the possibility of pricing some customers out of the market altogether, but the need to limit the burden on customers who continue to maintain telephone service”); *Alenco Communications, Inc. v. FCC*, 201 F.3d 608, 620-21 (5th Cir. 2000) (“[E]xcessive funding may itself violate the sufficiency requirements of the Act” and “[t]he [Commission]’s broad discretion to provide sufficient universal service funding includes the decision to impose cost controls to avoid excessive expenditures that will detract from universal service”).

⁷⁴ 47 U.S.C. § 254.

⁷⁵ Our approach is consistent with judicial interpretation of these objectives, as well as our own. See *supra* note 73; *Federal-State Joint Board on Universal Service, High-Cost Universal Service Support*, Order on Remand and Memorandum Opinion and Order, 25 FCC Rcd 4072, 4088, para. 30 (2010) (*Qwest II Remand Order*) (defining “sufficient” as “an affordable and sustainable amount of support that is adequate, but no greater than necessary, to achieve the goals of the universal service program”). Moreover, the courts have held that the Commission enjoys broad discretion when conducting exactly this type of balancing. See, e.g., *Rural Cellular Ass’n*, 588 F.3d at 1103; *Fresno Mobile Radio, Inc. v. FCC*, 165 F.3d 965, 971 (D.C. Cir. 1999); see also *Qwest II Remand Order*, 25 FCC Rcd at 4088, para. 29 (“[A] proper balancing inquiry must take into account [the Commission’s] generally applicable responsibility to be a prudent guardian of the public’s resources.”).

31. As we have repeatedly emphasized since we began reforming of our universal service programs, ratepayer funds are not unlimited and must be prioritized to achieve our policy goals.⁷⁶ We conclude that the budget of \$8 billion that we adopt today for Phase I of the 5G Fund incentivizes competition from carriers that wish to participate in the Phase I auction in order to deploy 5G consistent with the public interest obligations and performance requirements we propose for the 5G Fund. We further conclude that a budget of at least \$1 billion for Phase II of the 5G Fund will be necessary for carriers to commit to the deployment of technologically innovative 5G networks that facilitate precision agriculture. Dedicating at least \$1 billion to this second phase of the 5G Fund will help close the remaining digital divide but also direct funds to networks supporting innovative agricultural solutions, increasing our nation's economic efficiency and encouraging economic growth in rural areas, especially in vast areas of agricultural lands that currently remain unserved.⁷⁷

32. For these same reasons, we decline to allot a larger portion of the total 5G Fund budget to the Phase II auction, as some commenters suggest.⁷⁸ Such an approach risks significantly increasing the number of areas that remain unserved after the Phase I auction. Moreover, because the amount of funds necessary to cover the phase down of legacy high-cost support will not be known until the conclusion of the Phase I auction, we decline to reduce the Phase I budget by the amount necessary to fund the phase down, which should provide maximum certainty to prospective bidders.

33. Although some commenters suggest that the total budget may be insufficient to deploy 5G networks to all eligible areas,⁷⁹ none of those commenters proposed an alternative amount for the total 5G Fund budget. Those same commenters also support reassessing the Phase II budget following Phase I.⁸⁰ Aside from the commenters suggesting a three-phase approach for the 5G Fund, no commenters addressed our request for comment on an alternative total budget.⁸¹

⁷⁶ See e.g., *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2161, para. 25 (in establishing the Mobility Fund Phase II budget the Commission explained, “[t]he amount we dedicate reflects our priorities in allocating a finite budget to areas of greatest need to maintain and expand critical mobile voice and broadband services.”).

⁷⁷ See News Release, FCC, Chairman Pai Announces New Task Force Focused on Connecting American Farms and Ranches (Jun. 17, 2019); *5G Fund NPRM*, 35 FCC Rcd at 4010, para 45; California Public Utilities Commission Comments at 1 (generally supporting targeting funding to facilitate precision agriculture); Nebraska Experimental Testbed of Things, University of Nebraska Comments at 1-2, 7 (supporting the development of the advanced wireless networks that will enable rural agricultural communities to thrive in our modern, interconnected world).

⁷⁸ See, e.g., Verizon Comments at 2-4; RWA Comments at 7; see also AST&Science Comments at 27 (advocating that the Commission allocate the Phase I budget in two separate tranches). For similar reasons we also conclude it is unnecessary to devote 1% of the Phase I budget to develop research on Universal Service Fund spending. See Sarah Oh Comments at 3.

⁷⁹ See, e.g., CRWC Comments at 3-5; Trevor Eisnagle Express Comments; AST&Science Comments at 26 (supporting a \$9 billion budget as it represents a good start, but stating that it is ultimately unlikely to be sufficient to bring 5G service to all rural areas that lack 4G or 5G service).

⁸⁰ *Id.*

⁸¹ *5G Fund NPRM*, 35 FCC Rcd at 4010, para 46. Although it did not offer an alternative total budget amount, AST&Science suggests that we should “ earmark a small portion (10% to 15%) of the 5G Fund for *qualified applicants* who commit to use innovative, non-traditional systems to serve *areas that are highly unlikely to receive service* even with the benefit of support.” See AST&Science Comments at 20. We decline to adopt this suggestion, as we have others, because it does not serve our primary policy goal of awarding support to as many eligible areas as possible with the limited funds available. For the same reason, we decline to adopt Lynk Global's request that we set aside 1% of the 5G Fund as a reimbursable expense to satellite operators that successfully enable access to connectivity via mobile phones everywhere in the United States and its territories. See Letter from Margo R. Deckard, COO, Lynk Global Inc., to Marlene H. Dortch, Secretary, FCC (filed Oct. 12, 2020) (Lynk Global Oct. 12 *Ex Parte* Letter).

34. We acknowledge concerns of commenters that contend that funds necessary to deploy 5G-capable networks in rural areas may be significantly higher than our total 5G Fund budget.⁸² The Commission's experience in the CAF Phase II auction demonstrates that competitive bidding can bring costs below projections: the aggregate reserve price of more than 713,000 locations assigned in that auction was \$5 billion, compared to total winning bids of \$1.5 billion.⁸³ Moreover, we anticipate that many providers will use private capital in conjunction with the 5G Fund support they receive to build their 5G networks. By establishing the budget at \$9 billion, we also recognize the risk of overburdening consumers that contribute to the Fund. Of course, the Commission will have the opportunity to reassess the Phase II budget following Phase I in the event it determines it is insufficient.

3. Support for Tribal Lands

35. We adopt our proposal to reserve up to \$680 million of the \$8 billion 5G Fund Phase I budget to support networks serving eligible areas in Tribal lands.⁸⁴ Under the approach we adopt, only eligible areas on Tribal lands will be assigned support from this reserve.⁸⁵ This doubles the minimum amount that the Commission intended to reserve to support Tribal lands from the Mobility Fund Phase II budget. Most commenters favored our proposal to reserve support for Tribal lands in the 5G Fund,⁸⁶ but some express concern that \$680 million will still be insufficient to ensure that these areas receive reasonably comparable service at affordable prices.⁸⁷ We are mindful of these concerns, and we recognize that deploying networks that support 5G service will require a significant undertaking, particularly on Tribal lands where services often lag behind even non-Tribal rural lands. For those reasons, we acknowledge that we may need to revisit the amount of the budget reserved for Tribal lands after the conclusion of a Phase I auction, and, if necessary, we will do so at that time.

36. We adopt our proposal that bidding under the Tribal reserve budget and bidding under the unreserved portion of the budget will take place simultaneously as part of the single 5G Fund Phase I auction.⁸⁸ The Cherokee Nation expresses concern with this approach maintaining that we should conduct additional auctions as needed to ensure that the support reserved for Tribal lands in the 5G Fund

⁸² See, e.g., CRWC Comments at 22-23 (“All available information suggests that the amount of support needed will be significantly larger than \$9 billion. A 2017 report by Cost Quest Associates calculated that in order to build out a 4G LTE network in rural America it would take approximately 37,500 new towers and \$12.5 billion in capital investment, with another \$2.13 billion in annual maintenance capital and operating expenses going forward. The ten-year net present value of such investments was estimated to be \$25.6 billion, with an annual shortfall of approximately \$3.8 billion.”) Additionally, CRWC notes that a 2017 White Paper of the Commission's Office of Strategic Planning and Policy Analysis cites to another 2017 CostQuest paper entitled the “The 5G Mobile Ubiquity Price Tag” to show that, at that time, the estimated cost of providing “ubiquitous 5G coverage” could be between \$61 billion and \$250 billion. CRWC Comments at 23; see also CCA Reply Comments at 7-8 (noting that “[o]bservers have predicted that telecom operators will invest as much as \$275 billion nationwide over seven years as they build out 5G”).

⁸³ See *Connect America Fund Phase II Auction (Auction 903) Closes; Winning Bidders Announced; FCC Form 683 Due October 15, 2018*, Public Notice, 33 FCC Rcd 8257, 8257, para. 1 (2018).

⁸⁴ *5G Fund NPRM*, 35 FCC Rcd at 4011, para. 48.

⁸⁵ See *id.*

⁸⁶ AST&Science Comments at 21, 27; California Public Utilities Commission at 1 (generally supporting reserving \$680 million of the 5G Fund budget for 5G service on Tribal lands); Cherokee Nation Comments at 2; Smith Bagley, Inc. Comments at 15 (Smith Bagley Comments); Standing Rock Telecommunications, Inc. Comments at 2 (Standing Rock Comments).

⁸⁷ Cherokee Nation Comments at 2; Smith Bagley Comments at 15-16; Standing Rock Comments at 4.

⁸⁸ *Id.* at 48, n.79.

auction serves Tribal lands.⁸⁹ These concerns are unwarranted. Contrary to the Cherokee Nation's assumption, conducting bidding simultaneously creates no disincentive for bidders because fewer bids on Tribal lands under the reserved Tribal lands budget will not lead to more funds being transferred to the unreserved budget. Rather, Tribal areas with winning bids will receive a greater share of the Tribal budget. Accordingly, we do not believe that reserving those funds for a subsequent auction for support for Tribal lands will be a timely or practical approach to enhance 5G Tribal land deployments.

37. Consistent with past practice, the details and final bidding procedures for a 5G Fund auction will be developed during our standard pre-auction process, and we anticipate that the procedures we adopt after notice and comment will ensure that support levels assigned from the Tribal reserve will not be less than support assigned from the unreserved budget, except possibly in cases where more than one bidder is competing for support in the same area.⁹⁰

38. We decline to adopt Smith Bagley, Inc.'s Remote Tribal Areas Plan, which proposes allowing carriers serving Tribal lands to participate in an opt-in funding plan similar to the Alaska Plan, as an alternative mechanism for providing support to remote Tribal areas.⁹¹ We are not convinced that this approach would improve the outcome on Tribal lands over awarding support to Tribal areas through a reverse auction. As the Commission explained in rejecting a similar proposal in the Mobility Fund Phase II proceeding, the Commission adopted the Alaska Plan not because of the existence of Tribal lands in Alaska, but because of the need for support to be flexible enough to accommodate Alaska's unique conditions, like its "remoteness, lack of roads, challenges and costs associated with transporting fuel, lack of scalability per community, satellite and backhaul availability, extreme weather conditions, challenging topography, and short construction season."⁹² We again conclude that adopting such an approach for all remaining states would be inconsistent with our decision to use a reverse auction as an efficient mechanism for deciding where to allocate Tribal support.⁹³ Based on the \$680 million budget that we are reserving for support for Tribal lands, we anticipate that 5G Fund support will meaningfully flow to Tribal areas.

39. We also decline to adopt Standing Rock Telecommunications, Inc.'s request that we use a Tribal entity weighting factor as a mechanism to provide Tribal entities with the opportunity to become the winning bidder to provide supported 5G service on their Tribal lands.⁹⁴ The \$680 million reserved Tribal lands budget we adopt will create a powerful incentive for service providers to bid to serve Tribal lands. We are unpersuaded that creating a preference for a particular type of entity will advance our goals and produce greater deployment on Tribal lands. Indeed, including an additional weighting factor for Tribal entities could deter non-Tribal entities from bidding to serve Tribal lands, reducing both the competitiveness of the Phase I auction and the potential reach of our finite funds.

40. *Identifying Tribal Lands.* We adopt our proposal to amend the definition of "Tribal lands" in section 54.5 of the Commission's rules to allow for the designation of certain non-Tribal areas

⁸⁹ Cherokee Nation Comments at 2 (stating that it believes this approach to bidding will be a deterrent for providers to pursue Tribal land deployments because if providers know in advance this funding will later be available for non-Tribal lands, they may choose to allow the auction to play out to fund seemingly more profitable, less rural non-Tribal lands).

⁹⁰ *5G Fund NPRM*, 35 FCC Rcd at 4011-12, para. 49.

⁹¹ See Smith Bagley Comments at 6-14.

⁹² *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2166-67, para. 36; see also *Alaska Plan Order*, 31 FCC Rcd at 10162, para. 72 (citing *USF/ICC Transformation Order*, 26 FCC Rcd at 17829, para. 507).

⁹³ *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2166-67, para. 36.

⁹⁴ Standing Rock Comments at 2.

and communities as Tribal lands, consistent with the rules for the Lifeline program.⁹⁵ All commenters who addressed this proposal support it.⁹⁶ This designation process permits expansion of the definition of Tribal lands for the high-cost program upon an appropriate showing that certain areas or communities that fall outside the boundaries of existing Tribal lands—i.e., off-reservation lands other than those already covered by the definition⁹⁷—have the same characteristics as existing Tribal lands.⁹⁸ Although this designation process was adopted solely for the Lifeline program,⁹⁹ the Commission previously has relied on precedent for the Lifeline program when adopting, interpreting, and expanding the definition of Tribal lands for purposes of the high-cost program.¹⁰⁰ We find that the adoption and use of the designation

⁹⁵ *5G Fund NPRM*, 35 FCC Rcd at 4013-14, 4071, paras. 53-54, Appx. A (proposed amendment to 47 CFR § 54.5); *see also* 47 CFR §§ 54.400(e) (defining “Tribal lands” for purposes of the Lifeline program to include “any land designated as such by the Commission . . . pursuant to the designation process in § 54.412”), 54.412(a) (authorizing the Wireline Communications Bureau and the Office of Native Affairs and Policy to “designate as Tribal lands . . . areas or communities that fall outside the boundaries of existing Tribal lands but which maintain the same characteristics as Tribal lands defined in § 54.400(e)”).

⁹⁶ *See, e.g.*, Smith Bagley Comments at 16-17; Cherokee Nation Comments at 2.

⁹⁷ The section 54.5 definition of “Tribal lands” includes certain off-reservation lands—i.e., “former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688) and Indian Allotments, . . . as well as Hawaiian Home Lands—areas held in trust for native Hawaiians by the state of Hawaii, pursuant to the Hawaiian Homes Commission Act, 1920, July 9, 1921, 42 Stat 108 et seq., as amended.” 47 CFR § 54.5; *see also id.* § 54.400(e).

⁹⁸ *See id.* § 54.412(a), (d)-(e); *Lifeline and Link Up Reform and Modernization et al.*, Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd 6656, 6725-27, paras. 161 (2012) (*2012 Lifeline Order*) (providing examples of the characteristics that could support the designation of off-reservation lands as Tribal lands).

⁹⁹ *2012 Lifeline Order*, 27 FCC Rcd at 6725, para. 156 (“This [designation] process will apply to Tribal governments seeking qualification for enhanced Lifeline support for Tribal communities whose land does not meet the definition of ‘reservation’ contained in section 54.400(e) of our rules.”); *see id.* at 6727, para. 162 (noting that “it is the express intent of the Commission that any such designation shall be used solely for the Lifeline program and shall not be used for other purposes—such as eligibility for the Tribal Mobility Fund”). The Commission has extended the scope of Tribal land coverage for the Lifeline program by rulemaking and waivers. *See Bridging the Digital Divide for Low-Income Consumers et al.*, Fourth Report and Order, Order on Reconsideration, Memorandum Opinion and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, 32 FCC Rcd 10475, 10480-81, paras. 12 & n.34, 14 & n.44 (2017) (*2017 Lifeline Order*) (citing *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, 2016 Broadband Progress Report, 31 FCC Rcd 699, 731, para. 77 n.238 (2016) (*2016 Broadband Progress Report*)); *Federal-State Joint Board on Universal Service; Smith Bagley, Inc. Petition for Waiver of Section 54.400(e) of the Commission’s Rules*, Memorandum Opinion and Order, 20 FCC Rcd 7701, 7704, para. 10 (2005) (*Eastern Navajo Agency Waiver Order*); *Sacred Wind Communications, Inc. and Qwest Corporation, Joint Petition for Waiver of the Definition of “Study Area” Contained in Part 36, Appendix-Glossary of the Commission’s Rules; Sacred Wind Communications, Inc. Related Waivers of Parts 36, 54, and 69 of the Communication’s Rules*, Order, 21 FCC Rcd 9227, 9239-43, paras. 27-35 (WCB 2006) (*Sacred Wind Waiver Order*).

¹⁰⁰ *See, e.g.*, 47 CFR § 54.5 (citing 47 CFR § 54.400(e)); *Connect America Fund et al.*, Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration, 33 FCC Rcd 11893, 11910-11, para. 55 n.122 (2018) (adopting the definition of “Tribal lands” from the *USF/ICC Transformation Order*, as modified by the *2015 Lifeline Reform Order*, for the Alternative Connect America Cost Model (A-CAM II) support mechanism) (citing *Lifeline and Link Up Reform and Modernization*, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, Second Report and Order, and Memorandum Opinion and Order, 30 FCC Rcd 7818, 7903, para. 257 (2015) (*2015 Lifeline Reform Order*); *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17711, para. 126 n.197 (2011) (*USF/ICC Transformation Order*)); *USF/ICC Transformation Order*, 26 FCC Rcd at 17711, para. 126 n.197 (adopting part of the “Tribal lands” definition from the Lifeline rule); *Tribal Mobility Fund Phase I Auction Rescheduled for December 19, 2013; Notice* (continued....)

process for the high-cost program is in the public interest because it will: (1) reflect the flexibility that the Commission has used to adjust, as appropriate, the definition of Tribal lands in the universal service context; and (2) enable us to maximize bidding by all eligible bidders to serve Tribal lands in a 5G Fund auction and any future universal service auctions by grouping together existing Tribal lands and associated off-reservation lands, thereby making those areas more attractive for bidders and facilitating coverage to Tribal lands, as well as promoting competitive bidding for funding of such coverage.

41. We designate three types of off-reservation lands as Tribal lands for purposes of the high-cost program. First, we designate as Tribal lands any federally recognized off-reservation trust lands, Tribal designated statistical areas (TDSAs), or joint use areas from the Census Bureau’s American Indian, Alaska Native, and Native Hawaiian boundaries.¹⁰¹ Second, we designate as Tribal lands those areas within the study area boundaries of the Eastern Navajo Agency and Sacred Wind Communications in New Mexico to allow so-called “checkerboard” Tribal and non-Tribal land areas in this section of New Mexico to be aggregated as Tribal lands for purposes of the high-cost program, including the 5G Fund, consistent with past Commission waivers.¹⁰² Under this approach, all Tribal land with the same four-digit census code within the minimum geographic area for bidding will be grouped together to allow bidders to

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and Filing Requirements and Other Procedures for Auction 902, Public Notice, 28 FCC Rcd 11628, 11636-38, paras. 18-23 (*Auction 902 Procedures Public Notice*) (adding certain off-reservation lands to the Mobility Fund Phase I auction in accordance with precedent from the Lifeline context).

¹⁰¹ See *2017 Lifeline Order*, 32 FCC Rcd at 10480-81, paras. 12 & n.34, 14 & n.44 (citing *2016 Broadband Progress Report*, 31 FCC Rcd at 731, para. 77 n.238). In effect, we will thus include as Tribal lands all areas from the U.S. Census Bureau’s American Indian, Alaska Native, Native Hawaiian dataset that are classified as federally recognized, regardless of the area’s census code, classification, or component type in the data. See *TIGER/Line Shapefiles*, <https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html> (last visited Oct. 4, 2020). Because many Tribal citizens live and work in, or travel to such off-reservation trust lands, TDSAs, or joint use areas, or are otherwise areas which are near federally-recognized reservations that we unambiguously consider Tribal lands, we conclude that the “Tribal character of” such off-reservation lands is clear. See 47 CFR § 54.412(d). Moreover, in the context of the high-cost program, such areas face many of the same barriers to service as faced by on-reservation land—e.g., low population density, high levels of poverty, lack of infrastructure, and historical lack of service. We find that including off-reservation areas in our definition of Tribal lands will help ensure we close the digital divide by facilitating carriers availing themselves of Tribal support mechanisms in our high-cost programs to serve more expansive areas with many of the same characteristics. See 47 CFR § 54.412(e). We acknowledge that Commission staff previously concluded that certain TDSAs did not qualify as “Tribal lands” under the section 54.5 definition for purposes of the Tribal Mobility Fund Phase I auction. See *Auction 902 Procedures Public Notice*, 28 FCC Rcd at 11638, para. 23. For the reasons previously stated, however, we now consider all TDSAs as Tribal lands for the 5G Fund and other high-cost program mechanisms.

¹⁰² See *Eastern Navajo Agency Waiver Order*, 20 FCC Rcd at 7704, para. 10 (2005) (granting a waiver of the Commission’s Lifeline and Link Up eligibility rules to enable eligible residents of the Navajo Eastern Agency to receive enhanced Lifeline and Link Up support); *Sacred Wind Waiver Order*, 21 FCC Rcd at 9239-43, paras. 27-35 (clarifying that the 2005 waiver of the Commission’s Lifeline and Link-Up eligibility rules to enable eligible residents of the Eastern Navajo Agency to receive enhanced Lifeline and Link-Up support applies to Sacred Wind as well as Smith Bagley, Inc. and granting waiver to permit Sacred Wind and other eligible telecommunications carriers serving the area immediately adjacent to the Eastern Navajo Agency to offer Tier 4 Lifeline and Link-Up benefits to qualified residents); see also *Request for Waiver of the Definition of “Federally Recognized Tribal Land” under Section 1.2110(f)(3)(i) of the Commission’s Rules to Include Additional Areas within the Eastern Navajo Agency of the Navajo Nation*, Order, 29 FCC Rcd 13769, 13771-76, paras. 6-15 (WTB 2014) (*SBI Auction 97 Waiver Order*) (waiving the definition of “federally recognized Tribal land” under section 1.2110(f)(3)(i) of the Commission’s rules to expand it to include additional areas within the Eastern Navajo Agency of the Navajo Nation to allow any winning bidder in Auction 97 (i.e., the auction of Advanced Wireless Services licenses) to seek eligibility for Tribal lands bidding credits in those underserved areas of New Mexico); *Auction 902 Procedures Public Notice*, 28 FCC Rcd at 11637, para. 21 (“[W]e conclude that all of the populated, unserved census blocks in the Navajo Eastern Agency should be included in the Tribal Mobility Fund Phase I auction.”).

bid on Tribal areas grouped by Tribal entity. For Tribal land that is not part of the Census Bureau's federally recognized American Indian, Alaska Native, and Native Hawaiian boundaries, we will assign such land the census code for the appropriate Tribal entity.¹⁰³ Specifically, we will identify as part of the Navajo Nation the portions of the study area boundaries of the Eastern Navajo Agency and Sacred Wind Communications in New Mexico that fall outside of any Tribal boundary from the Census Bureau's data.¹⁰⁴ Lastly, we designate as Tribal lands any areas within the geographic boundaries reflected in the Historical Map of Oklahoma (1870-1890), including the Cherokee Outlet, consistent with the Commission's interpretation of the "former reservations in Oklahoma" in section 54.400(e).¹⁰⁵

42. Commenters generally support our proposals concerning identification of Tribal lands. Smith Bagley supports the definitional change to the Eastern Navajo Agency to capture so-called "checkerboard" areas consisting of multiple land classifications, so that residents have access to the 5G Fund, and all future universal service programs, consistent with past Commission waivers.¹⁰⁶ It submits that it is the correct course for the Commission to identify as part of the Navajo Nation the portions of the study area boundaries of the Eastern Navajo Agency and Sacred Wind Communications in New Mexico that fall outside of any Tribal boundary from the Census Bureau's data, and submits that solidifying the Eastern Navajo Agency's status as Tribal land will save Commission resources, bring certainty to carriers serving these areas, and generally serve the public interest.¹⁰⁷

43. The Cherokee Nation states that it interprets the Commission's proposal to mean that the Cherokee Nation's former reservation lands, the Cherokee Outlet, will be assigned to the Cherokee Nation because the Cherokee Nation is the only tribe to have treaty rights to the Cherokee Outlet, and that any "former reservation lands" of the Iowa, Kickapoo, and Pawnee will be assigned to them respectively, but asks for clarity regarding which particular "former reservation lands" will be assigned to each of the four Tribal entities.¹⁰⁸ RWA supports the Cherokee Nation's request.¹⁰⁹ We clarify that the

¹⁰³ Because there is no individual Alaska Native village associated with areas in Alaska that are not part of the American Indian, Alaska Native, and Native Hawaiian boundary data, we will identify these areas with the appropriate Alaska Native Regional Corporation identifier.

¹⁰⁴ See *Eastern Navajo Agency Waiver Order*, 20 FCC Rcd at 7705, para. 11 (noting that ninety-two percent of the people living within the borders of the Eastern Navajo Agency are members of the Navajo Nation); *Sacred Wind Waiver Order*, 21 FCC Rcd at 9242, para. 33 (explaining that "[t]he majority of residents of the lands located adjacent to the Eastern Navajo Agency are members of the Navajo Nation, except for those on the Jicarilla Apache reservation"); see also *SBI Auction 97 Waiver Order*, 29 FCC Rcd at 13773, para. 11 ("[T]he record reflects that the Eastern Navajo Agency and its Chapters are political units within and considered a part of the Navajo Nation."); *Auction 902 Procedures Public Notice*, 28 FCC Rcd at 11637, para. 21 (noting that "the Navajo Nation recognizes everything within the external borders of the reservation, including the Eastern Agency, to be part of its sovereign territory and subject to its territorial jurisdiction").

¹⁰⁵ See *Lifeline and Link Up Reform and Modernization*, Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Rcd 3962, 4121, para. 434 (2016) (concluding that the Cherokee Outlet is a "former reservation of Oklahoma" for purposes of the Lifeline rules); *2015 Lifeline Reform Order*, 30 FCC Rcd at 7905, para. 261 (adopting reliance on the Oklahoma Historical Map to determine the boundaries of "former reservations in Oklahoma" for purposes of the Lifeline rules); see also Oklahoma Historical Map, 1870-1890, Plate 6, Webb Publishing Company, Oklahoma City, OK (1917) (Copyright 1917, George Rainey, Enid, OK; Engraved George F. Cram Company, Chicago, IL). We note the Supreme Court's recent decision in *McGirt v. Oklahoma*, 140 S. Ct. 2452 (2020), holding that land reserved for the Creek Nation since the 19th century remains "Indian country" for purposes of the Major Crimes Act and recognizing approximately half of the state of Oklahoma as Native American reservation land, but further note that this decision does not impact the approach to defining and identifying Tribal lands for purposes of the high-cost program we adopt here because the lands at issue in that decision were already considered to be Tribal lands under our proposal.

¹⁰⁶ Smith Bagley Comments at iii.

¹⁰⁷ Smith Bagley Comments at 16.

¹⁰⁸ Cherokee Nation Comments at 2.

area not currently designated as Tribal in the U.S. Census Bureau’s American Indian, Alaska Native, and Native Hawaiian data but identified as the Cherokee Outlet on the Oklahoma Historical Map (1870-1890) will be considered Tribal under the definition we adopt. Similarly, areas not currently designated as Tribal in the Census Bureau data but identified as Iowa, Kickapoo, or Pawnee based upon the “former reservations in Oklahoma” identified on the Oklahoma Historical Map (1870-1890) will be considered Tribal.

44. The Council of Athabascan Tribal Governments and the Mount Sanford Tribal Consortium each state that the Commission’s proposal to include Alaska in the definition of “Tribal lands” but exclude Alaska from the 5G Fund is inconsistent and will create confusion unless the Commission either deletes the reference to Alaska, or notes in the definition that areas in Alaska are not eligible for 5G Fund support.¹¹⁰ We note that the existing definition of “Tribal lands” in section 54.5 of the Commission’s rules defines that term for purposes of high-cost support and thus applies to all high-cost support programs.¹¹¹ The Commission did not propose in the *5G Fund NPRM* a new definition of “Tribal lands” that is unique to the 5G Fund for Rural America. The amendments to section 54.5 proposed in the *5G Fund NPRM*—which we adopt here—are not specific to the 5G Fund and will apply to all high-cost support programs going forward, including the new 5G Fund, and for this reason, we do not qualify the reference to Alaska in the definition of “Tribal lands.” Instead, consistent with our policy of not providing high-cost support funding to more than one mobile competitive ETC in a geographic area, we proposed in the *5G Fund NPRM* to exclude areas in Alaska, for which high-cost support is already being provided via the mobile portion of the Alaska Plan, from the areas eligible for 5G Fund support.¹¹² In formally adopting our proposal to exclude areas in Alaska from eligibility for 5G Fund support today, we make clear that such areas are not eligible for 5G Fund support.

4. Term of Support

45. We adopt a 10-year support term for each phase of the 5G Fund, with monthly disbursements to winning bidders. As we recently explained in adopting a 10-year support term for the Rural Digital Opportunity Fund,¹¹³ a support term of 10 years encourages long-term investment and contributed to the robust participation in the successful Connect America Fund Phase II auction.¹¹⁴ We conclude that the same incentives apply here.

46. Commenters largely agree that a 10-year support term will provide the certainty and stability needed to encourage deployment of 5G service in rural areas while allowing providers to recover the cost of deploying their networks over time.¹¹⁵ We decline to shorten the term of support to five years as one commenter suggests,¹¹⁶ because we conclude that a five-year support term is too short to encourage

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¹⁰⁹ RWA Reply Comments at 16.

¹¹⁰ Council of Athabascan Tribal Governments Comments at 1; Mount Sanford Tribal Consortium Comments at 2.

¹¹¹ See 47 CFR § 54.5 (defining “Tribal lands” for purposes of the high-cost program).

¹¹² *5G Fund NPRM*, 35 FCC Rcd at 4009, para. 42; *Alaska Plan Order*, 31 FCC Rcd at 10164, para. 75.

¹¹³ *Rural Digital Opportunity Fund; Connect America Fund*, Report and Order, 35 FCC Rcd 686, 689, para. 7 (2020) (*Rural Digital Opportunity Fund Report and Order*).

¹¹⁴ See *id.* The Commission has used a 10-year support term on numerous other occasions. *Connect America Fund et al.*, Order, 31 FCC Rcd 12086, 12092, para. 22 (2016) (*ACS Phase II Service Obligations Order*); *Alaska Plan Order*, 31 FCC Rcd at 10150, para. 32; *Connect America Fund et al.*, Report and Order et al., 31 FCC Rcd 3087, 3097, para. 22 (2016) (*2016 Rate-of-Return Reform Order*); *Tech Transitions et al.*, Order et al., 29 FCC Rcd 1433, 1476-77, paras. 123-26 (2014) (all adopting 10-year support terms).

¹¹⁵ AT&T Comments at 2; HIMSS and PCHAlliance Comments at 2; see also RWA Reply Comments at 15.

¹¹⁶ AST&Science Comments at 25-26.

long-term investment.¹¹⁷ For similar reasons, we also reject the suggestion that we should accelerate the disbursement of funds by increasing support awarded during the first year,¹¹⁸ because our decision to disburse support on a monthly basis best ensures our ability to safeguard universal service funds in the event that service providers do not comply with our performance requirements and public interest obligations, and provides predictability for the Fund's contributions mechanism. Moreover, monthly disbursements provide 5G support recipients with reliable and predictable payments that conform to a variety of business cycles.

5. A Multi-Round, Descending Clock Auction

47. We adopt our proposal to rely on the Commission's existing Part 1, Subpart AA competitive bidding process rules for universal service support for the 5G Fund, with specific detailed clock auction bidding and bid processing procedures to be developed through our ordinary pre-auction notice and comment process.¹¹⁹ For Phase I and Phase II of the 5G Fund, we will use a multi-round, descending clock auction to identify the areas that will receive support, the carriers that will receive support in those areas, and the amount of support that each winning bidder will be eligible to receive. This descending clock auction will consist of sequential bidding rounds according to an announced schedule. Using multi-round auctions will enable bidders to adjust their bidding strategies over the course of the bidding so as to create viable aggregations of geographic areas in which to construct networks. The Commission has found that this approach to developing competitive bidding procedures—first defining important elements of the basic structure while later considering the detailed procedures for implementation—gives it necessary flexibility for integrating its auction objectives and high-level decisions into a workable and consistent auction process.¹²⁰ Most commenters support our proposal.¹²¹

48. For both the Phase I and Phase II auctions, we adopt our proposal to accept bids and identify winning bids using a support price per adjusted square kilometer.¹²² Each eligible area will have

¹¹⁷ See 47 USC § 254(b)(5); see e.g., RWA Reply Comments at 15 (urging the Commission to reject a shorter term of support).

¹¹⁸ RWA Reply Comments at 15; cf. AST&Science Comments at 25-26 (suggesting that “winning bidders should be able to draw down additional funds to the extent that they demonstrate actual out-of-pocket expenses to launch service in the target area in excess of the support received as long as the expenditures are consistent with the project description that was submitted and approved as part of the long form application”).

¹¹⁹ See 47 CFR § 1.21003; *5G Fund NPRM*, 35 FCC Rcd at 4014, 4060, paras. 55, 200; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 696-97, para. 22.

¹²⁰ *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2211, para. 146.

¹²¹ *5G Fund NPRM*, 35 FCC Rcd at 4014, para. 56; see e.g., AST&Science Comments at 28 (endorsing this approach “because the Commission has an excellent track record in designing and conducting successful reverse auctions to allocate support funds”); California Public Utilities Commission Comments at 1 (generally supporting the 5G Fund implementation with reverse auctions to award funding); NTCA Comments at 7 (the 5G Fund should consist of a multi-round, descending clock auction for areas identified through improved maps as unserved by at least 4G LTE); AT&T Comments at 1-2 (the Commission should adopt a multi-round, descending clock auction to award funding); Verizon Comments at 3 (“[t]he proposed descending-clock reverse auction framework is generally reasonable”); T-Mobile Reply Comments at 8 (noting that reverse auctions work and have been successfully used by the Commission in the universal service context, and opposing proposals to abandon this proven method). CCA, however, cautions against the use of reverse auctions because they can “drive support to lowest cost options,” specifically citing the use of equipment that may be subject to security concerns. See Comments of CCA at 17. We do not find this argument compelling. Firms generally face an incentive to minimize costs not limited to reverse auction bidders. Moreover, the Commission generally ensures equipment safety and security standards, and those concerns are not limited to competitive bidding in a reverse clock auction. See *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, Report and Order, 34 FCC Rcd 11423, 11449-54, paras. 66-78 (2019).

¹²² *5G Fund NPRM*, 35 FCC Rcd at 4014, para. 57.

an associated number of square kilometers which will be adjusted by an adjustment factor, described below.¹²³ We will determine support amounts for an area by multiplying an area's associated adjusted square kilometers by the relevant price per square kilometer.¹²⁴ This approach will ensure that carriers bidding to serve the hardest-to-serve parts of the country can compete efficiently and fairly in the auction. Commenters did not oppose these specific proposals.

49. During the pre-auction processes for Phase I and Phase II, as is the Commission's normal practice, we will seek comment on and adopt an opening price per adjusted square kilometer that is high enough that even carriers requiring a very high level of support will be able to compete in the auction. The opening price multiplied by the number of adjusted square kilometers in the area will represent the highest support amount that a winning bidder could receive for the area in the auction. The same opening price and subsequent clock prices, in dollars per adjusted square kilometer, will apply to all the eligible areas in the auction. The clock price will be decremented in subsequent rounds of the auction, implying lower support amounts for each area. Since the opening price is intended to serve as a starting point for bidding and not an estimate of final prices, we anticipate that the opening price that we propose will be based on rough estimates of the cost of providing service in hard-to serve areas, taking into account any adjustments that are adopted.

6. Minimum Geographic Area for Bidding

50. We conclude that the minimum geographic area for bidding—i.e., the geographic area by which areas eligible for 5G Fund support will be grouped for bidding—in a 5G Fund auction will be no larger than a census tract and no smaller than a census block group, as designated by the U.S. Census Bureau. Our goal in adopting a minimum geographic area for bidding is to ensure that a wide variety of interested bidders, including small entities, have the flexibility to design a network that matches their business model and technical capabilities and that allows service providers to achieve their performance benchmarks and public interest obligations efficiently. Thus, as the Commission did in the CAF Phase II and Rural Digital Opportunity Fund proceedings, we will determine the exact geographic area for grouping eligible areas during the pre-auction process when we finalize the auction design and have better data for determining eligible areas.¹²⁵ Commenters are split on whether the minimum geographic area for bidding in a 5G Fund auction should be smaller than a census tract,¹²⁶ and none support larger ones. In considering whether to use a minimum geographic area smaller than a census tract, we are mindful of the concerns of commenters that the number of square kilometers in a census tract may not correspond well with the low population density of that large a geographic area and that it may be difficult for carriers meet the 5G Fund performance requirements.¹²⁷

51. We also conclude that the minimum geographic area for bidding for a 5G Fund auction will be larger than individual census blocks, which are smaller than census tracts and census block

¹²³ See *infra* Section III.C.7.

¹²⁴ For example, an area with 100 square kilometers and an adjustment factor of 1.2 would have 100×1.2 or 120 adjusted square kilometers.

¹²⁵ See e.g., *CAF Phase II Auction Order*, 31 FCC Rcd at 5979, para. 89; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 702, para. 30.

¹²⁶ AT&T Comments at 2, 11-12 (supporting census block groups) Vermont Department of Public Service Reply Comments at 5-6 (supporting census block groups); *but see* New York Public Service Commission Comments at 4 (supporting census tracts); RWA Reply Comments at 7 (supporting census tracts). At least one commenter encourages us to use an "appropriately sized" minimum geographic unit that will facilitate bidding, allow for deployment milestones to be reached, and reflect the contiguous nature of mobile networks. CCA Comments at 13; CCA Reply Comments at 9.

¹²⁷ See e.g., AT&T Comments at 11-12.

groups. Although at least one commenter supports using individual census blocks,¹²⁸ as we recently concluded in the context of the CAF Phase II and Rural Digital Opportunity Fund auctions, doing so would significantly increase the complexity of the bidding process both for bidders and the bidding system and minimize the potential for broad coverage by winning bidders.¹²⁹ Furthermore, using census blocks as the minimum geographic area could create more challenges for providers in putting together a bidding strategy that aligns with their intended network construction or expansion.¹³⁰

52. In order to provide interested parties greater certainty, and insofar as no commenter objected to it, we also adopt our proposal to remove from a 5G Fund auction any geographic area that has *de minimis* eligible areas, which we define as an area of one square kilometer or less within the geographic area that we ultimately adopt. We believe there would be little or no demand for these *de minimis* areas, the administrative burdens would outweigh any potential benefits, and that the amount of the winning bid associated with such areas would be so small in terms of monthly disbursements that the cost to distribute it would outweigh its utility in benefitting a support recipient.¹³¹

53. Moreover, because we decide to allocate funds reserved for support to Tribal lands from a separate Tribal lands budget, we also adopt our proposal to identify the eligible areas that coincide with an area of a specific Tribal entity by overlaying the boundaries of Tribal lands for each federally recognized Tribal entity on the eligible areas within each minimum geographic area that we adopt.¹³²

7. Adjustment Factor

54. We adopt our proposal to incorporate an adjustment factor into the 5G Fund auction that will assign a weight to each geographic area and will apply that adjustment factor to bidding for support amounts, and to apply that adjustment factor to the methodology for disaggregating legacy high-cost support.¹³³ This weighting will reflect the relative cost of serving areas with differing terrain characteristics,¹³⁴ as well as the potential business case for each area, with less profitable areas receiving

¹²⁸ California Public Utilities Commission Comments at 5 n.13. CCA contends that a unit as small as a census block could threaten the ubiquity of wireless networks. See CCA Reply Comments at 9.

¹²⁹ *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 702, para. 30 (declining “to adopt individual census blocks as the minimum geographic area for bidding because of the significantly larger number of eligible census blocks, increasing the complexity of the bidding process both for bidders and the bidding system and minimizing the potential for broad coverage by winning bidders”); *Connect America Fund Phase II Auction Scheduled for July 24, 2018; Notice and Filing Requirements and Other Procedures for Auction 903*, Public Notice, 33 FCC Rcd 1428, 1436-37, para. 18 (2018) (*Auction 903 Procedures Public Notice*); see CCA Reply Comments at 9 (asserting that “a unit as small as a census block could threaten the ubiquity of wireless networks”).

¹³⁰ *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 702, para. 30.

¹³¹ *5G Fund NPRM*, 35 FCC Rcd at 4015, para. 64.

¹³² *Id.* at 4015, para. 65. We note that while commenters generally did not address this proposal, two commenters are generally supportive of our proposals to identify and group Tribal areas with the appropriate entity for purposes of the high-cost program and 5G Fund. See Smith Bagley Comments at 16-17; see also Cherokee Nation Comments at 2 (requesting clarification of but otherwise generally supporting a proposal to “identify the census blocks outside of tribal boundaries on the Oklahoma Historical Map (1870-1890) and associate them with the ‘Cherokee, Iowa, Kickapoo and Pawnee’”).

¹³³ *5G Fund NPRM*, 35 FCC Rcd at 4015, para. 66.

¹³⁴ Our decision to adopt this proposal is consistent with the Commission’s recognition in the *Mobility Fund Phase II Report and Order* that terrain could affect the cost of deploying service and the direction to the Wireline Competition Bureau and the Wireless Telecommunications Bureau to apply a methodology that used a terrain factor as a proxy for determining higher cost areas in transitioning legacy competitive ETC support to Mobility Fund Phase II support. See *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2183, para. 71. As the Commission noted, more mountainous terrains with greater variations in slope are areas that tend to be more costly to serve than level plains. *Id.* A terrain factor would be used to weight the area of a block such that eligible areas in more

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greater weight and therefore greater support.¹³⁵ Using an adjustment factor to help distribute 5G Fund support to, and disaggregate legacy support in, a range of areas across the country that are geographically and economically diverse serves the public interest.¹³⁶ As stated in the *5G Fund NPRM*, however, we do not expect an adjustment factor to capture the full differences between the costs and benefits of providing service to different types of geographic areas.¹³⁷ In addition, we may cap the adjustment factor if we believe that it would be helpful to do so in balancing our goals of providing broad and equitable support for 5G.

55. As directed in the *5G Fund Order*,¹³⁸ the Office and Bureau proposed and sought comment on specific adjustment factor values and the underlying methodologies used to develop them.¹³⁹ Consistent with our decision to adopt the use of an adjustment factor, the adjustment factor values that are adopted by the Office and Bureau will be used in both bidding in the 5G Fund auction and for the disaggregation of legacy support.

56. Commenters broadly support our proposal to adopt an adjustment factor, although they differ in how to calculate and apply it. T-Mobile argues that an adjustment factor will “encourage investment in areas that are more costly or less profitable to serve.”¹⁴⁰ The Massachusetts Department of Telecommunications and Cable also supports using an adjustment factor to score auction bids, but argues that the Commission should “account for all relevant differences in 5G deployment and operating costs between locations, not just differences in terrain.”¹⁴¹ AST&Science strongly supports incorporating an adjustment factor into the 5G Fund auction design “in order to increase support to areas that are more costly and less profitable to serve.”¹⁴² RWA believes that adjustment factors are “an effective way of targeting support to hard-to-serve rural areas” in an auction.¹⁴³

57. Our application of an adjustment factor in bidding in the 5G Fund auction and for the disaggregation of legacy support recognizes the variability of costs of deploying service, especially mobile service, across the country, and in that way advances our core universal service goal of ensuring access to reasonably comparable services in all areas of the country. We accordingly decline to adopt a

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mountainous areas would be allocated a greater amount of a competitive ETC’s total legacy support to reflect the higher costs of serving such areas. *Id.*

¹³⁵ The descending clock auction format we will use is one in which a uniform support rate is offered across all eligible areas, and carriers indicate which specific areas they would serve at that rate. If the sum of all payments that would be made at a specific rate given carriers’ expressed willingness to serve exceeds the 5G Fund budget, then the rate is reduced and carriers express their willingness to serve at the lower rate. This process continues until the payment is equal to the 5G Fund budget. Under this process, carriers will be willing to serve fewer areas as the rate falls, but if the same rate is offered for all remaining areas, more support than is needed will flow to the less costly-to-serve and more profitable remaining areas. The adjustment factor will, however, for any given support rate, allocate a multiple of the support rate to more costly and less profitable areas, thereby making them more attractive to serve and increasing the support to such areas.

¹³⁶ See generally *In Re: FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014).

¹³⁷ *5G Fund NPRM*, 35 FCC Rcd at 4016, para. 66.

¹³⁸ *5G Fund Order*, 35 FCC Rcd at 4061, paras. 202-03.

¹³⁹ See *Office of Economics and Analytics and Wireline Competition Bureau Seek Comment on Adjustment Factor Values for the 5G Fund*, Public Notice, 35 FCC Rcd 5704, 5706-11, paras. 6-17 (OEA/WCB 2020) (*5G Fund Adjustment Factor Public Notice*).

¹⁴⁰ T-Mobile Comments at 1.

¹⁴¹ Massachusetts Department of Telecommunications and Cable Comments at 10.

¹⁴² AST&Science Comments at 28.

¹⁴³ RWA 5G Fund Adjustment Factor Public Notice Comments at 2.

disaggregation methodology allocating universal service support uniformly throughout a provider's subsidized service area; doing so would ignore the significant additional costs that wireless providers incur to deploy service in more difficult terrain and economic conditions. Instead, consistent with the direction in the *5G Fund Order*,¹⁴⁴ the Office and Bureau will apply a disaggregation methodology that uses an adjustment factor as a proxy for determining areas that are relatively more costly for potential bidders and current legacy support recipients.

58. We adopt our proposal to use an adjustment factor that accounts for both the relative costs and business cases of deploying a 5G network given the differing terrain and economic conditions throughout the United States.¹⁴⁵ The adopted adjustment factor will ensure that bids to serve areas that tend to be less profitable to serve, such as more economically disadvantaged areas and areas with more challenging terrain, are given greater weight in the auction and are not disadvantaged. We defer the final determination of the precise manner in which the adjustment factor will be incorporated into the auction mechanism to the pre-auction process.

59. We disagree with Verizon that applying such an adjustment factor to bidding is untested.¹⁴⁶ In the CAF Phase II auction, the Commission's cost model adjusted reserve prices based on variations in the deployment costs of fixed networks due to factors like geography and regional costs.¹⁴⁷ This cost-based adjustment to the bid amount is effectively the same as we adopt here—albeit designed here for application to mobile networks—and we will build on our experience in that auction. We also disagree with RWA that the adjustment factor should not be applied to the disaggregation of legacy support.¹⁴⁸ Using an adjustment factor is appropriate because it will alleviate potential concerns over a carrier losing a disproportionate amount of its legacy support resulting from a disaggregation methodology in which more costly areas would be treated the same as less costly areas with respect to subsidies received.¹⁴⁹

60. We decline to adopt the Massachusetts Department of Telecommunications and Cable's proposal to explicitly account for all 5G capital and ongoing cost differences in the calculation of the adjustment factor.¹⁵⁰ We first note that two of the models presented in the *5G Fund Adjustment Factor Public Notice*, the Entry and Auction Bidding models, do reflect differences across geographic areas in capital and ongoing costs, including the differences in labor rates, utility rates and other factors cited by the Massachusetts Department of Telecommunications and Cable.¹⁵¹ These models estimate differences in total profitability from deployment, and as such, capture differences in capital and ongoing costs as

¹⁴⁴ *5G Fund Order*, 35 FCC Rcd at 4061, paras. 202-03; see also *5G Fund NPRM*, 35 FCC Rcd at 4016, para. 66 & n.95.

¹⁴⁵ *5G Fund NPRM*, 35 FCC Rcd at 4016, para. 66.

¹⁴⁶ Verizon Comments at 4.

¹⁴⁷ *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1497-98, paras. 217-21; *Connect America Fund*, Report and Order, 29 FCC Rcd 3964, 4000-01, paras. 75-76 (2014).

¹⁴⁸ RWA *5G Fund Adjustment Factor Public Notice Comments* at 2-3.

¹⁴⁹ See *5G Fund NPRM*, 35 FCC Rcd at 4018, para. 71. For example, a hypothetical carrier serving one mountainous census tract and one flat census tract of equal size in its subsidized service area might require 75% of its support to serve the mountainous tract and 25% to serve the flat tract. Were an unsubsidized carrier to enter the flat tract, which may be more likely given the relatively lower costs in the flat tract, if we did not apply the adjustment factor in calculating disaggregated support, the carrier would lose 50% of its funding and would be unable to continue serving the mountainous tract. However, applying an adjustment factor of three to the mountainous area would result in the carrier retaining 75% of its original support amount and allow it to continue serving the mountainous tract.

¹⁵⁰ Massachusetts Department of Telecommunications and Cable Comments at 10.

¹⁵¹ *Id.* at 3.

well as revenues from subscriber demand.¹⁵² Also, as we observed in the *5G Fund NPRM*, we do not intend for the adjustment factor to be an exhaustive accounting of all cost and demand differences across every area.¹⁵³ Rather, it is to allow bidders in less profitable to serve areas to effectively compete in the auction while at the same time allowing the auction, rather than a cost model, to determine the most economically efficient allocation of winning bidders and funding levels across geographic areas.

D. Public Interest Obligations and 5G Service Performance Requirements for Legacy High-Cost Support and 5G Fund Auction Support Recipients

1. 5G Public Interest Obligations for Legacy High-Cost Support Recipients

61. To bring accountability and ensure deployment of 5G technology in each carrier's subsidized service area, we establish broadband public interest obligations that will require competitive ETCs receiving legacy high-cost support for mobile wireless service to provide mobile, terrestrial voice and data services that comply, at a minimum, with 5G-NR technology as defined by 3GPP Release 15 (or any successor release that the Office of Economics and Analytics and the Wireline Competition Bureau may require after notice and comment).¹⁵⁴ Specifically, we adopt our proposal to require that legacy support recipients use an increasing percentage of their support toward 5G service.¹⁵⁵ We will also require competitive ETCs receiving legacy high-cost support to meet specified coverage requirements until such legacy support begins to phase down or otherwise ceases.

62. No commenter disputes our reliance on the Commission's determination in the *USF/ICC Transformation Order* that any pause in the phase down of legacy high-cost support should be accompanied by additional public interest obligations and performance requirements for these support recipients. Rural Americans deserve timely deployment of service by legacy recipients of high-cost

¹⁵² *5G Fund Adjustment Factor Public Notice*, 35 FCC Rcd at 5709-11, paras. 12-17.

¹⁵³ *5G Fund NPRM*, 35 FCC Rcd at 4016, para. 66.

¹⁵⁴ *5G Fund NPRM*, 35 FCC Rcd at 4023, para. 86. The Commission has already begun phasing down support for those competitive ETCs that receive legacy high-cost support to provide service to fixed locations. *See Wireline Competition Bureau Announces Beginning of Phase Down of Legacy Support for Price Cap Carriers and Fixed Competitive Eligible Telecommunications Carriers After Authorization of Connect America Fund Phase II Auction Support*, Public Notice, 34 FCC Rcd 3173, 3173 (WCB 2019). Similarly, we will exempt entirely from new obligations and requirements competitive ETCs receiving legacy high-cost support for mobile wireless service in Alaska, Puerto Rico, and the U.S. Virgin Islands, areas for which the Commission adopted alternative support mechanisms and that are not otherwise eligible for 5G Fund support. *See supra* para. 19. We further note that competitive ETCs may voluntarily relinquish receipt of legacy high-cost support for a subsidized service area, and upon so doing, will no longer be required to meet these public interest obligations. *See* Letter from Alan Buzacott, Executive Director, Federal Regulatory and Legal Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC at 3 (filed Oct. 20, 2020) (Verizon Oct. 20 *Ex Parte*). However, in cases where a carrier voluntarily relinquishes legacy support at some point after effective date of these rules, the Commission may seek up to full recovery of all legacy support the carrier received after the effective date of these rules which was not spent toward the deployment, operation, and/or maintenance of 5G services consistent with the non-compliance framework we adopt herein.

¹⁵⁵ *5G Fund NPRM*, 35 FCC Rcd at 4025, para. 91 ("Instead of requiring certain 5G broadband service coverage requirements, should we require that legacy support recipients use an increasing percentage of their support toward deployment of 5G service?"). AT&T generally supports our proposal to require legacy support recipients to use an increasing percentage of support toward 5G deployment, *see* Letter from Mary L. Henze, Assistant Vice President, Federal Regulatory, AT&T, to Marlene H. Dortch, Secretary, FCC at 1 (filed Sep. 8, 2020) (AT&T Sep. 8 *Ex Parte* Letter), while other parties raise concerns about the timing of when a requirement to use support for 5G services would take effect. *See, e.g.,* Letter from Matthew B. Gerst, Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, at 3 (filed Oct. 19, 2020) (CTIA Oct. 19 *Ex Parte* Letter); Letter from Alexi Maltas, Senior Vice President and General Counsel, CCA, to Marlene H. Dortch, Secretary, FCC at 2 (filed Oct. 16, 2020) (CCA Oct. 16 *Ex Parte* Letter); RWA Oct. 20 *Ex Parte* Letter at 2.

support that is comparable to what is being offered in urban areas, and our stewardship of the Universal Service Fund demands that we specify and clarify the obligations of legacy support recipients.

63. Because we recognize that the amount of legacy high-cost support received by each competitive ETC varies considerably and bears no direct relation to the size of its subsidized service area or to the expected cost of deploying 5G service, we do not adopt our proposal to require recipients to meet uniform 5G service deployment milestone coverage requirements largely mirroring those we adopt herein for 5G Fund support recipients.¹⁵⁶ Instead, we adopt a general requirement for competitive ETCs receiving legacy high-cost support to meet deployment coverage requirements, and direct the Office and Bureau to develop and adopt, after notice and comment, specific 5G broadband service deployment coverage requirements and service deployment milestone deadlines for each legacy support recipient that take into consideration the amount of legacy support the carrier receives.¹⁵⁷ In so doing, we direct the Office and Bureau to analyze the costs of 5G deployment in subsidized service areas and to evaluate the adequacy of legacy support to meet the particular deployment coverage requirements ultimately adopted.

64. We note as a threshold matter that each ETC receiving high-cost support has an existing public interest obligation to offer broadband service throughout its subsidized service area.¹⁵⁸ The details of the technical characteristics and deployment requirements of this broadband public interest obligation differ for each of the specific mechanisms under which carriers receive high-cost support,¹⁵⁹ but the obligation to offer broadband service applies broadly, including to competitive ETCs that continue to receive legacy high-cost support to provide mobile services. Our decision today thus helps to complete the reform of the high-cost program begun in 2011 by effectuating this broadband service public interest obligation for legacy high-cost support recipients, whose broadband-specific public interest obligations for mobile services were not previously detailed. In so doing, we also effectuate the Commission's expectation that any pause in the phase down would include additional mobile broadband public interest obligations and performance requirements for the continued receipt of support.¹⁶⁰ For the reasons stated in the *5G Fund NPRM*,¹⁶¹ we adopt our proposal to require legacy high-cost support recipients to meet additional public interest obligations and performance requirements and will require recipients of legacy high-cost support to meet the specific public interest obligations and performance requirements detailed herein.

65. Each competitive ETC receiving legacy high-cost support for mobile wireless services must now use an increasing percentage of its legacy support toward the deployment, maintenance, and

¹⁵⁶ *5G Fund NPRM*, 35 FCC Rcd at 4023, paras. 86-87.

¹⁵⁷ Some parties raise objections to or otherwise question our directing the Office and Bureau to develop 5G deployment coverage requirements for legacy support recipients. See CCA Oct. 16 *Ex Parte* Letter at 3 (expressing concern that such direction “would represent undue micromanagement of carriers’ networks and deployment strategies, particularly during this short-term interim period”); CTIA Oct. 19 *Ex Parte* Letter at 2-3 (raising concerns that “[t]he proceedings necessary to develop all of the provider-specific plans would significantly delay the use of these funds to support 5G in rural areas and will likely take longer than the transition period to the 5G Fund”). We disagree and believe that these workstreams can proceed in parallel. Without more rigorous and objective 5G deployment obligations, we are concerned that legacy support may not ensure the timely deployment of 5G service to rural areas, that we will lack adequate information by which to measure the effectiveness of this support, and that legacy recipients may not be properly incentivized to participate in a 5G Fund auction. *5G Fund NPRM*, 35 FCC Rcd at 4025, para. 92. We therefore disagree with these concerns and anticipate that the Office and Bureau will adopt appropriate carrier-specific coverage deployment requirements expeditiously.

¹⁵⁸ *USF/ICC Transformation Order*, 26 FCC Rcd at 17895, para. 86.

¹⁵⁹ See, e.g., *USF/ICC Transformation Order*, 26 FCC Rcd at 17790-97, paras. 358-85.

¹⁶⁰ *USF/ICC Transformation Order*, 26 FCC Rcd at 17832, para. 519 (anticipating that any temporary freeze on the phase down of legacy support “would be accompanied by additional mobile broadband public interest obligations”).

¹⁶¹ *5G Fund NPRM*, 35 FCC Rcd at 4016, para. 86.

operation of voice and broadband networks that support 5G meeting the performance requirements we adopt today within its subsidized service areas.¹⁶² Specifically, legacy support recipients must use at least one-third of the legacy support they receive in 2021 and at least two-thirds of the legacy support they receive in 2022 for these purposes. Some carriers raise a concern that budgets and deployment plans for 2021 are largely complete, which could make it difficult for some legacy support recipients to achieve the 2021 requirement.¹⁶³ As such, we will also afford a carrier the flexibility to use less than one third of its legacy support in 2021 and make up for any shortfall in 2021 by proportionally increasing the requirement in 2022 (above the two-thirds of its support the carrier is required to spend on 5G in that year).¹⁶⁴ To take advantage of this flexibility, a carrier receiving legacy support must certify to the Bureau by March 31, 2021 (or 30 days after the Commission receives Paperwork Reduction Act approval, whichever is later) as to the amount of 2021 legacy support it will use for the 5G deployment requirements and certify that it will make up any shortfall in 2022. For legacy support received in 2023 and for each subsequent year, the full amount of legacy support a carrier receives in the calendar year must be used for these purposes by the end of the calendar year until its legacy support for an area begins to phase down or otherwise ceases. We note that this requirement is not intended to prohibit a competitive ETC from using a portion of its legacy support on the maintenance or operation of 4G LTE or previous generation services in its subsidized service area as part of a network otherwise capable of providing 5G service meeting the performance requirements, for example, in order to continue to support older generation consumer handsets.¹⁶⁵

66. We conclude that adopting uniform coverage requirements for 5G broadband service deployment similar to those we adopt for 5G Fund winning bidders without first estimating the sufficiency of support amounts to meet a coverage requirement could give some carriers a windfall for little deployment while imposing impossible expectations on others. On the other hand, requiring that an increasing percentage of legacy support be used to deploy 5G service does not present similar concerns about the sufficiency of support.¹⁶⁶ Requiring a gradual shift to spending on 5G service, as we do today, will broadly align with the schedule for 5G deployment in unsubsidized and urban areas,¹⁶⁷ and will help ensure that high-cost areas do not fall behind.

¹⁶² As explained further in Section III.F, we will exempt from the 5G public interest obligations and performance requirements, as well as any carrier-specific 5G deployment coverage requirements adopted by the Office and Bureau, the legacy support a competitive ETC receives for areas that are subject to the two-year phase down of support, consistent with our proposal in the *5G Fund NPRM*. 35 FCC Rcd at 4023, para. 87.

¹⁶³ See CTIA Oct. 19 *Ex Parte* Letter at 3; CCA Oct. 16 *Ex Parte* Letter at 2.

¹⁶⁴ For example, a legacy high-cost support recipient that receives \$9 million per year in legacy support could meet this requirement by spending on 5G: \$3 million in 2021 and \$6 million in 2022; \$1.5 million in 2021 and \$7.5 million in 2022; or even \$0 in 2021 and \$9 million in 2022.

¹⁶⁵ In line with the geographic flexibility we adopt herein, the percentage of legacy support that a competitive ETC must use will be calculated against the total amount of legacy high-cost support that the carrier receives for all of the subsidized service areas for which it (or any affiliated competitive ETCs) receives support at 60% of the frozen high-cost service level, calculated per 47 CFR § 54.307(e)(2)(iii).

¹⁶⁶ For example, a competitive ETC that receives \$10 million per year to provide service across a state would thus, presumably, be able to deploy 5G broadband service on a faster timeline and covering more area (e.g., perhaps to 85% of its subsidized service area within four years) than would a competitive ETC that receives only \$1 million per year to provide service to a similar sized area across the same state. Nevertheless, both legacy support recipients would be able to spend the same proportion of legacy support toward deployment of 5G service in order to meet their broadband public interest obligations.

¹⁶⁷ *Applications of T-Mobile US, Inc., and Sprint Corporation For Consent to Transfer Control of Licenses and Authorizations; Applications of American H Block Wireless L.L.C., DBSD Corporation, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. for Extension of Time*, Memorandum Opinion and Order, Declaratory Ruling and Order of Proposed Modification, 34 FCC Rcd 10578, 10589, para. 27 (2019) (*T-Mobile-Sprint Order*) (conditioning (continued....))

67. Several commenters oppose our proposal to require legacy support recipients to meet uniform 5G coverage requirements as part of the public interest obligations and performance requirements we tentatively concluded we should adopt.¹⁶⁸ AT&T argues that requiring 5G deployment in areas after support has been phased down would “violate[] the Commission’s obligation [under section 254(b)(5) of the Act] to establish support mechanisms that provide sufficient funding.”¹⁶⁹ CRWC similarly argues that requiring 5G deployment public interest obligations without evaluating the costs required to deploy service is arbitrary and capricious and would violate the statute.¹⁷⁰ Smith Bagley opposes 5G deployment requirements for legacy support recipients on remote Tribal lands, where, it states, costs are so high and current support levels are insufficient to provide even 4G LTE service in many areas and that “the Commission cannot require carriers to improve facilities and service levels in uneconomic high-cost areas unless it provides support that is explicit and sufficient”¹⁷¹ We agree with these commenters that requiring legacy support recipients to meet uniform coverage requirements for 5G broadband service buildout without further analysis of the amount of legacy support each competitive ETC receives is premature. We have therefore directed the Office and Bureau to evaluate the adequacy of legacy support to meet particular deployment coverage requirements and to adopt specific 5G broadband service deployment coverage requirements and service deployment milestone deadlines for each legacy support recipient that take into consideration the amount of legacy support the carrier receives after notice and comment.

68. Three commenters support alternative frameworks that would require the deployment of 5G broadband service over a 10-year period in return for the same or an increased amount of legacy support carriers receive. Both RWA and NTCA suggest requiring modified 5G broadband service deployment obligations and performance requirements of legacy support recipients, but only as part of their respective “5G Small Carrier Fund” proposals.¹⁷² These proposals, which are largely modeled on the Commission’s Alaska Plan, would offer legacy support recipients an increase in their support amounts

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approval of the T-Mobile-Sprint transaction upon, among other conditions, T-Mobile’s commitment to deploying 5G service covering 97% of all Americans within three years after closing).

¹⁶⁸ See AT&T Comments at 15-19; CRWC Comments at 34-38; Smith Bagley Comments at 17-18; see also *5G Fund NPRM*, 35 FCC Rcd at 4023, para. 86 (“tentatively conclud[ing] that we should adopt additional, broadband-specific public interest obligations and performance requirements for all current mobile legacy high-cost support recipients and that these obligations and requirements, as an interim step before the 5G Fund auction, should largely mirror the requirements for 5G Fund support recipients”).

¹⁶⁹ AT&T Comments at 16. While AT&T seeks to distinguish “between ‘current legacy support recipients’ that are subject to a two-year phase down from ‘current legacy support recipients’ that will receive five years of preservation support[,]” see *id.*, under the disaggregation methodology and transition schedule we proposed, a legacy support recipient could have its legacy support phased down in one half of its subsidized service area and maintained to preserve service in another. *5G Fund NPRM*, 35 FCC Rcd at 4018, para. 71 & n.105. We expressly proposed to exempt from any 5G broadband service deployment public interest obligation areas where the legacy support recipient is subject to two-year phase down of support, both during the two-year phase down period and also after legacy support ceases, a proposal which we adopt herein. *5G Fund NPRM*, 35 FCC Rcd at 4023, para. 87 & n.124. In other words, contra AT&T’s suggestion, there will be no requirement to deploy 5G broadband service in areas where support is being or has been phased down.

¹⁷⁰ CRWC Comments at 34-38.

¹⁷¹ Smith Bagley Comments at 17-18; but see *In Re: FCC 11-161*, 753 F. 3d 1015, 1060 (10th Cir. 2014) (finding reasonable the Commission’s rejection of the notion that evaluating the sufficiency of high-cost universal service requires “‘complete’ or ‘full’ funding for carrying out the broadband and other obligations imposed upon carriers who are voluntary recipients of USF funds”).

¹⁷² RWA Comments at 12; NTCA Comments at 5-6.

over 10 years to deploy 5G and which we declined to adopt above.¹⁷³ Smith Bagley proposes a “Remote Tribal Areas Plan” that would similarly offer the same amount of support, or a modified amount determined by the Commission, over 10 years for legacy support recipients that serve remote Tribal lands to deploy 5G in such areas.¹⁷⁴ While we recognize the challenges of small carriers and those that provide service to Tribal areas,¹⁷⁵ as we explain above in declining to adopt the alternate proposals advanced by RWA, NTCA, and Smith Bagley,¹⁷⁶ the Commission’s experience awarding support via competitive bidding has shown it to be an effective use of ratepayer funds and none of these commenters has convinced us that departing from that approach is warranted.¹⁷⁷ We further conclude that the broadband public interest obligations and performance requirements we adopt today will help bring 5G service to existing high-cost areas while incentivizing current legacy high-cost support recipients, including small carriers and those that serve Tribal lands, to participate in the 5G Fund Phase I auction, ultimately ensuring that the largest number of rural areas receive support.

69. Finally, recognizing that there may be particular circumstances where the amount of legacy support received is so low or the costs of any steps toward the deployment of 5G service so high as to frustrate any 5G broadband public interest obligation, we direct the Office and Bureaus to consider adopting, after notice and comment, a *de minimis* exception to any 5G deployment public interest obligations that the Office and Bureau may adopt as part of the proceeding to develop carrier-specific deployment coverage requirements.¹⁷⁸ In so doing, we direct the Office and Bureau to consider in setting any *de minimis* exceptions the amount of legacy support a carrier receives in relation to the administrative costs of establishing and verifying 5G deployment.

2. 5G Public Interest Obligations for 5G Fund Auction Support Recipients

70. We adopt our proposal to establish public interest obligations for 5G Fund support recipients to provide terrestrial mobile voice and data services that comply, at a minimum, with 5G-NR technology defined as 3GPP Release 15 (or any successor release that the Office and Bureau may require 5G Fund support recipients to comply with after appropriate notice and comment) and to meet measured performance requirements as a condition of receiving support.¹⁷⁹ We also adopt our proposal to require 5G Fund support recipients to meet baseline performance requirements for minimum data speed, maximum data latency, and a minimum monthly data allowance.¹⁸⁰

¹⁷³ RWA Comments at 12 (proposing as part of its Phase 0 approach “that the Commission require legacy support recipients to meet applicable requirements (cell edge speeds of 7 Mbps upload, 1 Mbps download; 100 millisecond latency; and deployment of 3GPP release 15 or higher in all cell sites and sectors) for 40% of the square kilometers in their subsidized service areas in each state by the end of year four, 60% by the end of year six, and 85% by the end of year ten”); NTCA Comments at 5-6 (proposing a “5G Small Carrier Fund” to offer support to existing legacy high-cost support recipients with fewer than 500,000 subscribers in exchange for 5G service deployments meeting deployment benchmarks).

¹⁷⁴ Smith Bagley Comments at 9-14.

¹⁷⁵ See, e.g., Native Nations Communications Task Force, *Improving and Increasing Broadband Deployment on Tribal Lands*, at 11-12 (adopted Nov. 5, 2019) (noting failure of general buildout requirements based on percentage of area covered to achieve buildout on Tribal lands), available at <https://ecfsapi.fcc.gov/file/121379991071/18-213.pdf>.

¹⁷⁶ See *supra* Section III.C.1.

¹⁷⁷ See *supra* Sections III.C.1, 3.

¹⁷⁸ *5G Fund NPRM*, 35 FCC Red at 4025, para. 91.

¹⁷⁹ *5G Fund NPRM*, 35 FCC Red at 4022, para. 82.

¹⁸⁰ *Id.* at 4026, 4028-29, paras. 94, 97, 100-02.

71. Commenters generally support requiring specific public interest obligations and performance requirements for 5G Fund support recipients, and most support requiring the deployment of 5G service.¹⁸¹ CCA, however, suggests allowing 5G Fund support recipients to deploy 4G LTE-Advanced and provide a plan to transition to 5G-NR within a set period.¹⁸² In its reply comments, RWA disagrees with CCA's suggestion that 5G Fund support recipients be allowed to deploy 4G LTE-Advanced and suggests that the 5G buildout requirements require 5G-NR 3GPP Release 15 or later.¹⁸³

72. We agree with RWA and find it imperative that consumers in rural America receive service meeting the minimum industry standard to be considered 5G in order to ensure the 5G Fund is consistent with our goal to bridge the digital divide. We therefore adopt the requirement that 5G service deployed to meet public interest obligations and performance requirements for 5G Fund support recipients comply with the 5G-NR standard defined as 3GPP Release 15 (or any successor release with which the Office and Bureau may require 5G Fund support recipients to comply after notice and comment). In so doing, we also decline to adopt the suggestion of the 5G Fund Supporters who argue that the Commission should add an extension of the Cable Procurement Rule to the 5G Fund public interest obligations to ensure that minority- and women-owned businesses apply for the many procurement opportunities that will owe their creation to the 5G Fund.¹⁸⁴ Our experience using reverse auctions to distribute support successfully in the Mobility Fund Phase I and CAF Phase II auctions supports our decision that competitive bidding without specific preferences provides the most efficient and effective mechanism to award universal service support.

73. *5G Service Milestones.* To ensure that 5G Fund support recipients meet their public interest obligation to provide 5G service in areas where they receive support, we adopt interim and final service deployment milestones to monitor progress in timely meeting the 5G Fund performance requirements. Specifically, we adopt our proposal for interim service deployment milestones requiring a 5G Fund support recipient to offer 5G service meeting established performance requirements to at least 40% of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state by the end of the third full calendar year following authorization of support, to at least 60% of the total square kilometers by the end of the fourth full calendar year, and to at least 80% of the total square kilometers by the end of the fifth full calendar year.

74. We also adopt our proposed final service deployment milestone that requires a 5G Fund support recipient to offer 5G service that meets the established 5G Fund performance requirements to at least 85% of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state by the end of the sixth full calendar year following authorization of support.¹⁸⁵ Additionally, we adopt our proposal to require a 5G Fund support recipient to demonstrate by the end of the sixth full calendar year following authorization of support that it provides service that meets the established 5G performance requirements to at least 75% of the total square kilometers within each of its individual biddable areas.¹⁸⁶

¹⁸¹ RWA Comments at 13; NTCA Comments at 8;

¹⁸² CCA comments at 14.

¹⁸³ RWA Reply comments at 12.

¹⁸⁴ 5G Fund Supporters Comments at 14-16.

¹⁸⁵ *5G Fund NPRM*, 35 FCC Rcd at 4026, para. 95. We note that adopting our proposal to have uniform deadline for all 5G Fund service deployment milestones at the end of a calendar year (i.e., December 31) aligns with the deadlines adopted for other universal service programs. See 47 CFR § 54.316; *Connect America Fund, Connect America Phase II Auction*, Order, 35 FCC Rcd 109 (WCB 2020).

¹⁸⁶ *5G Fund NPRM*, 35 FCC Rcd at 4027, para. 96.

75. NTCA generally supports our proposed interim and final service deployment milestones,¹⁸⁷ and the New York Public Service Commission similarly supports our proposals.¹⁸⁸ We decline to adopt an alternative milestone schedule for deployment of 5G service suggested by RWA that would require recipients to cover 40% of the areas for which 5G Fund support is authorized by the end of year four, 60% by the end of year six, and 85% by the end of year 10.¹⁸⁹ While RWA claims that deployment of a 5G network is “more complex and time consuming than building out prior generation networks” and will be difficult for legacy high-cost support recipients to do as part of its Phase 0 proposal, RWA provides no persuasive reason why 5G Fund support recipients should follow this delayed schedule.¹⁹⁰ We are unconvinced that 5G Fund support recipients, which are able to factor in the cost and complexity of meeting service deployment milestones when placing bids in an auction, will find it overly burdensome to meet the deployment milestones we adopt.

76. We decline to adopt the proposal of the California Public Utilities Commission to adopt a higher service deployment milestone coverage requirement—90% by the end of year six and 100% by the end of year seven.¹⁹¹ There may be isolated areas that are particularly challenging to serve even in terrain that is otherwise not difficult to serve, and adopting a 100% coverage requirement could drastically increase costs in a 5G Fund auction if bidders reasonably conclude that certain areas they would otherwise be interested in serving are cost prohibitive due to an especially challenging terrain feature like a ravine or mountaintop. Such a requirement would thus potentially distort the 5G Fund auction with little gain. At the same time, we disagree with Verizon’s suggestion to reduce the required coverage percentage within each biddable unit with particularly challenging areas, based on an alternate deployment requirement focusing on road miles and population.¹⁹² We believe that deviating from our area-coverage approach in the 5G Fund would undercut our focus on ensuring widespread availability of 5G services, including in sparsely populated areas like agricultural lands. Moreover, while we acknowledge that achieving 5G deployment covering 85% required by the final service deployment milestone may be difficult to achieve in particularly challenging terrain, bidders in a 5G Fund auction will be able to factor in the costs of deployment in such environments when placing bids in the auction.

77. Lastly, we adopt the interim and final service milestones for 5G Fund support recipients as proposed in the *5G Fund NPRM* because we conclude it is imperative that carriers receiving 5G Fund support make significant progress toward providing 5G service early in their support term, and then continue to make progress toward overall coverage goals throughout the remainder of the term. We note that the service milestones we adopt for the 5G Fund are similar to those adopted for the Rural Digital Opportunity Fund and CAF Phase II, as well as in the *Uniendo a Puerto Rico Fund* and *Connect USVI Fund* proceeding.¹⁹³ Adopting a consistent approach here ensures that we act as responsible stewards of universal service funds. The requirement that 5G Fund support recipients cover at least 75% of the total

¹⁸⁷ NTCA Comments at 8.

¹⁸⁸ New York Public Service Commission Comments at 4-5.

¹⁸⁹ RWA Comments at 14.

¹⁹⁰ *Id.* at 12, 14.

¹⁹¹ California Public Utilities Commission Comments at 5. CTIA opposes this proposed requirement, noting that “a 100% service requirement will create an impossible standard for winning bidders and the Commission to verify build-out.” CTIA Reply Comments at 6-7. We agree that a 100% coverage requirement is neither workable nor realistic.

¹⁹² Verizon Comments at 10. Specifically, Verizon proposes minimum coverage of at least 35%, so long as at least 75% of road miles and 75% of the population in eligible areas were covered. *Id.*

¹⁹³ *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 709, para. 45; *PR-USVI Fund Report and Order*, 34 FCC Rcd at 9143-44, para. 62; *CAF Phase II Auction Order*, 31 FCC Rcd at 5963, para. 39 (citing *Connect America Fund et al.*, Report and Order, 29 FCC Rcd 15644, 15657-59, paras. 36-37 (2014) (*December 2014 Connect America Order*)).

square kilometers within each biddable unit also ensures that support recipients do not cherry-pick the easiest-to-serve areas and leave more difficult regions cut off from service and from other potential service providers.

3. 5G Service Performance Requirements

78. We adopt our proposal to require recipients of legacy high-cost support and 5G Fund support to meet baseline performance requirements for minimum data speed, maximum latency, and minimum monthly data allowance.¹⁹⁴ In the *5G Fund NPRM*, we proposed minimum baseline performance requirements for legacy and 5G Fund support recipients to deploy 5G service speeds of at least 35/3 Mbps, sought comment on whether the required data speed should be a median, mean, or another percentile of probability, proposed 100 milliseconds or lower round-trip latency, and proposed a minimum monthly data allowance that would correspond to the average U.S. subscriber data usage.¹⁹⁵ Consistent with these proposals, we will require that support recipients deploy 5G-NR service with median speeds of at least 35/3 Mbps, minimum cell edge speeds of at least 7/1 Mbps, and have round-trip latency of 100 milliseconds or less.¹⁹⁶ Additionally, we will require that support recipients offer at least one service plan in the areas for which legacy support is disbursed or 5G Fund support is authorized that includes a data allowance that is equivalent to the average United States subscriber data usage.

79. We disagree with CCA's suggestion to fund both 5G deployments and 4G LTE-Advanced deployments using equipment that can subsequently be upgraded to 5G.¹⁹⁷ As RWA and CRWC demonstrate, many competitive ETCs receiving legacy high-cost support have already deployed 4G LTE equipment in their network core using legacy support,¹⁹⁸ which should significantly reduce the burden of using future legacy support to upgrade these networks to 5G service meeting at least the 5G-NR standard we adopt. Consistent with our overall approach in this proceeding, we believe support is best directed to modern 5G deployments rather than further deployments of 4G LTE technology. Moreover, we agree with RWA that “[o]nly real 5G will allow the provision of flexible broadband services, increased speed, reduced latency, and reduced energy consumption, [among] other 5G capabilities that 4G (or ‘5G Lite’) simply cannot provide.”¹⁹⁹

80. RWA is the only commenter to directly address adopting these performance requirements specifically for legacy high-cost support recipients, which it generally supports albeit with a longer

¹⁹⁴ *5G Fund NPRM*, 35 FCC Rcd at 4023, para. 86 (proposing “that a legacy support recipient meet the same minimum baseline performance requirements for data speed, latency, and data allowance ultimately adopted for 5G Fund support recipients”). We proposed performance requirements for 5G Fund support recipients with a median data speed of at least 35/3 Mbps, latency of 100 milliseconds or less round trip, and minimum data allowance corresponding to the average subscriber data usage, which could change over time. *Id.* at 4027, 4028-29, paras. 97, 100-02.

¹⁹⁵ *Id.* at 4027-29, paras. 97-102.

¹⁹⁶ We do not adopt additional standardized propagation modeling requirements as proposed. *See 5G Fund NPRM*, 35 FCC Rcd at 4027-28, paras. 98-99. As discussed further in Sections III.E.1 and III.G.1, we will instead defer to the propagation modeling standards adopted for reporting of 5G mobile broadband coverage in the Digital Opportunity Data Collection. *See Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7474, 7477-78, 7479-80, paras. 33, 40, 45 (adopting a requirement for the submission of mobile coverage maps depicting 5G-NR service, both modeled using a 90% cell edge probability, 50% cell loading factor, and 100 meter or better spatial resolution, that depict cell edge minimum speed thresholds of 7/1 Mbps and 35/3 Mbps).

¹⁹⁷ CCA Comments at 14.

¹⁹⁸ CRWC Comments at 32; CRWC Reply Comments at 21; *see generally* Letter from Carri Bennet, General Counsel, RWA, to Marlene H. Dortch, Secretary, FCC at 2 (filed Jun. 24, 2020) (*RWA Member Survey Ex Parte Filing*).

¹⁹⁹ RWA Reply Comments at 13.

deployment buildout timeframe and as part of its “Phase 0” proposal.²⁰⁰ RWA and AT&T otherwise support our proposed data speeds of 35/3 Mbps,²⁰¹ and we agree with these commenters that a median speed of 35/3 Mbps, combined with the requirement that supported networks meet 3GPP’s 5G-NR standard, recognizes that network speeds will vary across service areas and will allow a variety of 5G applications in rural areas. We disagree with CCA’s claims that data speeds of 35/3 Mbps are arbitrary and will not be attainable for rural carriers without substantial cost.²⁰² The Commission has previously required minimum speeds of 35/3 Mbps for 5G service in the high-cost program and to date most eligible carriers have accepted that funding and associated obligation to deploy at those speeds.²⁰³ While it is true that 5G service is not defined by a particular speed, we conclude that setting both minimum cell edge and median target speeds based upon what we believe to be achievable with a minimum amount of spectrum will help align the services funded with 5G Fund support with the performance of 5G service in unsubsidized areas. We note that a review of the Commission’s public Universal Licensing System indicates that the licenses held by competitive ETCs receiving legacy high-cost support provide the minimum amount of bandwidth that we find to be necessary to support 5G services (at least 10 megahertz x 10 megahertz using frequency division duplex (FDD) or 20 megahertz using time division duplex (TDD)) meeting these speeds in more than 95% of subsidized service areas.²⁰⁴ We consequently believe even small and mid-size rural providers will be reasonably capable of meeting a 35/3 Mbps standard with available spectrum.

81. We also disagree with suggestions from Next Century Cities, Juniper Networks, and Verizon that we should adopt higher speeds for the 5G Fund, ranging from 50/5 Mbps to 1 Gbps.²⁰⁵ While many 5G networks will be capable of higher speeds, the 5G Fund is intended to support networks in even the most sparsely populated and hardest-to-serve parts of the country. Setting network speeds too high risks raising the costs of deploying in those areas so high that service providers are unwilling to bid. As we have noted, we believe 35/3 Mbps will be achievable by the vast majority of potential 5G Fund bidders and legacy support recipients, and is consistent with other 5G universal support requirements in insular areas. We likewise disagree with CRWC’s suggestion to use signal strength requirements and a

²⁰⁰ RWA Comments at 12 (proposing as part of its Phase 0 approach “that the Commission require legacy support recipients to meet applicable requirements (cell edge speeds of 7 Mbps upload, 1 Mbps download; 100 millisecond latency; and deployment of 3GPP release 15 or higher in all cell sites and sectors) for 40% of the square kilometers in their subsidized service areas in each state by the end of year four, 60% by the end of year six, and 85% by the end of year ten”). Elsewhere, RWA suggests that carriers that receive Phase 0 support commit to deploying 5G-NR service “utilizing 7 Mbps download and 1 Mbps upload speeds measured at the cell edge and speeds of 35/3 Mbps within the defined predicted area.” *Id.* at 5.

²⁰¹ RWA Comments at 15; AT&T Comments at 13.

²⁰² See CCA Comments at 14-15 (arguing that our assumption that rural carriers should be able to deploy 5G achieving 35/3 Mbps service “is not a reasonable expectation, at least without substantial cost” and suggesting just a 7/1 Mbps cell edge standard instead); CCA Reply Comments at 10-11.

²⁰³ See *PR-USVI Fund Report and Order*, 34 FCC Rcd at 9172, para. 124; see, e.g., *Wireline Competition Bureau Authorizes Stage 2 Mobile Support for T-Mobile in Puerto Rico*, Public Notice, DA 20-1082 at 1-2 (WCB 2020).

²⁰⁴ See *PR-USVI Fund Report and Order*, 34 FCC Rcd at 9172, para. 124 (finding it “reasonable to require at least 35 Mbps as a downlink speed because the minimum performance requirements of 5G technology, using a typical 10 MHz channel bandwidth, including other system efficiencies such as Multiple Input Multiple Output (MIMO) should permit service providers to meet this speed requirement”). Our analysis also may not capture the full amount of spectrum to which legacy high-cost support recipients have access, due to spectrum leasing arrangements that are not reflected in the Commission’s licensing database. FCC, Universal Licensing System, <https://www.fcc.gov/wireless/systems-utilities/universal-licensing-system> (last visited Sep. 23, 2020).

²⁰⁵ Next Century Cities Comments at 3-4 (proposing speeds of at least 100/100 Mbps); Juniper Networks Comments at 2 (at least 50/5 Mbps and up to 1 Gbps); Verizon Comments at 3. RWA disagrees with Verizon’s call for higher speeds, arguing that “as speeds increase, coverage diminishes.” RWA Reply Comments at 11.

link budget as the manner of measuring compliance with performance requirements, rather than data speed and latency.²⁰⁶ We do not believe there is, and CRWC does not offer, a meaningful way to impose a single set of signal strength and link budget parameters that can reliably predict network performance for every network design and configuration.²⁰⁷

82. Though AST&Science argues that low-earth orbit satellite service should be able to meet the 100 milliseconds or lower latency standard,²⁰⁸ other satellite companies seek to allow higher latency, perhaps via a tiered system similar to Rural Digital Opportunity Fund's performance and latency tiers.²⁰⁹ We agree with RWA that an increase in permitted latency could reduce service quality, however.²¹⁰ We also decline to add the complexity of adopting a tiered system to the 5G Fund auctions. We believe that adopting a round-trip latency requirement of 100 milliseconds or better for all areas better achieves our goal of ensuring access to services reasonably comparable to those in urban areas. One of the key benefits of 5G over other mobile technologies is reduced latency.

83. While the New York Public Service Commission generally supported requiring a data allowance that corresponds to the average United States subscriber data usage,²¹¹ we received no specific comments addressing a data source for the average United States subscriber data usage, on the time during the support term that any increases in the required data allowance should be established, or on whether there should be a cap on what minimum monthly data allowance should be required at future points during the support term.²¹² We continue to believe that tying the minimum monthly data allowance to average United States subscriber usage will ensure that rural Americans are not provided second-rate service, and we therefore adopt this standard for the minimum monthly data allowance. We defer to the proceeding in which the Office and Bureau adopt carrier-specific 5G coverage requirements for legacy support recipients and to the pre-auction process for 5G Fund auction support recipients to determine the data source from which we will evaluate the average United States subscriber data usage and the further parameters necessary to implement an evolving minimum monthly data allowance, respectively.

4. Additional Public Interest Obligations

a. Reasonably Comparable Rates

84. Consistent with section 254(b)(3) of the Act,²¹³ we will require as a public interest obligation for the receipt of mobile high-cost support that all legacy high-cost and 5G Fund support recipients offer 5G service in the areas where they receive support for deploying 5G service at rates that are reasonably comparable to rates they offer in urban areas, as proposed in the *5G Fund NPRM*.²¹⁴ In the

²⁰⁶ CRWC Comments at 40-41.

²⁰⁷ See *Mobility Fund Phase II Investigation Staff Report* at 47, para. 66 (finding that the signal strength at which an 80% success rate was achieved among the 4G LTE networks of T-Mobile, Verizon, and U.S. Cellular varied considerably); *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7501, para. 97 (recognizing that signal strength "values may vary based on factors such as spectrum band, network design, or device operating capabilities").

²⁰⁸ AST&Science Comments at 30.

²⁰⁹ Hughes Comments at 2; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 702-03, paras. 31-33.

²¹⁰ RWA Comments at 15.

²¹¹ New York Public Service Commission Comments at 4-5.

²¹² *5G Fund NPRM*, 35 FCC Rcd at 4028-29, paras. 101-02.

²¹³ See 47 U.S.C. § 254(b)(3).

²¹⁴ *5G Fund NPRM*, 35 FCC Rcd at 4029-30, paras. 103-04 (proposing "to require that 5G Fund support recipients have a public interest obligation to offer their services in eligible rural areas at rates that are reasonably comparable to rates they offer in urban areas"). Consistent with their existing public interest obligations under the statute, we

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USF/ICC Transformation Order, the Commission concluded that, as a condition of receiving federal high-cost universal service support, all recipients of such support must offer broadband service in their supported area that meets certain basic performance requirements at rates in rural areas that are reasonably comparable to rates offered in urban areas.²¹⁵

85. For both voice and broadband services, the Commission considers rural rates to be “reasonably comparable” to urban rates under section 254(b)(3) if rural rates fall within a reasonable range of urban rates for reasonably comparable voice and broadband services.²¹⁶ As an initial matter, we will define “urban” for this purpose consistent with the definition from the latest decennial U.S. Census Bureau data.²¹⁷ Consistent with suggestions filed in the Mobility Fund Phase II docket and our decision in that proceeding,²¹⁸ we conclude that if a legacy high-cost or 5G Fund support recipient is offering the same rates, terms, and conditions (including usage allowances, if any, for a specified rate) to both urban and rural customers, then it would fulfill the requirement that its rates are reasonably comparable.²¹⁹ We also will allow a support recipient to demonstrate it provides reasonably comparable rates if one of its stand-alone voice plans and one service plan offering data are substantially similar to plans offered in urban areas.²²⁰ We note that we may define more precisely the circumstances under which a legacy or 5G Fund support recipient can demonstrate compliance with this certification in later proceedings, and retain our authority to look behind recipients’ certifications and take action to address any violations.²²¹

86. Where a legacy high-cost or 5G Fund support recipient does not serve urban areas and therefore cannot demonstrate that it is offering reasonably comparable rates based upon its own offerings, we will require the support recipient to identify the carrier and specific rate plans upon which it is basing its compliance certification so that we can verify that its rates are reasonably comparable.²²² In such a

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similarly proposed “that legacy support recipients have the same public interest obligations as we propose for 5G Fund support recipients to provide 5G service at reasonably comparable rates.” *Id.* at 4023, para. 86.

²¹⁵ *USF/ICC Transformation Order*, 26 FCC Rcd at 17695, para. 86. The Commission noted that federal high-cost universal service support included all existing high-cost universal service mechanisms and the Connect America Fund. *Id.* at 17695, para. 86 n.126; *see also id.* at 17696-709, paras. 90-114 (describing broadband performance requirements, reasonably comparable pricing, and broadband measuring obligations).

²¹⁶ *USF/ICC Transformation Order*, 26 FCC Rcd at 17708, 18076, paras. 113, 1150.

²¹⁷ Currently, the latest decennial data available from the U.S. Census Bureau for this purpose is from 2010. *See 2010 Census Urban and Rural Classification and Urban Area Criteria*, <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural/2010-urban-rural.html> (last updated Dec. 2, 2019). We anticipate that 2020 data will be available in the near future. Consequently, we will update our definition of “urban” when new decennial data becomes available.

²¹⁸ *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2198, para. 107 (agreeing with suggestions by commenters and adopting “a presumption that if a given provider is offering the same rates, terms and conditions (including usage allowances, if any, for a specified rate) to both urban and rural customers, then that is sufficient to meet the statutory requirement that services be reasonably comparable”)

²¹⁹ This approach is consistent with how the Commission planned to evaluate this issue for Mobility Fund Phase II. *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2198, para. 107.

²²⁰ *Id.* at 2198-99, para. 108.

²²¹ *See id.*

²²² *See Mobility Fund Phase I Auction Scheduled for September 27, 2012; Notice and Filing Requirements and Other Procedures for Auction 901*, Public Notice, 27 FCC Rcd 4725, 4772-75, paras. 174-80 (WTB/WCB 2012) (adopting a proposal “that a Mobility Fund Phase I support recipient could demonstrate compliance with the required certification that its rates are reasonably comparable if each of its service plans in supported areas is substantially similar to a service plan offered by at least one mobile wireless service provider in an urban area and is offered for the same or a lower rate than the matching urban service plan”). We note that allowing for cross-carrier comparison is broadly similar to our decision in Mobility Fund Phase II to require that a support recipient offer at

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case, we will require that the support recipient submit corroborating evidence of reasonably comparable rates from the web page or other marketing materials of the other mobile carrier that does serve urban areas.

87. The New York Public Service Commission supports the proposed method for a support recipient to demonstrate that it offers reasonably comparable rates if it offers stand-alone voice plans and one service plan with data that is substantially like those offered in urban areas.²²³ NTCA also supports this approach, stating that “[a]ll who receive or win funding must . . . commit to offering a terrestrial mobile wireless product that is similar in features and price to the 5G mid-level plan offered in urban areas by large, nationwide providers.”²²⁴ We note that AST&Science supports our proposal to adopt a reasonably comparable rate requirement, but suggests that we include handset costs when determining whether rates are reasonably comparable.²²⁵ We decline to mandate specific prices for handsets because handsets are broadly available from vendors other than service providers, and thus market forces establish handset prices. We received no comments on the proposed method of demonstrating reasonably comparable rates if the support recipient does not serve urban areas by identifying a carrier and specific rate plan upon which the support recipient is basing its compliance certification, and requiring the submission of corroborating evidence of reasonably comparable rates from the web page or other marketing materials of the mobile carrier serving urban areas on which the demonstration is based. We adopt this proposal as a reasonable and not burdensome method of demonstrating compliance with the reasonably comparable rate requirement.

88. Emphasizing the obligation to offer voice and broadband service at reasonably comparable rates further ensures that service made available with universal service funds in rural areas is not beyond the financial reach of rural customers. We note that all ETCs must advertise the availability of their voice services throughout their service areas, and we require support recipients also to advertise the availability of their broadband services within their service area.²²⁶

b. Collocation and Voice and Data Roaming

89. We adopt our proposal to require competitive ETCs to allow collocation and voice and data roaming as a public interest obligation of the receipt of both legacy high-cost and 5G Fund support,²²⁷ and will require the same general collocation and voice and data roaming obligations that the Commission adopted for Mobility Fund Phase I,²²⁸ with certain minor changes for legacy support recipients.²²⁹ Until a competitive ETC ceases to receive legacy support,²³⁰ we will require the support

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least one service plan that includes a minimum monthly data allowance equivalent to a mid-level plan offered by a nationwide provider. *See Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2189, para. 87.

²²³ New York Public Service Commission Comments at 5.

²²⁴ NTCA Comments at 9.

²²⁵ AST&Science Comments at 31.

²²⁶ 47 U.S.C. § 214(e)(1)(B). This requirement is justified because the Commission has a compelling interest in consumers knowing about the availability of broadband service offered in satisfaction of an ETC’s deployment obligations.

²²⁷ *See 5G Fund NPRM*, 35 FCC Rcd at 4023, para. 86 (proposing that “legacy support recipients have the same public interest obligations as we propose for 5G Fund support recipients to . . . allow collocation and voice and data roaming”); *id.* at 4030, para. 105 (proposing “to adopt a public interest obligation that would require the same general collocation and voice and data roaming obligations that the Commission adopted for Mobility Fund Phase I, with certain minor changes”); *see also* 47 CFR § 54.1006(d)-(e).

²²⁸ 47 CFR § 54.1006(d)-(e); *USF/ICC Transformation Order*, 26 FCC Rcd at 18076, para. 1148.

²²⁹ *5G Fund NPRM*, 35 FCC Rcd at 4030, para. 105.

recipient to allow reasonable collocation by other carriers of services that would meet the technological requirements of the 5G Fund on all cell-site infrastructure that it owns or manages in the subsidized service area for which it receives legacy support.²³¹ For 5G Fund support recipients, to ensure that a support recipient does not use public funds to achieve unfair competitive advantage, we require that during the 5G Fund support term, a support recipient allow reasonable collocation by other providers of services that meet the technological requirements of the 5G Fund on all newly-constructed 5G cell-site infrastructure that the support recipient owns or manages in the areas for which it receives support. During the period of time that a carrier receives either legacy high-cost or 5G Fund support, we will also prohibit each support recipient from entering into facilities access arrangements that restrict any party to the arrangement from allowing others to collocate on the respective cell-site infrastructure.

90. RWA purports to support this collocation proposal, but asserts that collocation should only be required to the extent that the tower can support multiple carriers, and suggests that any reinforcement or upgrade costs would have to be borne by the last provider desiring to collocate on the tower.²³² We disagree with RWA's view regarding reasonable collocation because it conflicts with the underlying policy of ensuring that universal service support is used in a manner that does not allow one provider to gain an unfair competitive advantage over another. As the Commission explained in the context of adopting a similar requirement for Mobility Fund Phase II, the goal of having a public interest obligation to require reasonable collocation is to ensure that "publicly funded investments can be leveraged by other service providers."²³³ We decline to adopt RWA's position regarding collocation because we conclude it would place an undue burden on those service providers seeking to take advantage of the public benefits that can be gained for rural consumers from the 5G Fund, and would run counter to our efforts to close the digital divide. We remind both legacy high-cost and 5G Fund support recipients that they must also comply with the Commission's voice and data roaming requirements in effect as of the effective date of these rules on networks that are built using high-cost support.²³⁴

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²³⁰ That is, these requirements will be in effect until a legacy support recipient ceases to receive legacy high-cost support because, e.g., its legacy support is converted to 5G Fund support, its legacy support is completely phased down, or the period of time for which it receives preservation-of-service support concludes. *See infra* Section III.F.

²³¹ We note that this public interest obligation for legacy high-cost support recipients differs slightly from what we adopt for 5G Fund support recipients and from the requirements adopted by the Commission in Mobility Fund Phase I and Mobility Fund Phase II. *See USF/ICC Transformation Order*, 26 FCC Rcd at 17794-95, para. 376; *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2196, para. 102; *see also Mobility Fund Phase II Second Order on Reconsideration*, 33 FCC Rcd at 2542-43, para. 4. Here, we require a legacy support recipient to allow for reasonable collocation by other providers of services that would meet the technological requirements of the 5G Fund on all cell-site infrastructure that it owns or manages in the subsidized service area for which it receives legacy support whereas a 5G Fund support recipient, like Mobility Fund Phase I recipients and as adopted for Mobility Fund Phase II, must allow for reasonable collocation by other providers of services that would meet the technological requirements of the 5G Fund on all newly constructed cell-site infrastructure that it owns or manages in the area(s) for which it receives 5G Fund support. We conclude it is appropriate to apply a broader collocation requirement for legacy support recipients because we anticipate that such recipients will have already built their infrastructure and allowing reasonable collocation on those facilities serves our underlying policy goals of allowing other service providers to benefit from the public universal service funds. *Mobility Fund Phase II Second Order on Reconsideration*, 33 FCC Rcd at 2542-43, para. 4.

²³² RWA Comments at 14.

²³³ *Mobility Fund Phase II Second Order on Reconsideration*, 33 FCC Rcd at 2542-43, para. 4.

²³⁴ *See Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, Second Report and Order, 26 FCC Rcd 5411, 5448-53 paras. 74-87 (2011), *aff'd sub nom. Cellco Partnership v. FCC*, 700 F.3d 534 (D.C. Cir. 2012); *see generally Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, Declaratory Ruling, 29 FCC Rcd 15483 (WTB 2014).

E. Additional Mobile Legacy High-Cost Support Requirements

1. Reporting Requirements

91. *Initial Report of Current Service Offerings.* We adopt our proposal to require each competitive ETC receiving legacy high-cost support for mobile wireless service to file an initial report of its current service offerings in each of its subsidized service areas detailing how it is using legacy support.²³⁵ Legacy support recipients must file this report no later than three months after the Commission receives Paperwork Reduction Act approval for this requirement. RWA broadly supported requiring an initial report since “[t]his information will help the Commission ensure that support is actually being used for its intended purpose.”²³⁶ We agree. No other commenters discussed this point.

92. Consistent with our decision herein to require annual reports from legacy support recipients, we will require initial reports to be filed with USAC via a web portal, and the reports will be made available to the Commission and the relevant state, territory, and Tribal governmental agencies, as applicable.²³⁷ A legacy support recipient must maintain the accuracy and completeness of the information provided its initial report, and any substantial change in the accuracy or completeness of any initial report submitted by a legacy support recipient must be reported within 10 business days after the reportable event occurs. We retain our authority to look behind recipients’ initial reports and to take action to address any violations.²³⁸ We additionally direct the Office and Bureau to further specify the process by which legacy high-cost support recipients will be required to file their initial reports.

93. In order to have a complete understanding of current service offerings, we will require in the initial report information about the service each legacy support recipient offers in each subsidized service area where it receives legacy support. Such information will include an indication of the highest level of technology deployed, a target date for when 5G broadband service meeting the performance requirements we adopt today will be deployed within the subsidized service area (for any service area in which 5G has not been deployed), and an estimate of the percentage of area covered by 5G deployment meeting the adopted performance requirements (for any area in which 5G has been deployed). To help us better understand the services offered, we will also require that each recipient provide infrastructure information on the cell sites that the carrier uses to provide mobile service within each subsidized service area in a standardized template.²³⁹ We recognize that carriers may consider infrastructure information to

²³⁵ *5G Fund NPRM*, 35 FCC Rcd at 4023, para. 85.

²³⁶ RWA Comments at 11. We note that RWA addressed this proposed requirement only at a high-level, as was proposed in the *5G Fund NPRM*, and not the specific certifications and requirements that we adopt herein. Moreover, we disagree with RWA’s suggestion that the initial report of current service offerings should be required only after the Commission determines the final areas eligible for support in the 5G Fund Phase I auction, see RWA Oct. 20 *Ex Parte* Letter at 2, as doing so would unnecessarily delay our efforts to bring accountability to the high-cost program and to gain a more complete understanding of how legacy high-cost support is being used.

²³⁷ See *5G Fund NPRM*, 35 FCC Rcd at 4024, para. 90 (tentatively concluding to require that mobile legacy support recipients file annual reports with USAC via a web portal, and that USAC would make all data available to the Commission and state or Tribal governmental entities).

²³⁸ See *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2189, para. 87.

²³⁹ We note that we are currently considering whether to require from all mobile service providers the submission of infrastructure information more generally across providers’ networks. *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7502-03, paras. 100-02. Our decision to adopt a requirement that legacy support recipients provide infrastructure information for subsidized service areas is without prejudice to the matter of whether to adopt a similar requirement in the Digital Opportunity Data Collection proceeding.

be sensitive,²⁴⁰ and so we will treat such data submitted as part of the initial report as presumptively confidential.²⁴¹

94. We will require each legacy support recipient to provide, as part of the initial report, a brief narrative describing its current service offerings and providing a high-level accounting of how it has used legacy high-cost support received for the 12-month period prior to the deadline for the initial report. We direct the Office and Bureau to issue further guidance on the level of detail required and manner in which such initial accounting information must be provided consistent with our decision. Finally, we will require that each legacy support recipient provide certain certifications related to its current service offerings and use of legacy high-cost support, as part of its initial report. These will include, among other certifications, a certification that the carrier has filed relevant deployment data (either via FCC Form 477 or the Digital Opportunity Data Collection, as appropriate) that reflect its current deployment covering its subsidized service area.²⁴²

95. *Annual Reports.* We also adopt our proposal to require recipients of mobile legacy high-cost support to file annual reports regarding their efforts to provide 5G services throughout their subsidized service areas meeting the public interest obligations and performance requirements we adopt today.²⁴³ To that end, we will require that each legacy high-cost support recipient submit an annual report by July 1 in each year that includes updated information about the carrier's service offerings for the previous calendar year in its subsidized service areas, and how legacy support is being used, as well as certifications that the support recipient is in compliance with its public interest obligations and performance requirements. RWA was the only commenter to address our annual reporting proposal, of which it was supportive.²⁴⁴ Similar to initial reporting requirements above, we conclude that requiring annual reports will ensure accountability in the high-cost program by ensuring that legacy support recipients meet their public interest obligations and performance requirements.

96. Legacy high-cost support recipients must file annual reports with USAC via a web portal and filing these reports will replace the carrier's current obligation to annually file the existing FCC Form 481 with USAC.²⁴⁵ As with the initial reports, we will require a legacy support recipient to report any substantial change in the accuracy or completeness of any annual report it submits within 10 business days after the reportable event occurs, and we retain our authority to look behind recipients' annual reports and to take action to address any violations.²⁴⁶ And as with the initial reports, USAC will make the annual report filings available to the Commission and the relevant state, territory, and Tribal

²⁴⁰ See *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7502, para. 101 (recognizing "that the collection of infrastructure data could raise commercial sensitivity and national security concerns").

²⁴¹ See 47 CFR §§ 0.457(d), 0.459(a)(4). While we and USAC will treat as presumptively confidential and withhold from public inspection infrastructure information submitted as part of this report, USAC will provide these data to the Commission and the relevant state, territory, and Tribal governmental entities that have jurisdiction over a particular service area, as applicable.

²⁴² To the extent that the Digital Opportunity Data Collection is not yet in place at the time that the initial report of current service offerings is due, we will require that each legacy support recipient certify to submitting coverage data consistent with the specifications adopted in the Digital Opportunity Data Collection proceeding via the existing FCC Form 477 system.

²⁴³ *5G Fund NPRM*, 35 FCC Rcd at 4024, para. 90.

²⁴⁴ RWA Comments at 12.

²⁴⁵ The requirement for legacy high-cost support recipients to file annual reports, and that these reports will replace the current obligation to file the existing FCC Form 481, will take effect following submission of the initial report of current service offerings.

²⁴⁶ See *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2189, para. 87.

governmental agencies, as applicable.²⁴⁷ We direct the Office and Bureau to further specify the process by which legacy high-cost support recipients will be required to file their annual reports, including whether these reports will be incorporated into a modified FCC Form 481 or will be collected via a new form.

97. In addition to collecting the same general information collected as part of FCC Form 481,²⁴⁸ and broadly similar to the initial report, we will require annual reports to include updated information about the services each legacy support recipient offers in each subsidized service area where it receives legacy support for the previous calendar year, including the highest level of technology deployed, a target date for when 5G broadband service meeting the performance requirements will be deployed within the subsidized service area (for any service area in which 5G has not been deployed), and an estimate of the percentage of area covered by 5G deployment meeting the performance requirements we adopt today (for any area in which 5G has been deployed), as well as other relevant information that the Office and Bureau decide may be necessary. We will also require that each recipient provide updated infrastructure information on the cell sites that are located within each subsidized service area in a standardized template. As with the submission of these data as part of the initial report, we will treat infrastructure data submitted as part of an annual report as presumptively confidential.²⁴⁹

98. We will require legacy support recipients to provide as part of each annual report an accounting of the support a carrier has received and how legacy support is being used, including a brief narrative with high-level accounting of how it used legacy high-cost support received for the previous calendar year.²⁵⁰ In addition, we will require that the legacy support recipient indicate which of these expenditures were for the deployment, maintenance, and/or operation of networks capable of offering 5G service that meet the performance requirements we adopt herein. Requiring this information will allow us to ensure that legacy support recipients meet their public interest obligation to use an increasing percentage of their legacy support toward the deployment of 5G service.

99. Finally, we will require that each legacy support recipient provide a number of certifications related to its current service offerings and use of legacy high-cost support as part of its annual reports. These will include, among other certifications, a certification that the carrier has used the required minimum percentage of legacy support toward the deployment and/or operation of 5G service meeting the minimum performance requirements, as well as that it has filed relevant deployment data either as part of FCC Form 477 or in the Digital Opportunity Data Collection, as appropriate, that reflect its current deployment covering the subsidized service area.²⁵¹

²⁴⁷ *5G Fund NPRM*, 35 FCC Red at 4024, para. 90.

²⁴⁸ We will require from competitive ETCs receiving legacy high-cost support on these new annual reports contact information, information on affiliated operating companies, reporting on outages, complaints, and Tribal engagement, as well as service rate comparability, similar to the information collected as part of existing FCC Form 481, see *USF/ICC Transformation Order*, 26 FCC Red at 17852-59, paras. 579-606, along with the new information and certifications we adopt herein.

²⁴⁹ See *supra* note 240.

²⁵⁰ We note that all ETCs that receive high-cost support remain subject to periodic audits by USAC to ensure compliance. 47 CFR § 54.320(a)-(b). While we will not require legacy support recipients to submit detailed accounting information on its expenditures as part of its annual reports, opting instead to require only a brief submission of a high-level narrative alongside certifications on the use of support, we emphasize to competitive ETCs that they should retain adequate accounting records as evidence that they have met their public interest obligations to spend a minimum percentage of legacy support on the deployment of 5G in the case of an audit.

²⁵¹ As with our decision to require an initial report of current service offerings, to the extent that the Digital Opportunity Data Collection is not yet in place at the time that an annual report is due, we will require that each legacy support recipient certify to submitting coverage data consistent with the specifications adopted in the Digital Opportunity Data Collection proceeding via the existing FCC Form 477 system.

100. *Service Milestone Reports.* We adopt a high-level requirement that legacy high-cost support recipients submit 5G service milestone reports, and direct the Office and Bureau to propose and adopt, after notice and comment, the content and schedule of such reports in the proceeding in which they adopt carrier-specific 5G service deployment coverage requirements.²⁵² We anticipate that the particular service milestone report requirements that the Office and Bureaus adopt would be generally similar to the requirements we adopt herein for 5G Fund support recipients to file interim and final service milestone reports.

2. Demonstrating Compliance with Performance Requirements

101. We adopt a modified version of our proposal to require legacy support recipients to demonstrate compliance with performance requirements. This decision is consistent with requiring legacy support recipients to spend an increasing percentage of support on the deployment, maintenance, and operation of networks capable of supporting 5G broadband service that meets the performance requirements we adopt. In the *5G Fund NPRM*, we proposed to require that legacy support recipients, as with 5G Fund support recipients, demonstrate compliance with performance requirements by submitting milestone coverage maps reflecting 5G service deployment in conjunction with comprehensive on-the-ground measurement testing.²⁵³ Because we are not specifying carrier-specific 5G broadband service coverage requirements at this time, we will require a legacy support recipient to demonstrate the performance of any 5G networks deployed using legacy support by certifying in its annual report that it filed the relevant mobile deployment data as part of its FCC Form 477 filing or in the Digital Opportunity Data Collection, as appropriate, and that such data reflect any 5G deployment covering its subsidized service area.²⁵⁴ Additionally, we adopt a high-level requirement that legacy support recipients substantiate deployment coverage data with on-the-ground measurement tests, but defer a decision on the precise requirements for such tests, as well as the methodologies for conducting and validating on-the-ground measurement tests for legacy support recipients, to the proceeding in which the Office and Bureau adopt carrier-specific 5G broadband service coverage requirements.

102. Because the requirements adopted for the filing of 5G coverage maps in the Digital Opportunity Data Collection proceeding mirror the propagation model parameters specified for 5G deployment maps proposed in the *5G Fund NPRM*,²⁵⁵ requiring that legacy support recipients verify to the submission of coverage data in their FCC Form 477 or Digital Opportunity Data Collection filings will still provide us with the same information. Deferring to the Digital Opportunity Data Collection's requirements for the generation and submission of mobile coverage data therefore avoids the burden on legacy support recipients of having duplicative or conflicting requirements, as suggested by AT&T and

²⁵² *5G Fund NPRM*, 35 FCC Rcd at 4024-25, para. 90.

²⁵³ See *5G Fund NPRM*, 35 FCC Rcd at 4024, para. 89 (proposing a requirement “that legacy support recipients certify and demonstrate that they have met their service deployment milestones by meeting certain requirements as a measurement of performance within their subsidized areas using the same process we ultimately adopt for 5G Fund support recipients”); *id.* at 4032-33, paras. 111-13 (proposing to require that 5G Fund support recipients submit milestone coverage maps and on-the-ground measurement testing to demonstrate compliance with 5G public interest obligations and performance requirements).

²⁵⁴ As stated above, to the extent that the Digital Opportunity Data Collection is not operational at the time that a legacy support recipient is required to demonstrate compliance via the submission of 5G coverage maps, the support recipient will be required to submit maps generated consistent with the propagation model parameters adopted in the Digital Opportunity Data Collection proceeding through the legacy FCC Form 477 system. *Supra* n.251.

²⁵⁵ *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7474, 7477-78, 7479-80, paras. 33, 40, 45 (adopting a requirement for the submission of mobile coverage maps depicting 5G-NR service, both modeled using a 90% cell edge probability, 50% cell loading factor, and 100 meter or better spatial resolution, that depict cell edge minimum speed thresholds of 7/1 Mbps and 35/3 Mbps).

CTIA,²⁵⁶ without undermining the public interest obligations and performance requirements we adopt. We note, however, that legacy support recipients will be required to file 5G broadband coverage maps otherwise generated using the standardized propagation model parameters adopted in the Digital Opportunity Data Collection proceeding for 5G coverage data (i.e., minimum cell edge speeds of 7/1 Mbps with 50% cell loading and 90% cell edge probability) via FCC Form 477 prior to filing any annual reports, to the extent that a report is due prior to the first collection of mobile coverage data in the Digital Opportunity Data Collection.

103. Although we adopt a general requirement that legacy high-cost support recipients submit on-the-ground measurement tests to demonstrate compliance with 5G performance requirements, we do not adopt specific requirements at this time because of our decision deferring adoption of carrier-specific 5G broadband service coverage requirements for these recipients. Instead, we direct the Office and Bureau to adopt, after notice and comment, appropriate parameters for legacy high-cost support recipients to demonstrate compliance with 5G broadband public interest obligations and performance requirements, as necessary, concurrent with adoption of carrier-specific 5G broadband service coverage requirements for legacy support recipients. We anticipate that the test metrics and data specifications that the Office and Bureaus adopt, along with the methodologies for conducting on-the-ground tests and validating results, would be generally similar to the requirements we adopt herein for 5G Fund support recipients to demonstrate compliance.

104. Several commenters oppose the on-the-ground measurement testing methodology proposed in the *5G Fund NPRM*,²⁵⁷ or even the use of on-the-ground tests at all to demonstrate buildout.²⁵⁸ The Vermont Department of Public Service, on the other hand, argues that on-the-ground testing, including drive testing, is critical to verify deployment, though it “does not oppose [AT&T’s] proposed approach of determining validation methodology for the 5G Fund through the [Digital Opportunity Data Collection] proceeding.”²⁵⁹

105. We agree with the Vermont Department of Public Service that on-the-ground testing is important to verify appropriate use of legacy support. We nevertheless acknowledge commenters’ concerns that on-the-ground testing may be burdensome, and expect the Office and Bureau will give appropriate weight to those concerns in determining the appropriating testing methodology for legacy support recipients.²⁶⁰ Although the issue of whether to adopt a requirement that service providers substantiate coverage maps with on-the-ground testing data remains open in the Digital Opportunity Data Collection proceeding,²⁶¹ the outcome of that proceeding is not determinative here.

²⁵⁶ See AT&T Comments at 6 (“Aligning these particular 5G Fund [milestone mapping and speed test] requirements to the extent possible with similar [Digital Opportunity Data Collection] requirements will avoid having two very different sets of rules for validating mobile broadband coverage and permits participating providers to utilize the same or similar internal resources (e.g., personnel, equipment).”); CTIA Comments at 6-7 (“The NPRM discusses several instances in which 5G Fund participants would be called upon to demonstrate their mobile wireless coverage. This includes the proposals related to build-out milestones, milestone reports, demonstrations of compliance with performance requirements, and milestone map supporting data. To the extent possible, the Commission should ensure that these requirements align with similar and related requirements that the Commission seeks to adopt in the [Digital Opportunity Data Collection] proceeding related to verification and a challenge process.”) (internal citations omitted).

²⁵⁷ AT&T Comments at 7-11; RWA Comments at 16; CRWC Comments at 11; see also CTIA Comments at 7-8 (urging the Commission to “carefully consider the feasibility and practicality of its [on-the-ground measurement testing requirements]”).

²⁵⁸ Verizon Comments at 11-14.

²⁵⁹ Vermont Department of Public Service Comments at 3.

²⁶⁰ *In Re: FCC 11-161*, 753 F. 3d 1015, 1143 (10th Cir. 2014).

²⁶¹ *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7504-06, paras. 105-09.

106. Because this is a universal service subsidy program, our obligations as stewards of the Fund require that we take steps to ensure that support is being used for its intended purpose and to minimize waste, fraud, and abuse. This view is consistent with our treatment of fixed broadband deployments in the universal service high-cost program, where support recipients' subsidized networks are subject to mandatory speed and latency testing,²⁶² even though we did not adopt a similar testing requirement for fixed broadband networks in the Digital Opportunity Data Collection Proceeding.

3. Non-Compliance Measures for Failure to Comply with Public Interest Obligations and Performance Requirements

107. We adopt our proposal to terminate support payments to mobile competitive ETCs receiving legacy high-cost support that fail to comply with their public interest obligations and performance requirements.²⁶³ As stewards of the Universal Service Fund, it is our obligation to ensure that all Americans living in areas served by these carriers receive the most advanced wireless services. We do this, and create a powerful incentive to meet obligations, by ending support payments to legacy mobile competitive ETCs that fail to comply with their obligations and/or performance requirements. While ending support payments is a stricter consequence than what other high-cost support recipients face for failing to meet their public interest obligations and performance requirements,²⁶⁴ the continuation of legacy support is an interim mechanism in place as we implement the 5G Fund, and therefore, unlike the Commission's other modernized support mechanisms, the non-compliance measures here do not benefit from allowing legacy support recipients to come back into compliance prior to the end of the support term.

108. The rule we adopt is a modified version of our proposal.²⁶⁵ As we proposed, mobile competitive ETCs receiving legacy high-cost support that fail to comply with public interest obligations or performance requirements must notify the Bureau and USAC within 10 business days of non-compliance. We initially proposed that upon receipt of this notification, we would deem the carrier to be in default, and the carrier would no longer be eligible to receive support disbursements, and would be subject to recovery of support disbursed since the effective date of the public interest obligations and performance requirements.²⁶⁶ We modify the language of the proposed rule in two ways. First, we make clear that in addition to basing a finding of default on a legacy high-cost support recipient's notification of its non-compliance, the Bureau or USAC may in the absence of any such notification determine that the support recipient is in default and subject to the same consequences if they become aware of a recipient's non-compliance. Second, to address concerns of "disproportionate penalties," we limit the amount of support that may be subject to recovery to the legacy support not spent on the deployment, operation, and/or maintenance of voice and broadband networks that support 5G meeting the performance requirements.²⁶⁷ We conclude this modified approach for non-compliance better incentivizes 5G deployment, and thus we tweak our proposal in the *5G Fund NPRM* to avoid adverse outcomes.²⁶⁸

²⁶² See generally *Connect America Fund*, Order on Reconsideration, 34 FCC Rcd 10109 (2019).

²⁶³ *5G Fund NPRM*, 35 FCC Rcd at 4023, para. 84.

²⁶⁴ See 47 CFR § 54.320(d).

²⁶⁵ *5G Fund NPRM*, 35 FCC Rcd at 4077-78, Appx. A, Proposed Rules, Sec. 54.322(j); see Appendix A—Final Rules.

²⁶⁶ Such a carrier may be subject to further action (e.g., enforcement, revocation of ETC designation, and suspension or debarment).

²⁶⁷ See *Verizon Oct. 20 Ex Parte* at 2. The amount of support we make subject to recovery goes beyond Verizon's proposal to simply adopt the approach that the Commission used for fixed legacy high-cost support. *Id.* (citing *Connect America Fund et al.*, Order, 28 FCC Rcd 14887, 14891, para. 12 n.33 (2013) ("[I]f a holding company receives \$30 million in frozen support in 2013 but can only certify that \$5 million satisfies the 2013 section 54.313(c) obligation (to use at least one-third of such support for broadband-capable networks), it would relinquish (continued....)"))

109. CRWC’s argument that provisions in the 2020 Appropriations Act barring the Commission from modifying its rules to reduce competitive mobile ETCs’ support below 60% of their monthly baseline support amount until the Commission begins disbursing Mobility Fund Phase II support has no bearing on our authority to impose the non-compliance measures we adopt.²⁶⁹ The 2020 Appropriations Act does not relieve competitive ETCs of their obligation to comply with the high-cost program’s rules, including public interest obligations.²⁷⁰ Consequently, the Commission, even after enactment of the 2020 Appropriations Act, maintains its authority to subject competitive ETCs to reductions in support amounts for failing to comply with program rules.²⁷¹ Nor does any provision of the 2020 Appropriations Act prohibit us from adopting new rules or obligations for mobile competitive ETCs, which if not adhered to, would result in reductions in support.²⁷² The proviso to the appropriations statute permits the adoption of additional public interest obligations. The proviso states that it “shall not prohibit the Commission from . . . adopting other support mechanisms as an alternative to Mobility Fund Phase II.”²⁷³ Because this Report and Order implements a comprehensive alternative plan for mobile high-cost support that would replace Mobility Fund Phase II (much like the Alaska Plan, Uniendo a Puerto Rico Fund, and Connect USVI Fund), including a transition for legacy support recipients, the adoption of the 5G Fund and the associated public interest obligations on legacy support recipients are consistent with the statutory language.²⁷⁴

110. In addition, the public interest obligations we adopt here do not “modify, amend, or change the rules or regulations of the Commission for universal service high-cost support for competitive eligible telecommunications carriers in a way that is inconsistent with” the relevant rules in place in 2015—support amounts for competitive ETCs that comply with their obligations are still determined

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\$5 million of its support.”). Under the approach we adopt, for example, if the amount of legacy high-cost support disbursed to a mobile competitive ETC since the effective date of the public interest obligations and performance requirements is \$10 million and the carrier spent \$2 million on 5G deployment at the time of default, the carrier would be subject to up to \$8 million in recovery.

²⁶⁸ For instance, if a carrier foresaw its inability to meet its public interest obligations, under the approach proposed in the *5G Fund NPRM*, it could be incentivized to stop spending altogether knowing that all legacy support is subject to recovery. By making any support spent on 5G not subject to recovery, such a carrier is better incentivized to keep spending on 5G. While Verizon’s proposal would incentivize continued spending, such spending would not necessarily be 5G related.

²⁶⁹ See CRWC Comments at 25-30; 2016 Appropriations Act, Pub. L. No. 114-113, Div. E, Tit. VI, § 631, 129 Stat. 2242, 2470 (2015); Consolidated Appropriations Act of 2020, Pub. L. No. 116-93, Div. C, Tit. VI, § 625, 133 Stat. 2317, 2482 (2019). The 2016 Appropriations Act is no longer in effect, but the 2020 Appropriations Act contains the same language.

²⁷⁰ 47 CFR § 54.320(c).

²⁷¹ See, e.g., 47 CFR § 54.320(c); see also CRWC Comments at 37 (“The Commission is fully empowered to regulate carriers receiving legacy support to ensure that the purposes of the Act are being fulfilled.”).

²⁷² Congress was aware that the Commission in 2011 had expressed its intent to subject legacy high-cost support recipients to additional mobile broadband public interest obligations if the phase down in support were paused when it passed the later-in-time 2016 Appropriations Act. See *USF/ICC Transformation Order*, 26 FCC Rcd at 17832, para. 519 (anticipating that any temporary freeze on the phase down of legacy support “would be accompanied by additional mobile broadband public interest obligations”).

²⁷³ Consolidated Appropriations Act of 2020 § 625.

²⁷⁴ See *PR-USVI Fund Report and Order*, 34 FCC Rcd at 9165, para. 110 & n.373; *Alaska Plan Order*, 31 FCC Rcd at 10159, para. 66 & n.128.

pursuant to those rules.²⁷⁵ In fact, the public interest obligations we adopt today do not alter the support amounts competitive ETCs receive and are consistent with the statutory requirement that recipients use support “for the provision, maintenance, and upgrading of facilities and services for which the support is intended.”²⁷⁶ Finally, in enacting the 2020 Appropriations Act, Congress was legislating against the background of the established principle that we can impose additional conditions on the continued receipt of universal service funds.²⁷⁷

4. Geographic Flexibility on Use of Legacy High-Cost Support

111. We adopt our proposal to give mobile competitive ETCs receiving legacy high-cost support for a particular subsidized service area the flexibility to use support for the provision, maintenance, and upgrading of facilities and services within any of the designated service areas for which they receive legacy mobile support.²⁷⁸ Mobile competitive ETCs may also use legacy support within any of the designated service areas of an affiliated mobile competitive ETC (e.g., where several ETCs share a common holding company), regardless of whether those areas span more than one state.²⁷⁹ As we reasoned in the *5G Fund NPRM*, this allows for more efficient decisions about use of legacy support while still satisfying the statutory obligation to use support for its intended purposes.²⁸⁰

²⁷⁵ See 2016 Appropriations Act, Pub. L. No. 114-113, Div. E, Tit. VI, § 631, 129 Stat. 2242, 2470 (2015), Consolidated Appropriations Act of 2020, Pub. L. No. 116-93, Div. C, Tit. VI, § 625, 133 Stat. 2317, 2482 (2019). See 47 CFR § 54.307(e)(5), (e)(6) (2015).

²⁷⁶ 47 U.S.C. § 254(e).

²⁷⁷ See *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, Report and Order, Further Notice of Proposed Rulemaking, and Order, 34 FCC Rcd 11423, 11464, para. 105 (2019) (“[T]he Commission frequently enacts rules adjusting the levels of USF support received by carriers, and has long held that carriers have no entitlement to ongoing USF support at current levels.”); *USF/ICC Transformation Order*, 26 FCC Rcd at 17770, para. 293 (“Indeed, there is no statutory provision or Commission rule that provides companies with a vested right to continued receipt of support at current levels, and we are not aware of any other, independent source of law that gives particular companies an entitlement to ongoing USF support.”); see also *In re FCC 11-161*, 753 F.3d at 1082 (holding that “the FCC reasonably interpreted § 214(e)(2) as not requiring it to offer USF support to all ETCs in a particular area”); *id.* at 1070 (upholding the Commission’s determination that companies have no “vested right to continued receipt of support at current levels” or “entitlement to ongoing USF support”); *id.* at 1055, 1082 (noting that the Commission has the discretion to balance competing universal service principles); *Members of the Peanut Quota Holders Ass’n v. United States*, 421 F.3d 1323, 1335 (Fed. Cir. 2005) (“The government is free to create programs that convey benefits in the form of property, but, unless the statute itself or surrounding circumstances indicate that such conveyances are intended to be irrevocable, the government does not forfeit its right to withdraw those benefits or qualify them as it chooses.”) see also *Adak Eagle Enterprises, LLC & Windy City Cellular, LLC*, Order on Reconsideration and Memorandum Opinion and Order, 30 FCC Rcd 5080, 5089 para. 22 (2015) (“[C]ompanies do not have a vested right to continued receipt of support at current levels, and the Commission has the discretion to balance competing universal service principles.”); *Connect America Fund*, Order and Order on Review, 31 FCC Rcd 8454, 8466 para. 32 (2016) (“In fact, ‘there is no statutory provision or Commission rule that provides companies with a vested right to continued receipt of support at current levels, and [the Commission is] not aware of any other, independent source of law that gives particular companies an entitlement to ongoing USF support.’” (quoting *USF/ICC Transformation Order*, 26 FCC Rcd at 17771, para. 293).

²⁷⁸ *5G Fund NPRM*, 35 FCC Rcd at 4017, para. 70.

²⁷⁹ See 47 U.S.C. §§ 214(e)(1), 214(e)(5), 254(e); 47 CFR §§ 54.7 (describing intended use of federal universal service support), 54.207(a) (defining designated service areas). Our decision also applies to U.S. territories where competitive ETCs receive mobile legacy high-cost support.

²⁸⁰ *5G Fund NPRM*, 35 FCC Rcd at 4017, para. 70. This effectively makes permanent a waiver, which has since expired, of the Commission’s rules granted by the Bureau in response to the COVID-19 pandemic. See *Connect America Fund*, Order, 35 FCC Rcd 2964, 2965-66, paras. 7-9 (WCB 2020).

112. Commenters were generally supportive of our proposal,²⁸¹ and we agree with CRWC that providing geographic flexibility on the use of legacy high-cost support “is a no-cost means of improving the efficiency of investments to cover the greatest number of rural citizens.”²⁸² AT&T supports providing legacy support recipients with this flexibility, but cautions that doing so could result in state regulators being “unwilling to include the carrier in its annual [section 54.314] certification, rendering the ETC ineligible for support the following year.”²⁸³ AT&T proposes that the Commission “permit ETCs that avail themselves of this flexibility to certify directly to the Commission pursuant to section 54.314(b).”²⁸⁴ We believe adopting such a procedure at this time is premature because we cannot say whether this perceived issue will develop. Moreover, nothing we adopt permits a competitive ETC to use high-cost support to provide service outside of its or an affiliated competitive ETC’s designated service areas, nor do we permit any competitive ETC to use high-cost support for anything but its intended purposes. As such, we expect a state regulator to include a carrier that otherwise complies with its ETC obligations as required in its annual certification, and further note that we expect recipients that take advantage of this flexibility to be able to certify and produce evidence to document compliance as necessary.²⁸⁵

5. Freeze of Non-Frozen Legacy High-Cost Support

113. We adopt our proposal to freeze the mobile high-cost support of Standing Rock, the sole competitive ETC that continues to receive non-frozen support.²⁸⁶ Standing Rock, a competitive ETC in North Dakota (study area code: 389014) and South Dakota (study area code: 399020) has been exempt from the freeze and phase-down of competitive ETC support.²⁸⁷ The Commission adopted this approach in 2011 in order to provide time for Standing Rock, a “nascent Tribally-owned ETC . . . to reach a sustainable scale so that consumers on the Reservation can realize the benefits of connectivity that, but for Standing Rock, they might not otherwise have access to.”²⁸⁸ Standing Rock is no longer nascent and has had ample time—more time than the Commission anticipated in 2011—to reach a sustainable scale, and so the rationale for special treatment no longer exists and Standing Rock has not demonstrated a reason for continued special treatment. Accordingly, we now freeze Standing Rock’s high-cost support at the level it received for the most recent 12-month period prior to the effective date of this Report and Order, after which it will be subject to the same disaggregation and phase-down rules we adopt for all competitive ETCs whose legacy support was frozen pursuant to the *USF/ICC Transformation Order*.

114. Standing Rock urges the Commission to delay freezing support until release of the final eligibility map and in that time continue to use line counts for determining support amounts.²⁸⁹ It reasons that due to the COVID-19 pandemic, it “expects” line counts to increase (which would result in more

²⁸¹ See RWA Comments at 10; AT&T Comments at 20; CRWC Comments at 24.

²⁸² CRWC Comments at 24.

²⁸³ AT&T Comments at 20; see also AT&T Sept. 8 *Ex Parte* Letter at 1-2.

²⁸⁴ AT&T Comments at 20.

²⁸⁵ See 47 CFR §§ 54.314, 54.320.

²⁸⁶ *5G Fund NPRM*, 35 FCC Red at 4019, para. 74 & n.110.

²⁸⁷ See *USF/ICC Transformation Order*, 26 FCC Red at 17836-37, paras. 530-31. The pause of the phase down of competitive ETC support in 2014, see *id.* at 17832, para. 519, extended Standing Rock’s exemption. While the phase down of frozen support for every other legacy support recipient was paused at 60% level specified in section 54.307(e)(2)(iii) of our rules, in this particular case, we will treat Standing Rock’s support amount for the most recent 12-month period prior to the effective date of this Report and Order as the level specified in section 54.307(e)(2)(iii) for purposes of transitioning such support to 5G Fund support. See Appendix A—Final Rules, Sec. 54.307(e)(5)(ii)-(iii).

²⁸⁸ *USF/ICC Transformation Order*, 26 FCC Red at 17837, para. 531.

²⁸⁹ Standing Rock Comments at 3.

support) as “Tribal residents continue to adapt to social distancing requirements and the need for online learning and online business.”²⁹⁰ However, Standing Rock offers no data to support this claim. Given that its comments were filed more than three months after the President declared a national emergency due to the COVID-19 pandemic,²⁹¹ we would expect Standing Rock to demonstrate that its line counts have already increased, but it did not. Without adequate support for the claim, we find no reason to deviate from our proposal.

6. Limitations on Mobile Legacy High-Cost Support

115. We now clarify, as we proposed, that only terrestrial mobile wireless carriers may receive mobile high-cost support,²⁹² and that recipients of mobile legacy high-cost support must use such support only for the provision, maintenance, and upgrading of terrestrial mobile voice and broadband facilities and services.²⁹³ Consequently, carriers offering only non-terrestrial services, such as mobile-satellite service, will no longer be eligible to receive mobile legacy high-cost support after the effective date of these rules.²⁹⁴ We must ensure that we are funding advanced mobile services with our limited universal service funds, even for carriers receiving legacy support, and non-terrestrial services receiving legacy support cannot meet the appropriate broadband public interest obligations that we adopt for legacy support recipients.²⁹⁵ However, an affected carrier is not prohibited from bidding for, and winning, new 5G Fund support in an auction, provided that it is otherwise determined to be eligible. Moreover, we clarify that legacy support and 5G Fund support recipients may use whatever backend technologies, including satellite backhaul, to meet 5G public interest obligations so long as they offer to the end user terrestrial 5G service that complies with the 5G-NR standard and meets all performance requirements. We are not, therefore, categorically excluding satellite technology from networks supported by the 5G Fund so long as a carrier seeking 5G Fund support is capable of providing voice and 5G broadband terrestrial service meeting necessary program requirements.²⁹⁶

F. Schedule for Transition from Legacy High-Cost Support to 5G Fund Support

116. *Authority to Modify the Legacy High-Cost Support Rules.* We adopt our tentative conclusion that the 5G Fund constitutes a comprehensive mechanism for mobile high-cost support that serves as an alternative to Mobility Fund Phase II and likewise conclude that the framework we adopt for the 5G Fund is consistent with the Commission’s statutory authority to modify the rules for legacy high-

²⁹⁰ Standing Rock Comments at 4. With increased line counts, Standing Rock’s support will increase, and it claims that it will therefore be in a better position to meet the “needs of Tribal residents.” *Id.*

²⁹¹ Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak (Mar. 13, 2020), <https://www.whitehouse.gov/presidential-actions/proclamation-declaring-nationalemergency-concerning-novel-coronavirus-disease-covid-19-outbreak/>.

²⁹² *5G Fund NPRM*, 35 FCC Red at 4018, para. 72.

²⁹³ 47 U.S.C. § 254(e).

²⁹⁴ *5G Fund NPRM*, 35 FCC Red at 4018, para. 72. Currently, high-cost subsidy data from USAC indicate that one competitive ETC, Dialtone Services, LP, receives legacy support for provision of mobile-satellite service.

²⁹⁵ *5G Fund NPRM*, 35 FCC Red at 4018, n.108; *see* Dial Tone Services, <https://www.dialtonetexas.com/> (last visited Oct. 23, 2020); Application of Dialtone Services L.P. (DTS) for Designation as an Eligible Telecommunications Carrier Pursuant to P.U.C. Subt. R. 26.418, Order, Public Utility Commission of Texas, 2005 WL 1827871 (Tex.P.U.C.) (Aug. 2, 2005); *Communications Marketplace Report*, Report, 33 FCC Red 12558, 12671-72, para. 211 (2018).

²⁹⁶ AST&Science Comments at 15-16; *see also* SES Americom and O3B Comments at 4-8 (discussing how satellite technology can be integrated into 5G networks); RWA Reply Comments at 14; Lynk Global Oct. 12 *Ex Parte* Letter.

cost support.²⁹⁷ We reached similar conclusions with respect to both the Alaska Plan and the Uniendo a Puerto Rico Fund and the Connect USVI Fund.²⁹⁸

117. The statutory language expressly allowed for the Commission to “consider[], develop[], or adopt[] other support mechanisms as an alternative to Mobility Fund Phase II.”²⁹⁹ Indeed, the Commission has adopted alternate support mechanisms and otherwise ceased disbursement of legacy high-cost support based upon the phase down schedule in section 54.307(e)(2) of our rules to mobile competitive ETCs in Alaska,³⁰⁰ as well as in Puerto Rico and the U.S. Virgin Islands.³⁰¹ As with the adoption of those alternate support mechanisms, the 5G Fund for Rural America will serve as a comprehensive alternative mechanism for mobile legacy high-cost mobile support adopted as an alternative to Mobility Fund Phase II. Because the statute does not prohibit the Commission from adopting other comprehensive support mechanisms for high-cost mobile support as an alternative to Mobility Fund Phase II, we conclude that there is no legal issue with us adopting rules that will allow for the phase down of legacy support in areas that will be ineligible for 5G Fund support in the Phase I auction, and doing so prior to that auction.

118. In the *5G Fund NPRM*, we proposed a schedule for phasing down legacy high-cost support over two years for areas that are ineligible for 5G Fund support once the final eligible areas are known prior to conducting the 5G Fund Phase I auction.³⁰² Several commenters question our legal authority to resume the phase down of legacy high-cost support before we conclude the 5G Fund Phase I auction.³⁰³ These commenters focus on statutory language limiting our ability to modify our rules for competitive ETCs receiving legacy high-cost support in a manner inconsistent with sections 54.307(e)(5) and (e)(6) of our rules, as in effect in 2015. Section 54.307(e)(5) of the 2015 rules provided that legacy high-cost support competitive ETCs would continue to receive support at 60% of the frozen support level until “Mobility Fund Phase II is implemented.”³⁰⁴

²⁹⁷ See Consolidated Appropriations Act of 2020, Pub. L. No. 116-93 Div. C, Title IV § 625 (“None of the funds appropriated by this Act may be used by the Federal Communications Commission to modify, amend, or change the rules or regulations of the Commission for universal service high-cost support for competitive eligible telecommunications carriers in a way that is inconsistent with paragraph (e)(5) or (e)(6) of section 54.307 of title 47, Code of Federal Regulations, as in effect on July 15, 2015: *Provided*, That this section shall not prohibit the Commission from considering, developing, or adopting other support mechanisms as an alternative to Mobility Fund Phase II.”).

²⁹⁸ See *Alaska Plan Order*, 31 FCC Rcd at 10159-60, para. 66 & n.128; *PR-USVI Fund Report and Order*, 34 FCC Rcd at 9165, para. 110 & n.373.

²⁹⁹ Consolidated Appropriations Act of 2020, Pub. L. No. 116-93 Div. C, Title IV § 625.

³⁰⁰ *Alaska Plan Order*, 31 FCC Rcd at 10159-60, para. 66 & n.128. Similar to the schedule we adopt here, 12 months after release of the Report and Order adopting the Alaska Plan as a “comprehensive alternative plan for high-cost mobile support in Alaska,” *id.*, the Commission commenced a three-year phase down of support for carriers in Alaska that did not elect to participate in the Alaska Plan. *Id.* at 10171, para. 99.

³⁰¹ *PR-USVI Fund Report and Order*, 34 FCC Rcd at 9165, para. 110.

³⁰² *5G Fund NPRM*, 35 FCC Rcd at 4019, para. 75.

³⁰³ CRWC Comments at 25-30 (arguing that the statute prevents the Commission from reducing legacy high-cost support amounts below 60% of the frozen support level until the first month in which competitive ETCs receive 5G Fund support); AT&T Comments at 18 & n.46 (raising no objection as a policy matter but questioning whether as a legal matter the Commission can resume the phase down of support in advance of the 5G Fund Phase I auction).

³⁰⁴ 47 CFR § 54.307(e)(5) (2015). We do not address former section 54.307(e)(6) because the language in that rule applies only to competitive ETCs that become eligible to receive Mobility Fund Phase II support, *id.* § 54.307(e)(6), whereas our proposal to resume the phase down of legacy support prior to the 5G Fund Phase I auction to which some commenters object pertains only to those areas that are determined to be ineligible for support. *5G Fund NPRM*, 35 FCC Rcd at 4019.

119. The assertion by CRWC that “a competitive ETC is currently entitled to receive 60 percent of its monthly baseline support amount each month until Mobility Fund Phase II is implemented” widely misses the mark.³⁰⁵ As the Commission has consistently made clear and the courts have recognized, carriers are not “entitled” to receipt of universal service funds.³⁰⁶ The statutory provision is best read as a limitation on our ability to resume the currently-paused phase down of legacy support without ensuring that recipients can avail themselves of a high-cost support mechanism to replace legacy support, and not as establishing an “entitlement” for competitive ETCs to receive mobile legacy high-cost support at 60% of the frozen support level. As an alternative to Mobility Fund Phase II, the 5G Fund, along with the transition schedule adopted herein, provides an alternate comprehensive mechanism for distributing high-cost support as provided for within our statutory authority.

120. We also disagree with CRWC’s argument that we are “barred from finding that, by adopting new rules [the Commission] will have successfully ‘implemented’” the 5G Fund, which CRWC considers to be simply a “rebranded Mobility Fund [Phase] II.”³⁰⁷ This “implementation” argument lacks merit because nothing in the express language of the statute precludes us from adopting rules for a comprehensive support mechanism that is an alternative to Mobility Fund Phase II, and in so doing, reducing the legacy support for areas that are found to be ineligible for support under this new, alternate mechanism. We also do not consider the 5G Fund simply to be Mobility Fund Phase II by another name. Rather, this Report and Order establishes an entirely new program for mobile high-cost support that builds upon lessons we have learned from our previous efforts to reform high-cost support and close the digital divide,³⁰⁸ and includes an integrated plan with performance requirements, public interest obligations, and compliance provisions for both legacy high-cost support recipients and 5G Fund support recipients to ensure the efficiency and the good stewardship of our limited universal service fund dollars.³⁰⁹

121. Even if our ability to reduce the amount of mobile legacy high-cost support that we distribute were to turn on whether we have “implemented” the 5G Fund, CRWC’s argument still fails. In finalizing the rules and determining the final map of areas eligible for 5G Fund support, we will have implemented the 5G Fund for ineligible areas because we will have “give[n] practical effect to” the new program and ensured its “actual fulfillment by concrete measures.”³¹⁰ In reading the language of the

³⁰⁵ CRWC Comments at 28. CRWC further argues that “[t]he Commission is barred from modifying, amending, or changing that entitlement by § 625 of the 2020 Appropriations Act and § 54.307(e)(5)(v) of the Rules and any attempt to do so would be *ultra vires*.” *Id.* at 29.

³⁰⁶ *USF/ICC Transformation Order*, 26 FCC Rcd at 17771, para. 293 (“Indeed, there is no statutory provision or Commission rule that provides companies with a vested right to continued receipt of support at current levels, and we are not aware of any other, independent source of law that gives particular companies an entitlement to ongoing USF support.”); *see In Re: FCC 11-161*, 753 F. 3d 1015, 1098 (10th Cir. 2014) (“Ultimately, petitioners’ arguments rest on the faulty assumption that ETC designation by a State entitles an entity to USF funding.”); *supra* note 277. We further note that the “purpose of universal service is to benefit the customer, not the carrier.” *Rural Cellular Ass’n v. FCC*, 588 F.3d 1095, 1103 (D.C. Cir. 2009) (quoting *Alenco Commc’ns, Inc. v. FCC*, 201 F.3d 608, 621 (5th Cir. 2000)).

³⁰⁷ *See* CRWC Comments at 29; AT&T Comments at 18 n.46 (“[I]t is difficult to say that the Commission has ‘implemented’ the 5G Fund when it proposes to begin phasing down support months in advance of the 5G Fund Phase I auction”).

³⁰⁸ *See generally Rural Digital Opportunity Fund Report and Order; Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 5949 (2016); *PR-USVI Fund Report and Order*, 34 FCC Rcd 9109.

³⁰⁹ *See* 47 U.S.C. § 254(c) (“Universal service is an evolving level of telecommunications services that the Commission shall establish periodically under this section, taking into account advances in telecommunications and information technologies and services.”).

³¹⁰ CRWC Comments at 29 (quoting the dictionary definition of the transitive verb “implement”).

statute and our rules, CRWC seemingly confuses the concept of adopting a support mechanism, i.e., Mobility Fund Phase II, with the concept of holding the Mobility Fund Phase II *auction*, which was included in the framework of that support mechanism and was to be the means with which we would determine the amounts of support a recipient would receive. Indeed, in 2015, when Congress originally adopted the appropriations rider, the Commission had not even adopted the use of an auction to distribute Mobility Fund Phase II support,³¹¹ something we did only in 2017.³¹² By analogy here, the fact that steps will remain after we finalize both the rules for the 5G Fund and the final list of areas that will be eligible for support in the Phase I auction is also not dispositive, and is in fact irrelevant, to a determination of when the 5G Fund is “implemented.”³¹³ While CRWC contends that the 5G Fund would not be “implemented” until the first month that a winning bidder receives 5G Fund support, it is wholly unclear why such a particular action definitively marks the implementation of the 5G Fund more plausibly than other actions, such as when the rulemaking is complete and final rules become effective, when the Phase I auction closes but before 5G Fund support is authorized, or when all winning bidders have either been authorized for 5G Fund support or defaulted.³¹⁴

122. Further, we are also not persuaded by CRWC’s argument that its reading of the verb “implement” is most consistent with section 54.307(e)(5) and (e)(6) of our rules, as in effect in 2015. Former section 54.307(e)(5) specifies the legacy support amount that a competitive ETC shall receive “[i]n the event that the implementation of Mobility Fund Phase II has not occurred by” 2014, whereas former section 54.307(e)(6) specifies the “[e]ligibility after [i]mplementation of Mobility Fund Phase II” of a competitive ETC to continue receiving legacy support after it becomes eligible to receive Mobility Fund Phase II support.³¹⁵ These rules are meant to override the general phase down schedule in section 54.307(e)(2), establishing the legacy high-cost support amounts that a competitive ETC is eligible to receive at points in time before and after future high-cost support amounts are determined via the support mechanism that replaces legacy high-cost support. In the 5G Fund, we will have determined the future high-cost support amounts for areas that are ineligible for 5G Fund (no support) after the final rules are effective and eligible areas are finalized.

123. Lastly, reading the statute and our rules in the manner that CRWC proposes, providing potentially endless entitlement to legacy high-cost support after a final conclusion that no support is warranted, would broadly conflict with our responsibility to be good stewards of universal service support and our long standing policy goal to reform our high-cost program. We do not believe Congress could reasonably have intended such a result. Indeed, this reading would provide a competitive ETC with legacy support at the same level until the close of the Phase I auction, even after we have made a final determination that the area is no longer in need of ongoing support. CRWC would have us delay reform of the legacy support program for such areas for months or even longer after finalizing the rules and procedures for the program, regardless of whether we have made a determination that the supported area is currently being served by an unsubsidized competitor and is therefore ineligible for 5G Fund support in

³¹¹ 2016 Appropriations Act, Pub. L. No. 114-113, Div. E, Tit. VI, § 631, 129 Stat. 2242, 2470 (2015).

³¹² See *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2157, para. 17.

³¹³ To the extent that the time at which we determine final eligible areas would have been earlier under the Option A approach, which appears to be of concern to CRWC, see CRWC Comments at 25-26, we note that, consistent with our decision adopting Option B, we anticipate that the final eligible areas will be determined no earlier than the time at which we finalize the Phase I auction procedures as part of our typical pre-auction process.

³¹⁴ CRWC’s reading that only when new 5G Fund support is awarded can legacy high-cost support be reduced below the 60% level would seemingly mean that if we conducted a Phase I auction and no carriers were ultimately authorized for 5G Fund support (due to, e.g., the auction failing to close, or auction defaults for failure to file a long form application) we would continue to be obligated to disburse legacy support indefinitely. Neither the Commission nor Congress would have intended such a result.

³¹⁵ 47 CFR § 54.307(e)(5), (e)(6) (2015).

the Phase I auction. Such an outcome is not in the public interest, and CRWC has identified no reasons why Congress or the Commission intended to require this outcome. We therefore conclude that there is no legal bar to commencing phase down of legacy high-cost support in areas that are ineligible for 5G Fund support as soon as those areas are finalized. This is especially true because we are proceeding with Option B, and using new, granular mobile broadband data to render such determinations. Our decision here is guided by our need to balance competing priorities when managing our universal service support programs.³¹⁶

124. *Legacy High-Cost Support Transition Schedule.* We adopt a modified version of our proposed schedule for transitioning from legacy high-cost support to 5G Fund support that will reform mobile high-cost support while minimizing the disruption to carriers currently receiving legacy support. Similar to the transition schedule we adopted for Mobility Fund Phase II, legacy high-cost support will be converted to 5G Fund support, maintained for no more than five years to preserve service, or subject to phase down over two years depending upon whether the area was eligible for 5G Fund Phase I support and if eligible for the auction, whether there was a winning bidder for the area. We do not set an absolute date on which mobile legacy high-cost support would cease, regardless of when the 5G Fund Phase I auction is conducted. For legacy high-cost support that is subject to two-year phase down, support will be provided at two-thirds of the level of the disaggregated legacy support for the first 12 months, and one-third of the level of the disaggregated legacy support for the next 12 months. We will exempt competitive ETCs from 5G deployment public interest obligations and performance requirements for any areas where legacy support is being phased down, including the requirement that support recipients spend an increasing percentage of support on 5G services and that recipients demonstrate compliance through the submission of on-the-ground measurement tests.³¹⁷ All legacy high-cost support received by a competitive ETC in areas subject to phase down will end no later than two years after announcement of the conclusion of the auction. With the exception of the timing of the phase down of legacy support in ineligible areas previously discussed or our proposal to cease all support after five years discussed below, commenters generally did not object to our general transition schedule, including our proposals to phase down support over two years or to continue legacy support for up to five years to preserve service.³¹⁸

125. Under the transition schedule we adopt, in areas determined not to be eligible for 5G Fund Phase I support, legacy support will be phased down starting the first day of the month after the release of the final map of areas eligible for 5G Fund support. Because we expect that carriers will not require support in order to deploy 5G service in areas ineligible for 5G Fund support, and legacy support recipients will not be able to win 5G Fund support in the 5G Fund Phase I auction for those areas, we conclude that it is not in the public interest to continue legacy support for ineligible areas.³¹⁹ We will

³¹⁶ *In Re: FCC 11-161*, 753 F. 3d 1015, 1143 (10th Cir. 2014) (holding that “the FCC has broad discretion to balance competing policy goals” in funding universal service).

³¹⁷ *5G Fund NPRM*, 35 FCC Red at 4023, para. 87. We will continue to require that competitive ETCs meet public interest obligations relating to offering service at reasonably comparable rates, collocation and voice and data roaming requirements, and reporting requirements for subsidized service areas where legacy support is being phased down, however. Once legacy support has been completely phased down for a service area, the competitive ETC will no longer need to meet any public interest obligations for such an area. *Id.* at 4023, para. 87 n.124.

³¹⁸ *See, e.g.*, AT&T Comments at 14 (generally supporting the transition schedule adopted in Mobility Fund Phase II and suggesting that the Commission should follow that schedule for the 5G Fund). *But see* RWA Oct. 20 *Ex Parte* Letter at 2, 5 (suggesting that the Commission should allow for legacy high-cost support to continue for up to 10 years in eligible areas not won in a 5G Fund auction).

³¹⁹ *5G Fund NPRM*, 35 FCC Red at 4019, para. 75. As previously discussed, we will exempt areas determined to be ineligible for support from the 5G broadband public interest obligations and performance requirements we adopt for legacy high-cost support recipients. However, legacy support recipients will continue to have a public interest obligation to file annual reports, offer services at reasonably comparable rates, and allow for reasonable collocation and voice and data roaming for areas ineligible for support until support is fully phased down and they cease to receive legacy high-cost support for such areas.

commence the phase down of support in ineligible areas after release of the final map of eligible areas and prior to the conclusion of the Phase I auction. While CRWC asserts that it would be “arbitrary” to adopt the phase down of support in ineligible areas prior to the close of the 5G Fund Phase I auction because carriers’ support funds have already been committed through 2020 and 2021,³²⁰ in view of our decision to base the areas eligible for Phase I support on a new collection of coverage data, we now anticipate that it may be a year or more before this phase down would commence. Competitive ETCs that receive legacy high-cost support should therefore be able to factor into their capital expenditure plans that the amount of support they receive may be reduced in areas also served by an unsubsidized competitor in the near future.

126. However, we decline to adopt our proposal to end all legacy high-cost support to mobile carriers at the frozen high-cost support level no later than five years after the effective date of this Order, regardless of when the 5G Fund Phase I auction is conducted.³²¹ No commenters support this proposal,³²² and we agree that providing more certainty to legacy support recipients will promote expansive 5G deployment in these otherwise high-cost areas. Instead, for areas that are eligible for 5G Fund Phase I support, on the first day of the month following the release of a public notice announcing the close of the 5G Fund Phase I auction, legacy support for current recipients will either be maintained, pending authorization of the winning bidder to receive 5G Fund support,³²³ maintained in order to preserve service in areas without a winning bidder in the Phase I auction, or subject to phase down for all other legacy support recipients. That is, for eligible areas not won in the 5G Fund Phase I auction, legacy support will begin to phase down over two years or be maintained in order to preserve service for no more than five years after the Phase I auction closes regardless of whether the eligible area may be won in the 5G Fund Phase II auction.

127. In eligible areas won in the 5G Fund Phase II auction, legacy support (whether subject to phase down or preservation-of-service support) will either be maintained, pending authorization of the winning bidder to receive 5G Fund support,³²⁴ maintained in order to preserve service for the legacy support recipient receiving preservation-of-service support in areas without a winning bidder, or be subject to phase down beginning the first day of the month following release of a public notice

³²⁰ CRWC Comments at 30-32. Much of this argument is seemingly premised on our adoption of Option A. *See id.* at 31 (“Notifying legacy carriers that their support will be cut on perhaps less than six months’ notice contravenes the Commission’s policy of avoiding flash cuts for carriers using legacy support to operate and maintain networks.”).

³²¹ *5G Fund NPRM*, 35 FCC Red at 4019, para. 74.

³²² AT&T Comments at 18-19.

³²³ A legacy support recipient that wins support during the 5G Fund Phase I auction for its subsidized service area will continue to receive legacy high-cost support until such time as it is authorized to receive 5G Fund Phase I support (or, in the alternative, defaults on its bid or is otherwise denied authorization). For such a recipient, the amount of 5G Fund support (or phase down support, for a carrier that is ultimately not authorized) will be proportionally decreased to account for the amount of support disbursed from the date of release of the public notice announcing the close of the auction until the date that a determination is made whether or not to authorize the recipient to receive 5G Fund Phase I support.

³²⁴ Similar to Phase I, a legacy support recipient that wins support in the 5G Fund Phase II auction for its subsidized service area will continue to receive the amount of support it received under the transition schedule in effect at the time the Phase II auction closed until such time as it is authorized for 5G Fund Phase II support (or, in the alternative, defaults on its bid or is otherwise denied authorization). Once a determination is made whether to authorize the carrier for 5G Fund support, we will proportionally decrease for such a recipient the amount of 5G Fund support (or phase down support, for a carrier that is ultimately not authorized) to account for the amount of support disbursed from the date of the public notice announcing the auction close until the date that a determination is made whether to authorize the recipient to receive 5G Fund Phase II support.

announcing the close of the 5G Fund Phase II auction.³²⁵ If the carrier receiving maintenance of support in order to preserve service is not the winning bidder for an eligible area won during the 5G Fund Phase II auction, that carrier would begin to receive phased down support at this time.³²⁶

128. More specifically, we adopt our proposal that for a winning bidder that is receiving legacy support in the area of its bid, legacy support will cease and 5G Fund support will commence on the first day of the month following release of a public notice authorizing that carrier to receive 5G Fund support.³²⁷ If the winning bidder defaults on its bid prior to authorization, or otherwise fails to be authorized, we will not award 5G Fund support for that area. However, to avoid perverse incentives, consistent with our decision to maintain support to preserve service only in areas that lack a winning bid, a carrier receiving legacy support in the area of its winning bid will not receive preservation-of-service support and will instead be subject to phase down if not authorized to receive 5G Fund support.

129. In eligible areas where there is no winning bidder in the 5G Fund Phase I auction, the legacy support recipient receiving the minimum level of sustainable support will continue to receive support until further Commission action, but for no more than five years after the first day of the month following the release of a public notice announcing the close of the 5G Fund Phase I auction. We adopt our proposal to define the minimum level of sustainable support to be the lowest amount of legacy support among carriers that have deployed the highest level of mobile technology within the state.³²⁸ In eligible areas where there is no winning bidder in the 5G Fund Phase II auction, the legacy support recipient receiving the minimum level of sustainable support would continue to receive such “preservation-of-service” support until further Commission action, but for no more than five years after the first day of the month following the release of a public notice announcing the close of the 5G Fund Phase I auction.

³²⁵ Legacy high-cost support subject to phase down after the 5G Fund Phase I auction will continue to follow the original phase down schedule that commenced after the close of the 5G Fund Phase I auction for support recipients that were not the winning bidder in eligible areas won during the 5G Fund Phase II auction.

³²⁶ Legacy high-cost support maintained to preserve service after the 5G Fund Phase I auction will continue for eligible areas not won during the 5G Fund Phase II auction, but for no more than five years after the close of the Phase I auction.

³²⁷ *5G Fund NPRM*, 35 FCC Red at 4020, para. 77.

³²⁸ More specifically, for portions of a legacy support recipient’s subsidized service area that are eligible for 5G Fund support but for which there is no winner in a 5G Fund auction, the carrier will continue to receive legacy support in areas that do not overlap another legacy support recipient’s subsidized service area. In those portions where more than one carrier receives legacy support (i.e., overlapping subsidized service areas), the recipient that receives the lowest amount of disaggregated legacy support for that area among the carriers that have reported deployment of the highest level of technology—e.g., 5G—in the state will continue to receive legacy support for the overlapping area while all other recipients will receive phase down support, based upon the recipients’ submitted mobile broadband coverage data. In the case of ties where two carriers receive an identical amount of legacy support, we adopt our proposal to choose the preservation-of-service support recipient that has subsidized service areas covering a larger total area within the state.

130. The following chart summarizes the schedule we adopt to transition from legacy support to 5G Fund support for areas in the 5G Fund Phase I auction:

Transition Schedule for Legacy High-Cost Support to 5G Fund Support

| Area Eligibility | Auction Result | Bidder or Recipient Status | Support Type & Timing ³²⁹ |
|------------------|--------------------|--|--|
| Ineligible | | | 2-year phase down commences after effective date of rules and release of final eligible areas |
| Eligible | Won in auction | Carrier is the winning bidder and is a legacy support recipient for the area it won | Legacy support ceases and 5G Fund support commences after auction closes and bidder is authorized for area |
| Eligible | Won in auction | Carrier is a legacy support recipient but is not the winning bidder in the area for which it receives support | 2-year phase down of legacy support commences after auction closes |
| Eligible | Not won in auction | Carrier is a legacy support recipient but does not receive the minimum level of sustainable support for the area for which it receives support | 2-year phase down of legacy support commences after auction closes |
| Eligible | Not won in auction | Carrier is a legacy support recipient and receives the minimum level of sustainable support for the area for which it receives support | Legacy support continues for no more than 5 years after auction close |

G. Additional 5G Fund Support Requirements

1. Reporting Requirements

131. Consistent with the requirements adopted for CAF Phase II and the Rural Digital Opportunity Fund, we will require that a 5G Fund support recipient file annual reports certifying its compliance with the public interest obligations, performance requirements, and any other terms and conditions associated with receipt of 5G Fund support, and file interim and final service deployment milestone reports demonstrating that it has met the 5G Fund performance requirements for deployment of service.³³⁰

132. *Annual Reports.* We adopt our proposal to require that each 5G Fund support recipient file an annual report by July 1 of each year after the year in which it was authorized to receive 5G Fund support.³³¹ We will require a support recipient's annual report to cover the preceding calendar year and will require the support recipient to certify that it has complied with the public interest obligations, performance requirements, and any other terms and conditions associated with receipt of 5G Fund support in order to continue receiving 5G Fund disbursements.³³² The annual report must be filed with USAC via

³²⁹ Consistent with the existing high-cost disbursement schedule, all legacy support transition schedule timing will be aligned to the first day of the month following a triggering action.

³³⁰ See § 54.316(b)(4), (b)(5); *5G Fund NPRM*, 35 FCC Rcd at 4030, 4031, paras. 106, 108. We also adopt a rule that would require a support recipient authorized to receive 5G Fund support and its agents to retain any documentation prepared for, or in connection with, the award of the 5G Fund support for a period of not less than 10 years after the date on which the support recipient receives its final disbursement of 5G Fund support. *5G Fund NPRM*, 35 FCC Rcd at 4030, para. 106 n.153.

³³¹ *5G Fund NPRM*, 35 FCC Rcd at 4030, para. 107.

³³² *Id.* at 4030, para. 107; see *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 713, para. 57; see also *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2226, paras. 196-97. As each annual report covers the preceding calendar year, no report would be due in the year in which the auction is held.

a web portal, and USAC will make all such data available to the Commission and the relevant state, territory, and Tribal governmental entities, as applicable.³³³ A 5G Fund support recipient must maintain the accuracy and completeness of the information provided its annual reports. Any substantial change in the accuracy or completeness of any annual report submitted by a 5G Fund support recipient must be reported within 10 business days after the reportable event occurs. We retain our authority to look behind recipients' annual reports and to take action to address any violations.³³⁴ Other than AST&Science's general agreement that the proposals for annual reports and interim and final milestone reports are consistent with the Commission's obligation to assure that fund recipients are meeting their public interest obligations,³³⁵ we received no comment on our annual reporting proposals, and we direct the Office and Bureau to develop further specifics of reporting instructions in the pre-auction process.

133. *Service Milestone Reports.* We adopt the *5G Fund NPRM's* proposal that 5G Fund support recipients must submit interim and final service milestone reports,³³⁶ but in an effort to reduce data collection burdens and streamline reporting for Universal Service Fund participants, we do not adopt the *5G Fund NPRM's* proposals regarding specific data to be collected in these reports, choosing instead to rely on the data reporting as developed further in the Digital Opportunity Data Collection proceeding that is considering more broadly applicable standards.³³⁷ The service milestone reports would include certifications as to compliance with the interim and final service milestones and the performance requirements for the 5G Fund, as substantiated by the timely submission of milestone 5G coverage maps in the Digital Opportunity Data Collection, or if the Digital Opportunity Data Collection is not yet operational at the time 5G Fund reports are due, by the timely submission of its 5G coverage maps (generated consistent with the propagation modeling parameters adopted in the Digital Opportunity Data Collection proceeding) through the existing FCC Form 477 system.

134. The New York Public Service Commission supports the proposal to establish interim and final service milestones "to ensure 5G Fund support recipients meet their public interest obligations."³³⁸ We adopt interim and final service milestone reporting requirements to ensure that support recipients continually document their progress toward meeting their meeting 5G Fund public interest obligations and performance requirements, as a mechanism to reveal and remedy non-compliance. We will also require that each 5G Fund support recipient provide infrastructure information on the cell sites that the carrier uses to provide mobile service within the areas for which it is authorized to receive 5G Fund support in a standardized template as part of its interim and final milestone reports,³³⁹ as suggested by the Massachusetts Department of Telecommunications and Cable.³⁴⁰ We recognize that carriers may consider

³³³ *5G Fund NPRM*, 35 FCC Rcd at 4030, para. 107.

³³⁴ *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2189, para. 87.

³³⁵ AST&Science Comments at 31.

³³⁶ *5G Fund NPRM*, 35 FCC Rcd at 4030, 4031, paras. 106, 108.

³³⁷ *Digital Opportunity Data Collection Order and Further Notice*, 34 FCC Rcd at 7552-57, paras. 121-30; *see generally Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd 7460.

³³⁸ New York Public Service Commission Comments at 4-5.

³³⁹ We note that we are currently considering whether to require from all mobile service providers the submission of infrastructure information more generally across providers' networks. *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7502-03, paras. 100-02. Our decision to adopt a requirement that 5G Fund support recipients provide infrastructure information for areas in which the carrier is authorized to receive 5G Fund support is without prejudice to the matter of whether to adopt a similar requirement in the Digital Opportunity Data Collection proceeding.

³⁴⁰ Massachusetts Department of Telecommunications and Cable Comments at 12-13.

infrastructure information to be sensitive,³⁴¹ and so we will treat such data submitted as part of the initial report as presumptively confidential.³⁴²

135. While we adopt our proposal from the *5G Fund NPRM* that these reports will be submitted to USAC, as adopted for CAF Phase II and the Rural Digital Opportunity Fund,³⁴³ we clarify that we will share the relevant coverage data submitted via the Digital Opportunity Data Collection portal to which 5G Fund support recipients certify with USAC for the purposes of verifying these reports. USAC personnel would be responsible for verifying submitted data to determine compliance with 5G Fund requirements.

136. We adopt our proposal to require a support recipient to file interim and final service deployment milestone reports by March 1 of the calendar year following each applicable December 31 milestone deadline.³⁴⁴ Failing to timely submit a service milestone report that includes the required certification concerning performance and coverage requirements by the established deadline would subject support recipients to defined consequences (as specified in the non-compliance requirements below).³⁴⁵ We also adopt the proposal that standards for related data submissions align with those adopted for the Digital Opportunity Data Collection, as modified below.³⁴⁶

2. Demonstrating Compliance with Performance Requirements

137. We adopt a modified version of our proposals regarding the 5G Fund support recipients' demonstration of compliance with performance requirements. We will not require customized propagation modeling and mapping data, as we proposed in the *5G Fund NPRM*,³⁴⁷ but instead will require 5G Fund support recipients to certify at the established interim and final milestones to filing, in the Digital Opportunity Data Collection portal, 5G mobile broadband coverage data reflecting deployments in the eligible areas for which they are authorized to receive 5G Fund support.³⁴⁸ We will

³⁴¹ See *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7502, para. 101 (recognizing “that the collection of infrastructure data could raise commercial sensitivity and national security concerns”).

³⁴² See 47 CFR §§ 0.457(d), 0.459(a)(4). While we and USAC will treat as presumptively confidential and withhold from public inspection infrastructure information submitted as part of this report, USAC will provide these data to the Commission and the relevant state, territory, and Tribal governmental entities, as applicable, that have jurisdiction over a particular service area.

³⁴³ See *CAF Phase II Auction Order*, 31 FCC Rcd at 6011, para. 173; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 712, para. 56.

³⁴⁴ *5G Fund NPRM*, 35 FCC Rcd at 4032, para. 110; see *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 712-13, paras. 56-57; see, e.g., *T-Mobile-Sprint Order*, 34 FCC Rcd at 10589, para. 26 (noting commitments regarding coverage expectations looking ahead three and six years subsequent to consummation of the transaction).

³⁴⁵ See *infra* Section III.G.3.

³⁴⁶ *5G Fund NPRM*, 35 FCC Rcd at 4034, para. 115.

³⁴⁷ *Id.* at 4032-34, paras. 111-14. In addition to proposing to require submission of milestone 5G coverage maps generated using standardized propagation modeling parameters, we also proposed to require these maps be supplemented with on-the-ground measurement testing with at least three tests conducted per square kilometer (measured by overlaying a 1x1 sq. km grid on the submitted coverage maps) with each test recording, at least, the download/upload speed, signal strength, latency, and packet loss measurements. *Id.* at 4033, para. 113. The *5G Fund NPRM* proposed to require 90% of tests conducted at the cell edge record download/upload speeds of at least 7/1 Mbps, and that the median reported download/upload speeds be at least 35/3 Mbps for the area where the submitted maps show such service. *Id.* Additionally, we proposed in the *5G Fund NPRM* to require that at least 96% of speed tests in the cumulative speed test data submitted for each buildout milestone have data latency of 100 milliseconds or less. *Id.*

³⁴⁸ *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7474, 7477-78, 7479-80, paras. 33, 40, 45 (adopting a requirement similar to that proposed in the *5G Fund NPRM* for the submission of

(continued....)

also require that 5G Fund support recipients conduct on-the-ground measurement tests to substantiate 5G broadband coverage data, and adopt a modified version of the methodologies and requirements proposed in the *5G Fund NPRM* for conducting and validating results of such testing.³⁴⁹ We will defer to the pre-auction process, however, the adoption of additional requirements and parameters for on-the-ground measurement tests.

138. We decide neither to specify distinct 5G Fund requirements for propagation modeling nor to require the separate submission of coverage data because the requirements adopted for the filing of 5G coverage maps in the Digital Opportunity Data Collection proceeding mirror the propagation model parameters specified for 5G deployment maps proposed in the *5G Fund NPRM*.³⁵⁰ Therefore, requiring that 5G Fund support recipients verify to the submission of coverage data in their Digital Opportunity Data Collection filings will provide us with the same information while reducing the burden of potentially duplicated or conflicting requirements, as suggested by some commenters,³⁵¹ without undermining the public interest obligations and performance requirements we adopt here.

139. We will require 5G Fund support recipients to substantiate reported 5G deployment with on-the-ground measurement tests submitted at interim and final milestones, as proposed. Rather than adopt customized 5G Fund testing requirements at this time, we adopt as a starting point test metrics, data specifications, and permitted testing applications at least as stringent as those already adopted or that may be adopted for the governmental and third party challenges in the Digital Opportunity Data Collection

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mobile coverage maps depicting 5G-NR service, both modeled using a 50% cell loading factor, and 100 meter or better spatial resolution, that depict a cell edge minimum speed of 7/1 Mbps with 90% probability, and a median speed of 35/3 Mbps). The Vermont Department of Public Services supports aligning the 5G Fund validation process with that adopted for the Digital Opportunity Data Collection, noting that doing so will provide uniformity. Vermont Department of Public Services Reply Comments at 3.

³⁴⁹ *5G Fund NPRM*, 35 FCC Rcd at 4033, paras. 113-14. The methodologies we adopt for conducting on-the-ground tests and validating test results are intended to be broadly consistent with the framework we proposed for the submission of governmental and third-party challenges in the Digital Opportunity Data Collection. *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7518, para. 152.

³⁵⁰ *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7474, 7477-78, 7479-80, paras. 33, 40, 45 (adopting a requirement for the submission of mobile coverage maps depicting 5G-NR service, both modeled using a 90% cell edge probability, 50% cell loading factor, and 100 meter or better spatial resolution, that depict cell edge minimum speed thresholds of 7/1 Mbps and 35/3 Mbps). In the *5G Fund NPRM*, we sought comment on whether we should standardize the network performance testing and coverage mapping methodologies used by 5G Fund recipients to report on their compliance service milestones. *5G Fund NPRM*, 35 FCC Rcd at 4033, para. 112. As a general matter, we have taken steps to achieve standardization in testing, mapping, and reporting of mobile broadband deployment. In our decision to conditionally approve the transaction between T-Mobile and Sprint, we made clear that the approval of the transaction would be conditioned on the network buildout commitments of the licensees to provide 5G service to a large portion of the U.S. population, including rural areas, and these commitments include the submission of drive test results and coverage maps to the Commission at three- and six-year milestones. *T-Mobile-Sprint Order*, 34 FCC Rcd 10812, Appx. G (“Within 9 months following each of the third and sixth annual anniversaries of the closing date of the T-Mobile/Sprint merger, T-Mobile will submit to the Wireless Telecommunications Bureau a report that will include: 1. drive test results; 2. polygon shapefiles showing T-Mobile’s Low-band 5G Coverage Area and Mid-band 5G Coverage Area as of the 3-year or 6-year date (whichever is applicable); 3. a statement quantifying the U.S. Population and Rural Population covered by each of the Low-band 5G Coverage Area and Mid-band 5G Coverage Area as of the 3-year or 6-year date (whichever is applicable) . . .”).

³⁵¹ See AT&T Comments at 6; CTIA Comments at 6-7 (suggesting that “the Commission should ensure that these requirements align with similar and related requirements that the Commission seeks to adopt in the [Digital Opportunity Data Collection] proceeding related to verification and a challenge process”) (internal citations omitted).

proceeding.³⁵² Such requirements will serve as a minimum for the on-the-ground tests that we require for the 5G Fund, and we defer to the pre-auction process specifying any additional parameters, to allow for similar matters to be resolved in the Digital Opportunity Data Collection proceeding.³⁵³ However, because we have a heightened obligation to ensure the prudent use of universal service support, we note that we may go further than the requirements adopted in the Digital Opportunity Data Collection proceeding, or otherwise adopt more stringent requirements during the pre-auction process.

140. As for the methodologies for conducting on-the-ground tests and validating test results, we adopt the *5G Fund NPRM*'s proposals with certain modifications that will reduce the burden on 5G Fund support recipients.³⁵⁴ Specifically, we will require that 5G Fund support recipients submit on-the-ground measurement tests with at least three tests conducted per square-kilometer, measured by overlaying a uniform grid of one square kilometer (1 km by 1 km) on recipients' submitted 5G coverage maps within the area for which 5G Fund support was awarded, as we proposed, but only for a subset of grid cells.³⁵⁵ In response to concerns about the burdens of on-the-ground testing,³⁵⁶ we will require only that a support recipient conduct such tests in a percentage of all drive-testable grid cells where the recipient reports deployment of 5G by the service milestone.³⁵⁷ Additionally, we will require that the minimum percentage of drive-testable grid cells tested equal the minimum percentage of coverage required for each service buildout milestone (i.e., 40%, 60%, 80%, 85%).³⁵⁸ To avoid duplicative testing, we will only require such testing in grid cells that report new 5G deployment for each milestone, so that previously reported testing will be cumulative.

141. Finally, we adopt a methodology to validate results of on-the-ground testing based on the *5G Fund NPRM*'s proposed approach. To broadly align with the specifications for generating 5G mobile broadband coverage maps,³⁵⁹ we will require that cumulative test data results show at least 90% of

³⁵² See *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7504-05, 7515-16, 7517-21, paras. 105-08, 142-44, 149-64.

³⁵³ Cf. *5G Fund NPRM*, 35 FCC Rcd at 4035, para. 118.

³⁵⁴ *5G Fund NPRM*, 35 FCC Rcd at 4033, paras. 113-14. We note that the methodology adopted herein for conducting on-the-ground testing may not be identical to that adopted for the purposes of ensuring that T-Mobile meets its transaction commitments. *T-Mobile-Sprint Order*, 34 FCC Rcd 10801-28, Appx. G. We note that 5G Fund support recipients must validate geographically based 5G deployment, whereas T-Mobile's commitments are population-based, and other obligations such as data speed requirements also differ between T-Mobile's commitments and requirements for 5G Fund support recipients. Similarly, this methodology may also not be identical to that used to determine whether DISH has met its commitments as set forth in the Order of Modification and Extension of Time to Construct. *Applications of American H Block Wireless L.L.C., DBSD Corporation, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. for Extension of Time*, ULS File Nos. 0008741236, 0008741420, 0008741603, and 0008741789 et al, Order of Modification and Extension of Time to Construct, DA 20-1072 (WTB Sept. 11, 2020) (*DISH Order of Modification*).

³⁵⁵ *5G Fund NPRM*, 35 FCC Rcd at 4033, para. 113.

³⁵⁶ See, e.g., AT&T Comments at 6-7; CTIA Comments at 8; Verizon Comments at 14.

³⁵⁷ We will define as drive-testable any grid cell that has more than a *de minimis* amount of total roads, based upon the most recent roadway data from the U.S. Census Bureau available for this purpose, considering roads classified in the primary road (S1100), secondary road (S1200), local road (S1400), and service drive (S1640) categories. We defer to the pre-auction process establishing the *de minimis* road threshold for what is considered a drive-testable grid cell.

³⁵⁸ When verifying that the minimum number of grid cells have been tested, we will compare against the in-vehicle 5G broadband coverage maps modeled to a 7/1 Mbps minimum cell edge speed submitted by 5G Fund support recipients in the Digital Opportunity Data Collection portal. See *Digital Opportunity Data Collection Second Order and Further Notice*, 35 FCC Rcd at 7481-82, para. 48.

³⁵⁹ *Id.* at 7474, 7477-78, 7479-80, paras. 33, 40, 45.

measurements report 5G service record download and upload speeds of at least 7/1 Mbps, and record median download and upload speeds of at least 35/3 Mbps.³⁶⁰ Additionally, to avoid confusion and simplify alignment of requirements, we will reduce our proposed requirement that 96% of latency tests show data latency of 100 milliseconds or less, and will instead require that cumulative test data results show at least 90% of tests record data latency of 100 milliseconds or less at the cell edge.³⁶¹ This modification will simplify testing requirements and reduce the burden on carriers by aligning the probability of meeting the cell edge latency requirement value (of 100 milliseconds or less) with the probability of meeting the cell edge speed requirement value (of 7/1 Mbps or greater).³⁶²

142. The Vermont Department of Public Services generally supports on-the-ground testing, arguing it provides the most accurate information regarding availability of broadband, and would serve as a check on what is reported based on propagation modeling alone.³⁶³ We agree, and believe that requiring on-the-ground measurement testing will help ensure that 5G Fund support recipients are actually providing the level of service necessary to help close the digital divide. CTIA supports aligning the 5G Fund demonstrations of compliance and testing with the Digital Opportunity Data Collection proceeding and the Broadband DATA Act, noting that doing so will promote consistent information about mobile coverage, avoid confusion, and prevent wasted resources.³⁶⁴ AT&T urges the Commission not to adopt the *5G Fund NPRM*'s proposed Mobility Fund Phase II challenge process-like approach to demonstrating compliance with on-the-ground measurement testing and to allow the Digital Opportunity Data Collection process to be completed before establishing milestone mapping and speed test requirements for the 5G Fund so we can look at lessons learned from that proceeding in designing its validation methodology, but supports the proposal to require median speeds of 35/3 Mbps with a 7/1 Mbps cell edge as reasonable.³⁶⁵ AT&T specifically objects to any requirement that every kilometer in an eligible area be tested.³⁶⁶ Verizon emphasizes that all definitions and specifications of testing must be clear across propagation mapping and speed testing.³⁶⁷

143. We agree with CTIA and AT&T that we should generally align the framework for 5G Fund support recipients to demonstrate compliance with public interest obligations and performance requirements with the Digital Opportunity Data Collection to the extent appropriate, and have taken steps to do just that. We also acknowledge the concerns raised by AT&T and have modified the requirements and methodologies proposed in the *5G Fund NPRM* to reduce the amount of area that must be tested, learning from the experience of the Mobility Fund Phase II challenge process. RWA, CTIA, and the CRWC advocate for changes to the proposed on-the-ground testing methodology, or to avoid an on-the-ground testing requirement altogether, with more focus on sampling or propagation maps.³⁶⁸ CCA encourages the Commission to consider alternatives and grant waivers as necessary for the most rural and difficult to test areas.³⁶⁹ While we recognize that there is a cost to requiring 5G Fund support recipients to

³⁶⁰ *Id.* at 4033, para. 113.

³⁶¹ *See id.* at 4035, para. 117.

³⁶² *Id.*

³⁶³ Vermont Department of Public Services Reply Comments at 3.

³⁶⁴ CTIA Comments at 6-7.

³⁶⁵ AT&T Comments at 6-7.

³⁶⁶ *Id.* at 8.

³⁶⁷ Verizon Comments at 16.

³⁶⁸ *See* RWA Comments at 16; RWA Reply Comments at 13 (opposing on-the-ground testing altogether in favor of propagation mapping); CTIA Comments at 7-8; CRWC Comments at 41 (advocating for sampling in accessible areas).

³⁶⁹ CCA Comments at 16.

conduct on-the-ground measurement tests, we conclude that the burden of conducting such tests is justified by our obligation to responsibly manage ratepayer funds. Moreover, bidders in a 5G Fund auction will be able to factor in the expected costs of complying with these requirements when bidding in an auction.

144. The California Public Utilities Commission urges the Commission to require 5G Fund recipients to demonstrate milestone compliance with drive test data, until and unless recipients demonstrate that such test results validate the accuracy of propagation modeling and maps predicting coverage based on on-the-move radio frequency sampling.³⁷⁰ The California Public Utilities Commission notes that “drive tests” often includes two types of testing—tests taken from a moving vehicle and stationary tests taken at specific designated points—and that drive tests should be designed to capture the service parameters likely to be experienced by consumers and thus should be conducted using stationary testing, rather than testing from moving vehicles, because stationary testing will most accurately capture this user experience.³⁷¹ The Institute for the Wireless Internet of Things at Northeastern University advocates for site surveying through unmanned aerial systems, with methodology hardened by experimentation at the AERPAW PAWR platform³⁷² or other test environments where controlled flights are permitted, and for realistic, at-scale validation and testing using the world’s largest radiofrequency emulation platform—Colosseum.³⁷³

145. In light of comments suggesting that we harmonize requirements in the 5G Fund with the Digital Opportunity Data Collection proceeding, we decline to adopt these alternative methods of demonstrating coverage. Our decision to align the test metrics, data specifications, and permitted testing applications as part of the 5G Fund’s reporting requirements with those already adopted or that may be adopted for the Digital Opportunity Data Collection moots many of the issues raised in these comments. We anticipate that standardizing the data required for compliance reporting will ease the burden on support recipients throughout universal service programs, while collecting sufficient data to confirm that the 5G Fund’s requirements have been met.

146. We disagree with the assertion that propagation modeling alone, in the absence of on-the-ground measurements to substantiate predicted coverage, is sufficient for 5G Fund support recipients, and note that our obligation to be good stewards of limited ratepayer funds weighs on our conclusion to also require on-the-ground tests. To the extent that commenters raise concerns about the burden of requiring such on-the-ground tests, we conclude that by relaxing the requirement to conduct a test in every grid cell, we have substantially reduced the burden of demonstrating compliance with 5G Fund public interest obligations and performance requirements. Moreover, we believe that bidders in a 5G Fund auction will adequately take into account the expected costs of demonstrating compliance when placing their bids, and that such costs would be less than the cost to the fund, in the absence of any on-the-ground testing requirement, of providing support to carriers that have not fully met their obligations. We defer to the pre-auction process specifying any further speed test parameters.

³⁷⁰ California Public Utilities Commission Comments at 7-8.

³⁷¹ *Id.* at 8.

³⁷² AERPAW is the Aerial Experimentation and Research Platform for Advanced Wireless (aerpaw.org), and PAWR is Platforms for Advanced Wireless Research, a \$100 million program jointly funded by the U.S. National Science Foundation and an industry consortium of 34 companies spanning wireless infrastructure, software stack, test and measurement, services, device technology and telecommunication operations. (Institute for the Wireless Internet of Things at Northeastern University Comments at 1, 8, n.13. We anticipate that the possible use of Unmanned Aircraft Systems for mobile coverage testing will be addressed subsequently along with other testing metrics and specifications.

³⁷³ Institute for the Wireless Internet of Things at Northeastern University Comments at 2-3.

3. Non-Compliance Measures

147. We adopt post-authorization non-compliance measures for the 5G Fund that are similar to the non-compliance measures and framework for support reductions applicable to all high-cost ETCs and the process adopted by the Commission for drawing on letters of credit for CAF Phase II and Rural Digital Opportunity Fund support recipients to address a support recipient's failure to meet a service milestone.³⁷⁴ We will require any support recipient to notify the Commission, USAC, and the relevant state, U.S. Territory, or Tribal government, if applicable, within 10 business days of its non-compliance with any interim milestone.³⁷⁵ Upon such notification, the Bureau will issue a letter evidencing the default, and the issuance of this letter will initiate reporting obligations and withholding a percentage of the 5G Fund support recipient's total monthly 5G Fund support, if applicable, starting the month after issuance of the letter.³⁷⁶ We will rely on the following non-compliance tiers for failure to meet the 5G Fund performance requirements as of the deadline for each interim service milestone:³⁷⁷

³⁷⁴ *5G Fund NPRM*, 35 FCC Rcd at 4057-60, 4086-89, paras. 194-97, Appx. A, Proposed Rules, Sec. 54.1020; *see* 47 CFR § 54.320(d)(1)(i)-(iv), (d)(2); *December 2014 Connect America Order*, 29 FCC Rcd at 15695-98, paras. 147-50; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 713-16, paras. 58-64. We received no comments on our proposed non-compliance measures.

³⁷⁵ *5G Fund NPRM*, 35 FCC Rcd at 4086, Appx. A, Proposed Rules, Sec. 54.1020(b); *see* 47 CFR § 54.320(d).

³⁷⁶ *5G Fund NPRM*, 35 FCC Rcd at 4086, Appx. A, Proposed Rules, Sec. 54.1020(b); *see* 47 CFR § 54.320(d)(1).

³⁷⁷ *5G Fund NPRM*, 35 FCC Rcd at 4086, Appx. A, Proposed Rules, Sec. 54.1020(b)(1)-(4); *see* 47 CFR § 54.320(d)(1)(i)-(iv).

Non-Compliance Framework

| Compliance Gap ³⁷⁸ | Non-Compliance Measure |
|--|--|
| Tier 1: 5% to less than 15% required square kilometers coverage ³⁷⁹ | Quarterly reporting |
| Tier 2: 15% to less than 25% required square kilometers coverage | Quarterly reporting + withhold 15% of monthly support |
| Tier 3: 25% to less than 50% required square kilometers coverage | Quarterly reporting + withhold 25% of monthly support |
| Tier 4: 50% or more required square kilometers coverage | Quarterly reporting + withhold 50% of monthly support for six months; after six months withhold 100% of monthly support and recover percentage of support equal to compliance gap plus 10% of support disbursed to date ³⁸⁰ |

A 5G Fund support recipient will have the opportunity to move tiers as it comes into compliance and will receive any support that has been withheld if it moves from one of the higher tiers (i.e., Tiers 2-4) to Tier 1 status (or comes into full compliance) during the service milestones.³⁸¹

148. We separately require a support recipient that has not deployed service that meets the performance requirements adopted for the 5G Fund to at least 20% of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state by the Year Three Interim Service Milestone deadline to notify the Commission and USAC within 10 business days of its non-compliance.³⁸² Upon such notification, the Bureau will issue a letter evidencing the default, and the support recipient will be subject to full support recovery and will not be permitted to avail itself of the opportunity provided by the non-compliance tier framework to come into greater or full compliance.³⁸³

149. We will require any support recipient to notify the Commission, USAC, and the relevant state, U.S. Territory, or Tribal government, if applicable, within 10 business days of its non-compliance

³⁷⁸ A compliance gap is the percentage of required square kilometers that a recipient has not served by the relevant service milestone. For example, assume that in one state, a 5G Fund support recipient won 1,000 square kilometers of eligible area. The recipient would be required to serve 40% of those square kilometers by the end of the third full calendar year following support authorization (i.e., 400 square kilometers). If at the Year Three Service Milestone deadline the recipient has only built out to 360 square kilometers, it would be in Tier 1 status (a compliance gap of 10%: 400 minus 360 = 40, 40 is 10% of 400).

³⁷⁹ In the CAF Phase II auction, the Commission did not impose reporting obligations if a support recipient missed an interim milestone by less than 5% of the required coverage for that interim milestone, but reserved the right to impose quarterly reporting in individual instances if the support recipient shows no progress in addressing the shortfall by the fifth year of support. *December 2014 Connect America Order*, 29 FCC Rcd at 15695, para. 147 & n.323; see *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 713-14, para. 58; 47 CFR § 54.320(d)(1)(i)-(iv), 54.806. We make the same reservation here for the 5G Fund.

³⁸⁰ Except that non-compliance of 50% or more at the Year Three Interim Milestone will result in default with no additional time permitted to come back into compliance, as adopted for the Rural Digital Opportunity Fund. See *infra* para. 236; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 713-14, para. 58 & n.166.

³⁸¹ *5G Fund NPRM*, 35 FCC Rcd at 4057-60, paras. 194-97; see 47 CFR § 54.320(d)(1)(v); *December 2014 Connect America Order*, 29 FCC Rcd at 15695, para. 147.

³⁸² *5G Fund NPRM*, 35 FCC Rcd at 4086, Appx. A, Proposed Rules, Sec. 54.1020(a); see *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 716, para. 64.

³⁸³ *5G Fund NPRM*, 35 FCC Rcd at 4086, Appx. A, Proposed Rules, Sec. 54.1020(a); see *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 716, para. 64.

with the Year Six Final Service Milestone.³⁸⁴ If a support recipient misses the Year Six Final Service Milestone, it will have 12 months from the date of the Year Six Final Service Milestone deadline within which to come into full compliance.³⁸⁵

150. If the support recipient is not able to come into full compliance with the Year Six Final Service Milestone deployment requirements within this 12-month grace period, as verified by USAC, the Wireline Competition Bureau will issue a letter to that effect and support will be recovered as follows: (1) if the support recipient has deployed service to at least 80%, but less than the required 85%, of the total eligible square kilometers in a state, USAC will recover 1.25 times the average support amount per square kilometer that the recipient has received in the state times the number of square kilometers unserved, up to the 85% coverage requirement; (2) if the support recipient has deployed service to at least 75% but less than 80% of the total eligible square kilometers in a state, USAC will recover 1.5 times the average support per square kilometer that the recipient has received in the state times the number of eligible square kilometers unserved, up to the 85% coverage requirement, plus 5% of the recipient's total 10-year support in the state; and (3) if the support recipient has deployed service to less than 75% of the total eligible square kilometers in a state, USAC will recover 1.75 times the average support per square kilometer that that the recipient has received in the state times the number of eligible square kilometers unserved up to the 85% coverage requirement, plus 10% of the recipient's total 10-year support for the state.³⁸⁶

151. We will apply the same support reduction if USAC subsequently determines in the course of a compliance review that a support recipient did not provide evidence to demonstrate that it was offering service at the required performance levels to the square kilometers required by the Year Six Final Service Milestone.³⁸⁷ The non-compliance measures we adopt are consistent with those adopted for the Rural Digital Opportunity Fund, with adjustments to account for the fact that we are proposing that the Year Six Final Service milestone require service to at least 85% of the total eligible square kilometers in a state.

152. We also adopt a service deployment requirement pursuant to which a 5G Fund support recipient must demonstrate that it provides service that aligns with the 5G Fund performance requirements established by the Commission to least 75% of the total square kilometers within each biddable area (e.g., census block group or census tract) for which it is authorized to receive support by the Year Six Final Service Milestone.³⁸⁸ If the support recipient is not able to come into full compliance with this service deployment requirement after the 12-month grace period we adopt, USAC will recover an amount of support that is equal to 1.5 times the average amount of support per square kilometer that the support recipient had received in the eligible area times the number of square kilometers unserved within that eligible area, up to the 75% requirement.

153. As for CAF Phase II and the Rural Digital Opportunity Fund, USAC will be authorized to draw on a 5G Fund support recipient's letter of credit to recover the full value of the support covered by the letter of credit in the event that a support recipient does not meet the relevant service milestones, does not come into compliance during the Year Six Final Service Milestone grace period, and does not repay

³⁸⁴ *5G Fund NPRM*, 35 FCC Rcd at 4088, Appx. A, Proposed Rules, Sec. 54.1020(c); *see* 47 CFR § 54.320(d).

³⁸⁵ *5G Fund NPRM*, 35 FCC Rcd at 4058-59, 4086, para. 195, Appx. A, Proposed Rules, Sec. 54.1020(c); *see* 47 CFR § 54.320(d)(2); *December 2014 Connect America Order*, 29 FCC Rcd at 15697, para. 148.

³⁸⁶ *5G Fund NPRM*, 35 FCC Rcd at 4058-59, 4086, para. 195, Appx. A, Proposed Rules, Sec. 54.1020(c).

³⁸⁷ For comparison, *see* 47 CFR § 54.320(d)(3); *December 2014 Connect America Order*, 29 FCC Rcd at 15697-98, para. 149; 47 CFR § 54.806; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 715-16, para. 63.

³⁸⁸ *5G Fund NPRM*, 35 FCC Rcd at 4059, 4086, para. 196, Appx. A, Proposed Rules, Sec. 54.1020(d).

the Commission the support associated with the non-compliance gap within a certain amount of time.³⁸⁹ If a support recipient is in Tier 4 status during the deployment period or has missed the Year Six Final Service Milestone, and USAC has initiated support recovery as described above, the support recipient will have six months to pay back the support that USAC seeks to recover.³⁹⁰ If the support recipient does not repay USAC by the deadline, the Wireline Competition Bureau will issue a letter to that effect and USAC will draw on the letter of credit to recover all of the support covered by the letter of credit,³⁹¹ with any remaining balance due being a debt owed to the Commission by the support recipient.³⁹²

154. If a support recipient has closed its letter of credit³⁹³ and it is later determined that the support recipient have ceased offering service at the required performance levels to the required square kilometers of eligible area in a state during the 10-year term of support, the support recipient will be subject to additional non-compliance measures, such as withholding of monthly payments and enforcement action, if it does not repay the Commission after six months.³⁹⁴ As for other high-cost universal service support programs, the failure to comply with the public interest obligations or any other terms and conditions associated with receipt of 5G Fund support may subject the support recipient to the Commission's existing enforcement procedures and penalties, reductions in support amounts, potential revocation of ETC designation, and/or suspension or debarment.³⁹⁵

155. And as for CAF Phase II and the Rural Digital Opportunity Fund, 5G Fund support recipients will be subject to compliance reviews.³⁹⁶ If subsequent to the Year Six Final Service Milestone USAC determines that a support recipient does not have sufficient evidence to demonstrate that it continues to offer service that meets the performance requirements adopted for the 5G Fund to all of the eligible square kilometers in the state as required by the Year Six Final Service Milestone, USAC will immediately recover a percentage of support from the support recipient.³⁹⁷

156. As we concluded in the *CAF Phase II Auction Order*, “drawing on the letter of credit in the event that the ETC fails to repay the support that USAC is instructed to recover will ensure that the Commission will be able to recover the support in the event that the ETC is unable to pay.”³⁹⁸ Through

³⁸⁹ *5G Fund NPRM*, 35 FCC Rcd at 4059-60, 4085-86, para. 197, Appx. A, Proposed Rules, Secs. 54.1016(c)(1), 54.1020(d); see 47 CFR § 54.315(c)(4)(i)-(ii); 47 CFR § 54.804(c)(4); *CAF Phase II Auction Order*, 31 FCC Rcd at 6016-18, paras. 189-94; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 715-16, para. 63.

³⁹⁰ *5G Fund NPRM*, 35 FCC Rcd at 4059-60, 4085, 4087, para. 197, Appx. A, Proposed Rules, Secs. 54.1016(c)(1), 54.1020(b)(4)(ii); see 47 CFR § 54.315(c)(4)(i); 47 CFR § 54.804(c)(4)(i); *CAF Phase II Auction Order*, 31 FCC Rcd at 6017, paras. 190-91; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 715-16, para. 63.

³⁹¹ *5G Fund NPRM*, 35 FCC Rcd at 4059-60, 4085, para. 197, Appx. A, Proposed Rules, Sec. 54.1016(c)(1), (c)(2); see 47 CFR § 54.315(c)(4)(ii); *CAF Phase II Auction Order*, 31 FCC Rcd at 6017, paras. 190-91; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 715-16, para. 63.

³⁹² See 47 CFR 1.1901 *et seq.*; *infra* note 566.

³⁹³ See *infra* para. 234 (allowing a support recipient to close its letter of credit after certification and verification of its compliance with its Year Six Final Service milestone obligations).

³⁹⁴ *5G Fund NPRM*, 35 FCC Rcd at 4059-60, para. 197; see *CAF Phase II Auction Order*, 31 FCC Rcd at 6017, para. 192; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 715-16, para. 62-63.

³⁹⁵ *5G Fund NPRM*, 35 FCC Rcd at 4059-60, 4083, para. 197, Appx. A, Proposed Rules, Sec. 54.1015(g); see 47 CFR § 54.320(c).

³⁹⁶ *5G Fund NPRM*, 35 FCC Rcd at 4088-89, Appx. A, Proposed Rules, Sec. 54.1020(e); Appendix A—Final Rules; see 47 CFR § 54.320(d)(3).

³⁹⁷ *5G Fund NPRM*, 35 FCC Rcd at 4088-89, Appx. A, Proposed Rules, Sec. 54.1020(e); Appendix A—Final Rules; see *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 715, para. 62; 47 CFR § 54.320(d)(3).

³⁹⁸ *CAF Phase II Auction Order*, 31 FCC Rcd at 6017-18, para. 193.

the support reduction framework we are adopting, a 5G Fund support recipient will have a number of opportunities to cure its non-compliance before we will seek to recover the support that is associated with the compliance gap. Moreover, we will only recover 100% of the support that has been disbursed in those cases where a 5G Fund support recipient has not repaid the support associated with its compliance gap. Because a 5G Fund support recipient that fails to repay the support associated with its compliance gap is also unlikely to be able to meet its obligations to use the support to offer service that meets the 5G Fund performance requirements, we conclude that recovering 100% of the support will allow us to re-award such support through an alternative mechanism to an ETC that will be able to meet its obligations.³⁹⁹

H. Eligibility Requirements

157. We adopt our proposal to require parties seeking 5G Fund support to satisfy eligibility requirements that are consistent with those adopted for Mobility Fund Phase I, CAF Phase II, and the Rural Digital Opportunity Fund.⁴⁰⁰

1. Eligible Telecommunications Carrier Eligibility Requirements

158. *ETC Designations.* We adopt the same flexibility adopted for CAF Phase II and the Rural Digital Opportunity Fund with respect to ETC designations and will not require an entity seeking to participate in a 5G Fund auction to obtain designation as an ETC in the areas where it seeks support prior to applying for or bidding in a 5G Fund auction.⁴⁰¹ Rather, we will permit a 5G Fund auction winning bidder to be designated as an ETC after it is announced as a winning bidder for a particular area.⁴⁰² A 5G Fund auction winning bidder will be required to obtain an ETC designation from the relevant state commission, or this Commission if the state commission lacks jurisdiction, that covers the each of the geographic areas in which it won support within 180 days after the release of the public notice announcing winning bidders.⁴⁰³

159. As the Commission determined in CAF Phase II, permitting entities to obtain ETC designation after the announcement of winning bidders for support encourages broader participation in the competitive process by a wider range of entities.⁴⁰⁴ It will also conserve participants' resources by

³⁹⁹ *Id.* at 6018, para. 193.

⁴⁰⁰ See 47 CFR §§ 54.1003, 54.310(e), 54.803; *April 2014 Connect America Order and Further Notice*, 29 FCC Rcd at 7064-7066, paras. 40-47. The limited comment we received supports adoption of eligibility requirements for parties seeking 5G Fund support. See AST&Science Comments at 31 (“[e]ligibility requirements generally consistent with those adopted for prior reverse auctions for support funds are appropriate”); AT&T Comments at 2 (the Commission should adopt its proposed eligibility requirements); see also CCA Comments at 17-18 (supports the “sensible” eligibility requirements proposed by the Commission concerning ETC designations, spectrum access, and financial and technical qualifications).

⁴⁰¹ See 47 CFR §§ 54.310(e)(1), 54.803(b); *April 2014 Connect America Order*, 29 FCC Rcd at 7064-65, para. 43; *CAF Phase II Auction Order*, 31 FCC Rcd at 6001, para. 147; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 723, para. 81. Only ETCs designated pursuant to section 214(e) of the Act are eligible to receive support from the high-cost program. 47 U.S.C. § 214(e)(1).

⁴⁰² As more fully explained in the application process requirements we adopt herein, an applicant must disclose, in its short-form application, whether it is an ETC in any area for which it will seek support or whether it will file an application to become an ETC in any such area after winning support in a 5G Fund auction.

⁴⁰³ See *CAF Phase II Auction Order*, 31 FCC Rcd at 6002, para. 149; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 727-28, para. 92. Although we permit winning bidders to obtain ETC status after being announced as winners in a 5G Fund auction, we do not disturb the current system of state jurisdiction over ETC designations. Consistent with section 214(e) of the Act, applicants may be designated as ETCs either by a state public utilities commission or by the Commission. See 47 U.S.C. § 214(e); see also *USF/ICC Transformation Order*, 26 FCC Rcd at 17798, para. 390.

⁴⁰⁴ *CAF Phase II Auction Order*, 31 FCC Rcd at 6001, para. 147; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 723, para. 81.

avoiding obligations for auction participants who do not win any coverage areas in the auction, as well as safeguarding potential bidding strategies of applicants seeking ETC designation before an auction.⁴⁰⁵ The Commission's experience with CAF Phase II indicates that most applicants were ultimately designated within the long-form review period, even if it took them longer than the deadline for submitting proof of ETC designation.⁴⁰⁶ The limited comment we received on our ETC designation eligibility requirement proposals support this approach.⁴⁰⁷

160. *Forbearance from Service Area Redefinition Process.* Consistent with the approach adopted for Mobility Fund Phase I, CAF Phase II, and the Rural Digital Opportunity Fund, we will forbear from the statutory requirement that the ETC service area of a 5G Fund support recipient conform to the service area of the rural telephone company serving the same area.⁴⁰⁸ Following the approach the Commission adopted for CAF Phase II and the Rural Digital Opportunity Fund, we will likewise be maximizing the use of 5G Fund support by making it available for only one provider per geographic area.⁴⁰⁹ Thus, forbearance is appropriate and in the public interest.

161. Therefore, for those entities that obtain ETC designations after becoming winning bidders in a 5G Fund auction, we forbear from applying section 214(e)(5) of the Act, insofar as this section requires that the service area of such an ETC conform to the service area of any rural telephone company serving an area eligible for 5G Fund support. We note that forbearing from the service area conformance requirement eliminates the need for redefinition of any rural telephone company service areas in the

⁴⁰⁵ See *April 2014 Connect America Order*, 29 FCC Rcd at 7064-65, para. 43.

⁴⁰⁶ If the ETC process takes longer than 180 days, we will entertain requests from winning bidders for waiver of the ETC deadline. 47 CFR § 1.3. Consistent with the approach adopted for CAF Phase II and the Rural Digital Opportunity Fund, we will require such waiver requests to demonstrate that the ETC application was filed no later than 30 days after the release of the public notice announcing that it is a winning bidder or that the petitioner has a persuasive good-faith case for not having done so. See *CAF Phase II Auction Order*, 31 FCC Rcd at 6002-03, para. 153; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 723, para. 81; see also *5G Fund NPRM*, 35 FCC Rcd at 4037, para. 123. As the Commission discovered with both the rural broadband experiments and CAF Phase II auction, there were various circumstances impacting the ability of individual bidders to file their ETC applications, and when an application was filed did not always determine whether an applicant was designated within the 150 remaining days. *CAF Phase II Auction Order*, 31 FCC Rcd at 6002-03, para. 153; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 723, para. 81. We note that any circumstances where a state will need more time due to procedural requirements or resource issues can be dealt with through the waiver process. See *CAF Phase II Auction Order*, 31 FCC Rcd at 6003-04, para. 154.

⁴⁰⁷ See AST&Science Comments at 32; CCA Comments at 17-18 (supporting the proposed eligibility requirement to submit ETC designations within 180 days after auction winning bidders are announced); NTCA Comments at 9; RWA Comments at 19.

⁴⁰⁸ *5G Fund NPRM*, 35 FCC Rcd at 4037, para. 124; *Connect America Fund et al.*, Second Report and Order, 27 FCC Rcd 7856 (2012) (*CAF Second Report and Order*); *CAF Phase II Auction Order*, 31 FCC Rcd at 6005-09, paras. 157-68; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 728-29, paras. 93-95. The Act and the Commission's rules define the term "service area" as a geographic area within which an ETC has universal service obligations and may receive universal service support. 47 U.S.C. § 214(e)(5); see also 47 CFR § 54.207(a). Section 214(e)(5) of the Act requires that a competitive ETC's service area must conform to the incumbent rural telephone company's service area "unless and until the Commission and the States, after taking into account recommendations of a Federal-State Joint Board . . . establish a different definition of service area for such company." 47 U.S.C. § 214(e)(5). The only commenter that commented on our proposal to forbear from the service area redefinition process supports this approach. See RWA Comments at 20.

⁴⁰⁹ *Phase II Auction Order*, 31 FCC Rcd at 6006, para. 159 (concluding that "forbearance from the section 214(e)(5) service area conformance requirement for recipients of the [CAF] Phase II competitive bidding process is appropriate and in the public interest"); *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 728, para. 93.

context of 5G Fund competitive bidding process.⁴¹⁰ However, if an existing ETC seeks support through the 5G Fund competitive bidding process for areas within its existing service area, this forbearance will not have any impact on the ETC's pre-existing obligations with respect to other support mechanisms and the existing service area. For the Mobility Fund Phase I auction, the Commission forbore from requiring that the service areas of an ETC conform to the service area of any rural telephone company serving the same area, pursuant to section 214(e)(5) of the Act and section 54.207(b) of the Commission's rules.⁴¹¹ Similarly, the Commission concluded that like Mobility Fund Phase I, some of the price cap carrier study areas that may become eligible for the CAF Phase II and the Rural Digital Opportunity Fund competitive bidding processes meet the statutory definition so that the carrier serving those study areas would be classified as a rural telephone company.⁴¹²

162. We find that forbearance is warranted in these limited circumstances. Our objective is to distribute support to winning bidders as soon as possible so that they can begin the process of deploying new broadband service to consumers in those areas. Case-by-case forbearance would likely delay our post-selection review of entities once they are announced as winning bidders.

163. The Act requires the Commission to forbear from applying any requirement of the Act or our regulations to a telecommunications carrier if the Commission determines that: (1) enforcement of the requirement is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory; (2) enforcement of that requirement is not necessary for the protection of consumers; and (3) forbearance from applying that requirement is consistent with the public interest.⁴¹³ We conclude each of these statutory criteria is met for the 5G Fund for the same reasons we concluded they were met for Mobility Fund Phase I, CAF Phase II, and the Rural Digital Opportunity Fund.⁴¹⁴

164. *Just and Reasonable.* We conclude that compliance with the service area conformance requirement of section 214(e)(5) of the Act and section 54.207(b) of the Commission's rules is not necessary to ensure that the charges, practices, and classifications of carriers designated as ETCs in areas for which support will be authorized through a 5G Fund auction are just and reasonable and not unjustly or unreasonably discriminatory.⁴¹⁵ As discussed herein, we find that the three factors traditionally taken into account by the Commission and the states when reviewing a potential redefinition of a rural service area pursuant to section 214(e)(5) of the Act no longer apply in the context of designating ETCs in areas for which support will be authorized through a 5G Fund auction. Forbearance from the service area conformance requirement would not prevent the Commission from enforcing sections 201 or 202 of the Act, which require all carriers to charge just, reasonable, and non-discriminatory rates.⁴¹⁶ We note that all

⁴¹⁰ Accordingly, Commission rules regarding the redefinition process are inapplicable to petitions that are subject to this Report and Order. See 47 CFR § 54.207(c), (d).

⁴¹¹ 47 U.S.C. § 214(e)(5); 47 CFR § 54.207(b); *CAF Second Report and Order*, 27 FCC Rcd at 7856-57, 7860-63 paras. 1-2, 9-21 (2012).

⁴¹² *CAF Phase II Auction Order*, 31 FCC Rcd at 6005-06, paras. 157-68; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 728, para. 94.

⁴¹³ 47 U.S.C. § 160(a); see also 47 U.S.C. § 160(b) (directing the Commission, in "making the determination under subsection (a)(3) of this section, [to] consider whether forbearance from enforcing the provision or regulation will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services").

⁴¹⁴ See *CAF Second Report and Order*, 27 FCC Rcd 7861-63, at para. 13-19; *CAF Phase II Auction Order*, 31 FCC Rcd at 6005-06, paras. 157-68; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 728-29, para. 95.

⁴¹⁵ 47 U.S.C. § 160(a)(1).

⁴¹⁶ See 47 U.S.C. §§ 201, 202.

ETCs—whether rural ETCs or other entities designated as ETCs in areas eligible for 5G Fund support in order to receive such support—will continue to be subject to the requirements of the Act that consumers have access to reasonably comparable services at reasonably comparable rates.⁴¹⁷ Moreover, we adopt herein a public interest obligation for a 5G Fund support recipient to offer its services in the areas for which it is authorized to receive support at rates that are reasonably comparable to those rates offered in urban areas.⁴¹⁸ In fact, as we discuss herein, the deployment of voice and 5G broadband-capable networks into these areas will expand the choice of telecommunications services for consumers in the relevant areas. The resulting competition is likely to help ensure just, reasonable, and nondiscriminatory offerings of services. For these reasons, we find that the first prong of section 10(a) is met.

165. *Consumer Protection.* We also conclude that it is not necessary to apply the service area conformance requirement to a winning bidder in the 5G Fund competitive bidding process to protect consumers.⁴¹⁹ Forbearance from the service area conformance requirement in these limited circumstances will not harm consumers currently served by the rural telephone companies in the relevant service areas. To the contrary, these consumers will benefit from the use of 5G Fund support to deploy voice and 5G broadband-capable networks in these areas. Moreover, 5G Fund support recipients, like all ETCs, will be required to certify that they will satisfy applicable consumer protection and service quality standards in their service areas.⁴²⁰ For these reasons, we find that the second prong of section 10(a) is met.

166. *Public Interest.* We conclude that it is in the public interest to forbear from the service area conformance requirement in these limited circumstances. Because we adopt our proposal to distribute 5G Fund support through competitive bidding, we set up a system under which only one ETC will receive support to serve a given area eligible for 5G Fund support. Geographic eligibility for 5G Fund support is based on whether specific areas show a lack of unsubsidized 4G LTE and 5G broadband service by at least one carrier, a definition that is unrelated to the boundaries of rural carrier service areas. Thus, a rural telephone carrier's service area is not a relevant consideration in determining where a 5G Fund support recipient that is awarded support through competitive bidding should be designated as an ETC. Accordingly, the analysis that the relevant state and the Commission historically undertook when deciding whether to redefine a rural telephone carrier's service area is not applicable to the 5G Fund competitive bidding process.⁴²¹ We find that forbearing from the conformance requirement will encourage participation by assuring that obligations of new ETCs will not extend to portions of rural service areas for which a new ETC may not receive support. By providing this assurance, we reduce the cost of auction participation, encourage lower bids, and improve auction outcomes.

167. Similarly, enabling new ETC service areas to be defined in a more targeted manner for the 5G Fund is consistent with our approach of targeting support to areas with a specific need for the support, helps preserve those efficiencies, and thus serves the public interest. 5G Fund support will be determined by a competitive bidding process in which ETCs will bid for the support they need to serve a

⁴¹⁷ 47 U.S.C. § 254(b)(3); *see also, e.g.*, 47 CFR §§ 54.1009(a)(4), 54.313(a)(2), 54.314.

⁴¹⁸ *See supra* paras. 84-88; Appendix A—Final Rules.

⁴¹⁹ 47 U.S.C. § 160(a)(2).

⁴²⁰ 47 CFR §§ 54.202(a)(3), 54.313.

⁴²¹ Because the service area redefinition analysis is not relevant to the 5G Fund competitive bidding process, we find it is not in the public interest for the states and the Commission to work together to define the service area of 5G Fund support recipients serving rural telephone companies' service areas. However, we note that forbearance in these limited circumstances does not otherwise impact the state's primary role in designating ETCs. *See* 47 U.S.C. 214(e)(2). State commissions are still required to consider the public interest, convenience and necessity of designating an ETC in a rural area already served by a rural telephone company. 47 U.S.C. § 214(e)(3); 47 CFR § 54.201(e). We note that the redefinition process is still required for ETCs seeking other kinds of support, and that our action today does not disturb the roles of state commissions and this Commission in the ETC designation process or in the redefinition process in other circumstances where redefinition is required.

specific area, rather than any larger area, such as an underlying rural telephone company study area. Absent forbearance, we find that entities seeking 5G Fund support may be required to take on unsupported ETC obligations in portions of rural carriers' study areas—areas that may not be eligible for support or for which they may not win support—and that this is likely to discourage participation in a 5G Fund auction. We conclude that requiring 5G Fund support recipients to serve a wider area runs counter to the Commission's recent and ongoing efforts to serve the public interest by focusing Universal Service Fund resources on defined areas of need.

168. We also note that requiring each 5G Fund support recipient to conform its service areas to those of the rural telephone companies in the states they seek to serve could result in lengthy redefinition proceedings, which may delay our post-auction review of winning bidders' long-form applications and consequently delay our distribution of 5G Fund support and the deployment of voice and 5G broadband services in the area(s) won by the support recipient.⁴²²

169. In addition, we find that in these limited circumstances requiring conformance is not essential to protect the ability of rural telephone companies to continue to provide service. Past concerns that an ETC serving only a relatively low-cost portion of a rural carrier's service area might cream skim by receiving per line support based on the rural carrier's costs of serving the entire area are not relevant to 5G Fund support, which will be awarded through a competitive process.⁴²³ Moreover, because the Commission decided in the *USF/ICC Transformation Order* that universal service could support both mobile and fixed services in a given area, we see no inherent conflict between a mobile provider receiving support to offer previously unavailable service in a portion of a rural telephone company's study area and the rural telephone company continuing to provide its pre-existing service. We note that our decision to grant forbearance in these limited circumstances does not impose any additional administrative requirements on rural telephone companies.

170. For similar reasons, we conclude that forbearance in these limited circumstances will not harm competitive market conditions.⁴²⁴ The public interest benefits of forbearance go beyond efficiently enabling consumer access to 5G services. If anything, forbearance may enhance competition by introducing new service providers to the market and, as discussed above, will not eliminate any existing market participants or introduce concerns about cream skimming. ETCs that receive 5G Fund support will have the obligations of any other ETCs, including an obligation to make available Lifeline service to eligible low-income consumers,⁴²⁵ and thus an ETC deploying 5G services to new areas as part of the 5G Fund also will be making its services available to low-income consumers who may qualify to receive reduced charges for these advanced services. Moreover, as a 5G Fund support recipient is deploying service in its funded areas, it may also find that it has a business case to deploy service in surrounding areas, thereby increasing competition and providing more options for consumers.

⁴²² We note that some rural broadband experiment provisionally selected bidders found that it was time-consuming to obtain ETC designations in circumstances where the incumbent rural telephone company challenged their ETC petitions. *See, e.g.,* Northeast Rural Services, Inc. Motion to Withdraw Census Blocks from Rural Broadband Experiment Awards and Motion to Dismiss ETC Waiver Petitions as Moot, WC Docket Nos. 10-90, 14-259 (filed Aug. 14, 2015) (requesting that the Commission withdraw certain census blocks from its bids after it experienced delays in obtaining an ETC designation in areas served by rural telephone companies).

⁴²³ Unlike the legacy identical support rule, under which a competitive ETC received the same per-line support as an incumbent calculated based on the incumbent's cost of serving its entire service area, the amount of 5G Fund support is not linked to the support received by an overlapping rural carrier but is determined by the results of competitive bidding for support. Consequently, cream skimming concerns that arose under the identical support rule are not relevant for purposes of seeking 5G Fund support.

⁴²⁴ *See* 47 U.S.C. § 160(b) (requiring the public-interest determination to consider whether forbearance would promote competitive market conditions).

⁴²⁵ *See* 47 CFR § 54.405 (ETC obligation to offer Lifeline).

171. We further note that forbearance from the conformance requirement and redefinition process for these limited purposes should not affect rural carriers' abilities to serve their entire rural service territories. Moreover, the Act contains safeguards to address any such potential concerns. The Act already requires designating commissions to affirmatively determine that designating a carrier as an ETC within a rural service area is in the public interest, and this is not affected by this grant of forbearance.

2. Spectrum Access

172. We will require that an applicant seeking to participate in a 5G Fund auction have exclusive access to licensed spectrum with sufficient bandwidth in an area that enables it to satisfy the applicable performance requirements in order to receive 5G Fund support for that area.⁴²⁶ As more fully explained in the application process requirements we adopt herein, we will require an applicant to have exclusive access to licensed spectrum with sufficient bandwidth (i.e., spectrum for which the applicant holds a license or lease) and to describe its access to such spectrum. We also will require an applicant to certify that the description is accurate, that it has access to such spectrum in the area(s) in which it intends to bid for support, that it has such access to spectrum at the time it applies to participate in competitive bidding and at the time it applies for support if it is a winning bidder, and that it will retain its access to such spectrum for at least 10 years after the date on which it is authorized to receive support.⁴²⁷

3. Financial and Technical Capability

173. Consistent with what the Commission has required in other universal service proceedings, we adopt our proposal to require an entity to certify that it is financially and technically qualified to meet the 5G Fund public interest obligations and performance requirements within the 10-year support term in the geographic areas for which it seeks support.⁴²⁸ We implemented such a requirement for Mobility Fund Phase I, Tribal Mobility Fund Phase I, CAF Phase II, and the Rural Digital Opportunity Fund, and we conclude it is an equally appropriate requirement for the 5G Fund.⁴²⁹ As we have previously stated, "it would not be administratively efficient to conduct a competitive bidding process with participation from entities that are not prepared to make such commitments."⁴³⁰ Accordingly, requiring this certification is a reasonable protection for the auction process and to safeguard the award of universal service funds. As more fully explained in the application process requirements we adopt herein, we will require an applicant to certify as to its financial and technical qualifications in both its pre-auction short-form application and its post-auction long-form application.

⁴²⁶ *5G Fund NPRM*, 35 FCC Rcd at 4038, para. 126. The limited comment we received supports adoption of our proposed spectrum access eligibility requirements. *See* AST&Science Comments at 33 ("[a]ccess to spectrum capable of providing the intended 5G service is a critical element of the 5G Fund proposal, and the Commission should require applicants to demonstrate that each applicant has access to spectrum in an area sufficient to satisfy the performance requirement"); CCA Comments at 17-18 (supporting the proposed eligibility requirement that an applicant certify it has sufficient spectrum access in an area that enables it to satisfy the applicable 5G Fund performance requirements); NTCA Comments at 9 ("[a]ll who receive or win funding must have the necessary spectrum resources. . .").

⁴²⁷ Because we adopt a 10-year term of support for the 5G Fund, the spectrum access rule we adopt requires an applicant to certify that it will retain such spectrum access for 10 years after it is authorized to receive support.

⁴²⁸ *5G Fund NPRM*, 35 FCC Rcd at 4038, para. 127; *see Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 719, para. 72; 47 CFR §§ 54.1003(c), 54.315(a)(2); 54.804(b)(2)(ii). The only comment we received on our proposal to require 5G Fund applicants and winning bidders to certify as to their financial and technical qualifications in their short-form and long-form applications is supportive of this requirement. *See* CCA Comments at 17-18 (supporting demonstrations of financial and technical capability as an eligibility requirement).

⁴²⁹ 47 CFR §§ 54.1003(c), 54.315(a)(2); 54.804(b)(2)(ii); *April 2014 Connect America Order*, 29 FCC Rcd at 7066, para. 47; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 719, para. 72.

⁴³⁰ *April 2014 Connect America Order*, 29 FCC Rcd at 7066, para. 47.

4. Encouraging Participation

174. To encourage participation by the widest possible range of entities, we adopt our proposal to permit all qualified applicants to participate in a 5G Fund auction.⁴³¹ Our commitment to fiscal responsibility requires that we distribute our finite budget cost effectively in light of our goals for the 5G Fund and consistent with the bidding procedures we adopt for the auction. The Commission did not prohibit any particular class of parties from participating in Mobility Fund Phase I based on size or other concerns or from seeking Mobility Fund Phase I support based solely on a party's past decision to relinquish universal service support provided on another basis.⁴³² In order to avoid potentially limiting our ability to close the 5G coverage gap, we follow the same approach here. We expect that our general auction rules and procedures will provide the basis for an auction process that promotes our objectives for the 5G Fund and provide a fair opportunity for all serious, interested parties to participate.

175. AST&Science asks the Commission to allow mobile-satellite companies capable of providing 5G-NR broadband service to standard smartphones and off-the-shelf user devices to participate meaningfully in closing the digital divide by partnering with terrestrial broadband providers in the 5G Fund auction.⁴³³ It states that providers should be invited to demonstrate, on a case-by-case basis at the short-form application stage, the capability of these transformational, mobile-satellite-based technologies to meet the technical and performance standards for the 5G Fund, consistent with the Commission's longstanding policy of implementing regulatory policies in a technologically-neutral fashion and in a manner that avoids picking winners and losers.⁴³⁴ AST&Science submits that this approach would enable it to more quickly implement its business plan of formulating cooperative arrangements with wireless carriers to extend high-quality 5G services to areas that are extremely unlikely to be covered by traditional terrestrial technologies.⁴³⁵ SES Americom and O3B Limited similarly state the Commission "should not stifle 5G deployment by barring mobile service providers from using satellite technologies that can support latency-sensitive mobile services, such as SES's Medium Earth Orbit ("MEO") satellite network."⁴³⁶

176. RWA asserts that satellite providers should be eligible to participate in a 5G Fund auction "if they can (1) meet the proposed speed and latency performance requirements; and (2) provide for continuity of mobile service by being capable of holding voice and data sessions while moving across the country at speeds of 75 miles per hour without regularly dropping the session, and being able to provide roaming services at reasonable rates to other carriers pursuant to the Commission's roaming rules."⁴³⁷

177. Consistent with our decision to permit all qualified applicants to participate in a 5G Fund auction, we will not categorically preclude a satellite provider from applying for, bidding in, and winning 5G Fund support in a 5G Fund auction, provided that it is otherwise eligible.⁴³⁸ We note that pursuant to

⁴³¹ *5G Fund NPRM*, 35 FCC Rcd at 4038, para. 128.

⁴³² *See USF/ICC Transformation Order*, 26 FCC Rcd at 17802, paras. 408-409; *see also Connect America Fund et al.*, Fourth Order on Reconsideration, 27 FCC Rcd 8814, 8819, para. 13 (2012) ("By permitting all qualified providers to participate in this [Mobility Fund Phase I] reverse auction, we expect that our limited USF dollars will be used more efficiently and effectively to construct mobile broadband networks to cover more unserved areas.").

⁴³³ AST&Science Comments at 4.

⁴³⁴ *Id.*

⁴³⁵ *Id.*

⁴³⁶ SES Americom and O3B Limited Joint Reply Comments at 1-2.

⁴³⁷ RWA Reply Comments at 14.

⁴³⁸ *See supra* para. 115 (noting that we will not categorically exclude satellite technology from networks supported by the 5G Fund and that a carrier seeking 5G Fund support may be eligible so long as it is capable of providing voice and 5G broadband terrestrial service meeting the 5G-NR standard using permitted spectrum bands directly to an off-the-shelf handset (assuming it meets all other eligibility requirements)).

the rules we adopt herein, entities seeking 5G Fund support must satisfy certain eligibility requirements, and 5G Fund support recipients must be capable of providing mobile, terrestrial voice and broadband services that meet public interest obligations and performance requirements we adopt for the 5G Fund as a condition of receiving support – which include among other things offering voice and 5G broadband service that conforms to the 5G-NR standard using permitted spectrum bands directly to an off-the-shelf handset (e.g., an iPhone), and otherwise meets our adopted median data speed and end-to-end round-trip latency requirements of at least 35/3 Mbps and 100 milliseconds or less, respectively.⁴³⁹ Accordingly, while a carrier could potentially use non-terrestrial services, such as satellite service, to augment its provision of mobile, terrestrial voice and data services in the areas for which it is awarded 5G Fund support, it cannot rely solely on any such non-terrestrial services to meet its 5G Fund public interest obligations and performance requirements.

5. Enforceable Commitments to Deploy 5G

178. In the *5G Fund NPRM*, we tentatively concluded that T-Mobile should not be allowed to use any eligible areas for which it might win 5G Fund support to fulfill its transaction-specific rural commitments to deploy 5G.⁴⁴⁰ As a threshold matter, today we adopt restrictions on the use of 5G Fund support to fulfill enforceable commitments to deploy 5G. We do this to ensure that our limited universal service funds are spent in the most cost-effective manner. We conclude it would be inefficient to allow any provider with enforceable 5G deployment obligations to use universal service support to fund those deployments. At the same time, we are concerned that it would be equally inefficient to use our limited universal service funding to overbuild T-Mobile’s extensive rural 5G deployment commitments. We sought comment on two approaches to avoiding such an outcome: (1) allowing T-Mobile to make pre-auction binding commitments to deploy 5G services in eligible areas within the time frames adopted as deployment milestones for the 5G Fund without receiving 5G Fund support and otherwise prohibiting T-Mobile from participating in the auction;⁴⁴¹ and (2) permitting T-Mobile to identify areas before the auction where they intend to deploy 5G service and removing these areas from the list of eligible areas.⁴⁴²

179. AT&T, the California Public Utilities Commission, CCA, RWA, and Verizon agree with our tentative conclusion that T-Mobile should not be allowed to use 5G Fund support to fulfill its transaction commitments to deploy 5G.⁴⁴³ T-Mobile does not object to prohibiting it from using 5G Fund

⁴³⁹ We decline to adopt RWA’s continuity of mobile service threshold for being capable of holding voice and data sessions without regularly dropping a session because we find it adds a qualifier to the definition of what we consider to be a component of 5G mobile service. We are unconvinced that this qualifier is how reasonably comparable 5G services in urban environment are defined. We therefore conclude that the requirements we adopt for median data speed, latency, and technology standards are sufficient to capture the range of services that customers reasonably expect 5G services to provide.

⁴⁴⁰ T-Mobile made certain enforceable commitments to the Commission as part of its approval of the T-Mobile–Sprint transaction, which was approved on October 16, 2019, and consummated on April 1, 2020. Specifically, T-Mobile is obligated to cover 85% of the United States’ rural population with 5G service by April 1, 2023, and 90% of the rural population by April 1, 2026. T-Mobile is further required, by April 1, 2023, to provide two-thirds of the rural population with 5G download speeds of at least 50 Mbps, and over half (55%) with 5G download speeds of at least 100 Mbps. By April 1, 2026, T-Mobile must provide 5G download speeds of at least 50 Mbps to 90% of the rural population, and two-thirds of the rural population must be able to receive 5G service with download speeds of at least 100 Mbps. See *T-Mobile-Sprint Order*, 34 FCC Rcd at 10588-91, 10801-828, paras. 25-32, Appx. G; see also T-Mobile, “T-Mobile Completes Merger with Sprint to Complete the New T-Mobile,” (Apr. 1, 2020), <https://www.t-mobile.com/news/un-carrier/t-mobile-sprint-one-company> (indicating that the merger was completed on April 1, 2020).

⁴⁴¹ *5G Fund NPRM*, 35 FCC Rcd at 4039, para. 130.

⁴⁴² *Id.* at 4039, para. 131.

⁴⁴³ AT&T Comments at 13; California Public Utilities Commission Comments at 6; CCA Reply Comments at 12; CRWC Comments at 18; RWA Comments at 21; Verizon Comments at 7.

support to meet its transaction commitments, but argues that such a prohibition should not apply only to it, asserting that it would be unfair to single out T-Mobile in this way and that such a prohibition applied only to T-Mobile would be an inefficient use of funds.⁴⁴⁴ CRWC asserts that T-Mobile could game any pre-auction commitment process by strategically selecting areas thereby excluding them from the 5G Fund auction for anti-competitive reasons, cross-subsidize its merger commitments, and then face no consequences if it ultimately does not decide to deploy in those areas.⁴⁴⁵ Accordingly, CRWC argues that T-Mobile should be barred from participating in a 5G Fund auction.⁴⁴⁶ RWA also argues that T-Mobile should not be able to make pre-auction binding commitments to deploy 5G that would remove areas from the auction.⁴⁴⁷

180. In advocating for Commission approval of its transaction with Sprint, T-Mobile made several commitments to deploy 5G, which were adopted as conditions of approval.⁴⁴⁸ T-Mobile is subject to significant financial penalties if it does not meet its 5G deployment commitments.⁴⁴⁹ We expect T-Mobile to be able to fulfill these commitments without 5G Fund support based upon their claimed merger synergies.⁴⁵⁰ Accordingly, we agree that T-Mobile should not be allowed to use 5G Fund support to fulfill its transaction commitments to deploy 5G. We are mindful that other entities could be similarly situated to T-Mobile, with enforceable commitments to deploy 5G, and any such entities will likewise not be allowed to use 5G Fund support to fulfill their commitments.⁴⁵¹ We will nevertheless evaluate

⁴⁴⁴ T-Mobile Comments at 11-13. T-Mobile has encouraged the Commission to rely on objective criteria such as rurality and population density or coverage data to determine the areas that are eligible for 5G Fund support, and to keep T-Mobile's transaction commitments separate from the 5G Fund. See Letter from Steve Sharkey, Vice President, Government Affairs, Technology and Engineering Policy, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 20-32 at 2 (filed Apr. 15, 2020). We believe that establishing 5G Fund auction eligibility based upon a new mobile data coverage collection, combined with the procedures we adopt herein regarding enforceable commitments to deploy 5G, appropriately address this concern while balancing our priorities in distributing universal service fund support.

⁴⁴⁵ CRWC Reply Comments at 15.

⁴⁴⁶ CRWC Comments at ii-iii, 18; CRWC Reply Comments at 15. CRWC attempts to show that it would be optimal to exclude T-Mobile from the auction through a stylized numerical simulation of subsidy auctions in Missouri. CRWC Reply Comments, Ex. A, Appx. A at A-1-A-7. CRWC quantifies the benefits of excluding T-Mobile by comparing its simulations to two baseline scenarios making the following assumptions about T-Mobile's conduct: (1) T-Mobile might not deploy 5G in an eligible area if another provider could cover that area for a lower cost, or (2) T-Mobile would not deploy at all in any eligible area. CRWC Reply Comments, Ex. A, Appx. A at A-5. However, it is likely T-Mobile will deploy in many eligible areas regardless of where other providers deploy or what happens in an auction, especially in light of its transaction commitments; in those cases, the area would not require a subsidy to be served. These baseline scenarios are therefore inappropriate. Further, the analysis ignores the auction budget constraint, and therefore cannot capture the benefits of increased competition by including T-Mobile. The analysis also attempts to demonstrate that T-Mobile could use the pre-selection process to strategically disadvantage rival service providers, but it is based on a single simplified theoretical scenario with no evidence of its practical relevance. CRWC Reply Comments, Ex. A, Appx. B-1-B-2.

⁴⁴⁷ Letter from Carri Bennet, General Counsel, RWA, to Marlene H. Dortch, Secretary, FCC at 2 (filed Oct. 12, 2020).

⁴⁴⁸ *T-Mobile-Sprint Order*, 34 FCC Rcd at 10589-90, paras. 26-29.

⁴⁴⁹ *Id.* at 10590-91, paras. 30-32.

⁴⁵⁰ *Id.* at 10585, para. 18.

⁴⁵¹ On July 26, 2019, DISH filed applications seeking more time to satisfy the construction requirements for its AWS-4, Lower 700 MHz E Block, and AWS H block licenses. DISH has enforceable commitments to deploy 5G and is subject to significant penalties if it fails to meet its commitments. See generally *DISH Order of Modification*; see also *T-Mobile Sprint Order*, 34 FCC Rcd at 10829-10833, Appx. H. Accordingly, DISH cannot use 5G Fund support to meet its enforceable 5G deployment commitments.

enforceable commitments other than T-Mobile's on a case-by-case basis considering the specific commitments and our goals in the 5G Fund.

181. We are mindful that prohibiting carriers with enforceable commitments from participating in a 5G Fund auction would accomplish the goal of preventing universal service funds from being used to fulfill those commitments.⁴⁵² Such a prohibition, however, would not address our interest in avoiding the use of universal funds to overbuild areas that will already see 5G deployment. As we noted in the *5G Fund NRPM*, “failing to adequately account for T-Mobile's enforceable 5G deployment commitments would risk using our limited universal service support to overbuild areas that would see timely, unsubsidized 5G deployment [as defined by the Commission] by T-Mobile.”⁴⁵³ Moreover, prohibiting participation by otherwise qualified carriers would undermine our interest in maximizing auction participation so as to achieve the most efficient auction result and covering the most area at the least cost. All recipients of high-cost funds are subject to a statutory requirement to only use those funds for the universal service purposes for which they were granted.⁴⁵⁴ Recipients of 5G Fund support will be subject to reporting requirements, as well as auditing, to ensure that funding awards are spent as intended.⁴⁵⁵

182. We conclude that our approach to enforceable commitments to deploy 5G must promote our goals of: prohibiting the use of 5G Fund support to fulfill enforceable 5G deployment commitments; avoiding the use of 5G Fund support to overbuild areas that will see unsubsidized 5G deployment; and establishing procedures that will ensure a fair and competitive auction. Accordingly, we will allow T-Mobile to make pre-auction, binding commitments to deploy 5G in certain areas, thus removing those areas from the auction inventory of areas eligible for support.⁴⁵⁶ We direct the Office and Bureau to establish the specific procedures for pre-auction binding commitments, that would cover, as appropriate, qualifications and restrictions on participating in the pre-selection process.⁴⁵⁷ These procedures can address, as appropriate, deterrence of any anti-competitive behavior, performance measures, noncompliance penalties, and any actions (before, during, or after the auction) that would run contrary to the goals of the 5G Fund.⁴⁵⁸

183. In addition, we will allow T-Mobile to participate—and win support—in the 5G Fund auction, but consistent with our prohibition on using universal service support to fulfill other 5G deployment obligations, we will not allow T-Mobile to claim any population in areas won in the 5G Fund auction toward their population-based merger commitments. Similar to T-Mobile's commitment

⁴⁵² See Verizon Comments at 7-8 (noting that the most straightforward way of prohibiting the use of universal service funds to fulfill merger commitments is to preclude carriers with those commitments from participating in the auction).

⁴⁵³ *5G Fund NPRM*, 35 FCC Rcd at 4039, para. 130 & n.196.

⁴⁵⁴ 47 U.S.C. § 254(e).

⁴⁵⁵ The Commission has imposed substantial penalties on entities that have misused high cost support. See, e.g., *Sandwich Isles Communications, Inc.*, Order on Reconsideration, 34 FCC Rcd 577 (2019) (affirming a recovery and penalty of \$76 million for misuse of universal service funds).

⁴⁵⁶ We note that if T-Mobile does remove areas from the auction inventory of areas eligible for support, then those areas would be subject to the drive-testing requirements negotiated in the transaction and not to the 5G Fund performance requirements.

⁴⁵⁷ These pre-auction commitment procedures will address which entities with enforceable commitments can use these procedures. For example, these procedures will address whether DISH should receive the same or similar treatment as T-Mobile.

⁴⁵⁸ We are confident that the Office and Bureau can develop and implement procedures that accord with enforceable commitments, balance our priorities, ensure the most efficient use of our limited funds, and appropriately address anti-competitive concerns.

concerning its potential participation in the Puerto Rico/U.S. Virgin Islands Stage 2 Competition, population in any areas won by T-Mobile in a 5G Fund auction will be added to its merger population commitments, such that T-Mobile's total deployment commitment shall increase in equal measure.⁴⁵⁹ The same condition will apply to any similarly situated carrier with enforceable commitments for 5G deployment that participates in the 5G Fund auction, preventing the 5G Fund supported deployments from counting toward satisfying the carrier's enforceable commitments to deploy 5G.

184. These measures balance our interests in prohibiting entities from using universal service funding to fulfill enforceable commitments, limiting overbuilding by not subsidizing areas that will already see timely 5G deployment without universal service support, and holding an efficient, open auction in which entities can compete vigorously for funding to serve areas that they would not otherwise serve without support.

6. Inter-Relationship with Other Universal Service Mechanisms and Obligations

185. We adopt our proposal to allow recipients of other high-cost universal service support to participate in a 5G Fund auction.⁴⁶⁰ While we will not prohibit applicants from participating in a 5G Fund auction merely because they have won support through other universal service mechanisms, we note that the goals of 5G Fund are to help ensure the availability of *mobile* voice and broadband services across rural areas of the country. Accordingly, we will prohibit a 5G Fund support recipient from using 5G Fund support to satisfy any pre-existing high-cost deployment obligations to fixed locations and prohibit a recipient of other high-cost support from using that support to satisfy its 5G Fund deployment obligations.

I. Application Process

186. Consistent with prior Commission auctions and the process adopted for the Rural Digital Opportunity Fund, we adopt a two-stage application process for the 5G Fund, consisting of pre-auction and post-auction requirements.⁴⁶¹ Each entity interested in participating in a 5G Fund auction will be required to file a pre-auction short-form application that provides basic information and certifications regarding its qualifications to receive support.⁴⁶² If determined to be qualified to bid, an applicant will be allowed to participate in the auction. After the auction concludes, a winning bidder must file a post-auction long-form application with more extensive information about its qualifications, funding, and the network it intends to use to meet its 5G Fund public interest obligations and performance requirements to demonstrate to the Commission that it is legally, technically and financially qualified to receive 5G Fund support.⁴⁶³ As we did for CAF Phase II and the Rural Digital Opportunity Fund, we stress that each potential bidder has the sole responsibility to perform its due diligence research and analysis before proceeding to participate in a 5G Fund auction.⁴⁶⁴ We direct the Office and Bureau and to adopt the

⁴⁵⁹ See, e.g., Letter from Olga de la Torre, Director, Legal Affairs, T-Mobile, to Marlene Dortch, Secretary, FCC, WC Docket Nos. 18-143, 10-90, 14-58 (July 7, 2020).

⁴⁶⁰ *5G Fund NPRM*, 35 FCC Rcd at 4040, para. 134. We received no comments on our proposal to allow recipients of other high-cost universal service support to participate in a 5G Fund auction.

⁴⁶¹ *5G Fund NPRM*, 35 FCC Rcd at 4040, para. 135; see *USF/ICC Transformation Order*, 26 FCC Rcd at 17804, para. 417; *CAF Phase II Auction Order*, 31 FCC Rcd at 5980, para. 92; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 717-18, para. 68-69.

⁴⁶² *5G Fund NPRM*, 35 FCC Rcd at 4040, para. 135.

⁴⁶³ *Id.* at 4040, para. 136; see also *CAF Phase II Auction Order*, 31 FCC Rcd at 5980, para. 92; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 717, para. 68.

⁴⁶⁴ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1471, para. 111; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 724-25, para. 84.

format and deadlines for the submission of documentation for the short-form and long-form application processes.⁴⁶⁵

1. Short-Form Application Process

187. As more fully explained below, we adopt our proposal to apply the Commission's existing Part 1, Subpart AA universal service competitive bidding rules to entities seeking to participate in the competitive bidding process for 5G Fund support so that such entities will be required to: (1) provide information that would establish their identity, including disclosing parties with ownership interests and any agreements they may have relating to the support to be sought through the competitive bidding process, (2) identify their authorized bidders, (3) make various universal service support specific certifications, (4) provide any additional information that may be required by the Commission in order to evaluate their qualifications to participate in the competitive bidding process, and (5) comply with the rule prohibiting certain communications during the competitive bidding process.⁴⁶⁶ We also adopt our proposed amendments to various Part 1, Subpart AA rules to codify policies and procedures applicable to the auction application process that have been adopted for CAF Phase II and the Rural Digital Opportunity Fund, better align provisions in Part 1, Subpart AA with like provisions in the Commission's Part 1, Subpart Q spectrum auction rules, and make other updates for consistency, clarification, and other purposes.⁴⁶⁷ We received no comments on our proposed amendments to the Part 1, Subpart AA rules, and adopt them as proposed in the *5G Fund NPRM*. The Part 1, Subpart AA universal service competitive bidding rules, as amended herein, will apply to participants in a 5G Fund auction.⁴⁶⁸ In addition, we adopt our proposal to require entities seeking to participate in a 5G Fund auction to also provide certain 5G Fund specific information in their short-form applications. The limited comments we received on our 5G Fund specific short-form application proposals are summarized and discussed in this section as necessary to address any issues or alternative approaches raised by commenters concerning our proposals. We conclude the pre-auction short-form requirements we adopt here provide for a fair and efficient process and will best serve the Commission's ability to determine whether an applicant is qualified to bid for 5G Fund support.

188. An entity interested in participating in the 5G Fund competitive bidding process will submit a pre-auction short-form application in which it must provide, among other things, information as to the applicant's identity, ownership, and any agreements into which it has entered, as well as a description of the applicant's access to spectrum and various applicant certifications. Commission staff then will review the submitted short-form applications to determine whether applicants have provided the necessary information required at the short-form stage and thereafter release a public notice indicating which short-form applications are deemed complete and which are deemed incomplete. Consistent with CAF Phase II and the Rural Digital Opportunity Fund, applicants whose short-form applications are deemed incomplete will be given a limited opportunity to cure defects and to resubmit correct applications, excluding major modifications.⁴⁶⁹ As in CAF Phase II and the Rural Digital Opportunity

⁴⁶⁵ 47 CFR §§ 1.21000-1.21004, pt. 54.

⁴⁶⁶ *5G Fund NPRM*, 35 FCC Rcd at 4041, para. 138. We received no comments on our proposal to apply the Part 1, Subpart AA rules entities seeking to participate in competitive bidding process for 5G Fund support.

⁴⁶⁷ *Id.* at 4041, para. 139.

⁴⁶⁸ We note that the Part 1, Subpart AA rules are subject to further modification; any modification of the Part 1, Subpart AA rules that the Commission may adopt in the future will also apply in a 5G Fund auction.

⁴⁶⁹ *5G Fund NPRM*, 35 FCC Rcd at 4040, 4068-69, para. 135, Appx. A, Proposed Rules, Sec. 1.21001(f)(5); *see Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1487, 1490-91, paras. 171, 188; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 718, para. 69. Major modifications include, but are not limited to, any changes in the ownership of the applicant that constitute an assignment or change of control, any changes to the identity of the applicant, or any changes to the certifications required in the application. *5G Fund NPRM*, 35 FCC

(continued....)

Fund, following the conclusion of the short-form application review process and a determination of which applicants are qualified to participate in the auction, a public notice will be released identifying those applicants that may bid in the auction.⁴⁷⁰

189. *Ownership Disclosures.* Section 1.21001(b)(1) of the Commission's rules currently requires each universal service auction applicant to provide information in its short-form application to establish its identity, including information concerning its real parties in interest and information regarding parties that have an ownership or other interest in the applicant.⁴⁷¹ For past universal service support auctions, the Commission has adopted separate, program specific rules specifying that the type of ownership information to be provided by applicants is the information required by section 1.2112(a) of the Commission's rules.⁴⁷² To simplify the ownership disclosure requirements for all universal service auction applicants going forward and eliminate the need for the Commission to continue to separately adopt the same ownership disclosure requirements in the program specific rules for each universal service auction, we adopt our proposed amendment to section 1.21001(b)(1) to specify that the type of ownership information to be provided by such applicants is the information set forth in section 1.2112(a).⁴⁷³

190. *Authorized Bidders.* Section 1.21001(b)(2) of the Commission's rules currently requires each universal service auction applicant to identify in its short-form application up to three individuals authorized to make or withdraw a bid on behalf of the applicant.⁴⁷⁴ The Commission's spectrum auction rules prohibit the same individual from serving as an authorized bidder for more than one applicant in an auction⁴⁷⁵ in order to ensure that an individual is not in a position to be privy to the bidding strategies of more than one applicant in a spectrum auction, which could allow it to be a conduit—intentional or unintentional—for bidding information between auction applicants. The same concerns that prompted the Commission to adopt this prohibition in spectrum auctions exist in the universal service auction context. Therefore, to align with our spectrum auction rules and to help guard against potential violations of the prohibited communications rule, we adopt our proposed amendment to this rule and will prohibit the same individual from serving as an authorized bidder for more than one auction applicant in a given universal service auction.⁴⁷⁶

191. *Agreement Disclosures; Certification Concerning Agreement Disclosures.* Sections 1.21001(b)(3) and (b)(4) of the Commission's rules currently require each universal service auction applicant to identify in its short-form application all real parties in interest to any agreements relating to the participation of the applicant in the competitive bidding and to certify that its application discloses all real parties in interest to any agreements involving the applicant's participation in the competitive

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Rcd at 4068-69, Appx. A, Proposed Rules, Sec. 1.21001(f)(5); *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 718, n.189.

⁴⁷⁰ *5G Fund NPRM*, 35 FCC Rcd at 4040, 4069, para. 135, Appx. A, Proposed Rules, Sec. 1.21001(f)(7); *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1491, para. 191; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 718, para. 69.

⁴⁷¹ 47 CFR § 1.21001(b)(1).

⁴⁷² *See id.* §§ 54.1005(a)(1), 54.315(a)(1), 54.804(a)(1).

⁴⁷³ *5G Fund NPRM*, 35 FCC Rcd at 4041, 4066, para. 140, Appx. A, Proposed Rules, Sec. 1.21001(b)(1); *see* 47 CFR §§ 1.2105(a)(2)(ii)(B), 1.2112(a)(1).

⁴⁷⁴ 47 CFR § 1.21001(b)(2).

⁴⁷⁵ *Id.* § 1.2105(a)(2)(iii).

⁴⁷⁶ *5G Fund NPRM*, 35 FCC Rcd at 4041-42, 4066, para. 141, Appx. A, Proposed Rules, Sec. 1.21001(b)(2). We note that a violation of the Commission's prohibited communications rule could occur if an individual acts as the authorized bidder for two or more applicants because a single individual may, even unwittingly, be influenced by the knowledge of the bids or bidding strategies of multiple applicants, in his or her actions on behalf of such applicants.

bidding.⁴⁷⁷ To better align the agreement disclosure requirement and associated certification for universal service auctions with the agreement disclosure requirement in our spectrum auction rules and with the procedures adopted for the CAF Phase II auction and the Rural Digital Opportunity Fund,⁴⁷⁸ we adopt our proposed amendments to these rules. Accordingly, an applicant must disclose all real parties in interest to any agreements and provide a brief description of each agreement it discloses,⁴⁷⁹ and must certify that its application discloses all real parties in interest to any agreements and that it has provided a brief description of, and identified each party to, any partnerships, joint ventures, consortia or other agreements, arrangements, or understandings of any kind, including any joint bidding arrangements, relating to the applicant's participation in the competitive bidding and the support being sought.⁴⁸⁰

192. *Certification Concerning Auction Defaults.* Section 1.21001(b)(7) of the Commission's rules currently requires each universal service auction applicant to certify that it will make any payment that may be required in the event of an auction default.⁴⁸¹ To confirm an applicant's understanding that it will be deemed in default and thus liable for a payment, we adopt our proposed amendment to this rule to require an applicant to also acknowledge, as part of making this certification and as a condition of participating in the auction, that it will be deemed in default and subject to either a default payment or a forfeiture in the event of an auction default.⁴⁸²

193. *Due Diligence Certification.* We adopt our proposal to require each universal service auction applicant to acknowledge through a certification that it has sole responsibility for investigating and evaluating all technical and marketplace factors that may have a bearing on the level of support it submits as a bid, and that if the applicant wins support, it will be able to build and operate facilities in accordance with the obligations applicable to the type of support it wins and the Commission's rules generally.⁴⁸³ This certification will help ensure that each applicant acknowledges and accepts responsibility for its bids and any forfeitures imposed in the event of an auction default, and that the

⁴⁷⁷ 47 CFR § 1.21001(b)(3), (b)(4).

⁴⁷⁸ See *id.* § 1.2105(a)(2)(viii); *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1439-40, para. 26; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 718, para. 70.

⁴⁷⁹ *5G Fund NPRM*, 35 FCC Rcd at 4042, 4066, para. 142, Appx. A, Proposed Rules, Sec. 1.21001(b)(3).

⁴⁸⁰ *Id.* at 4042, 4067, para. 142, Appx. A, Proposed Rules, Sec. 1.21001(b)(4).

⁴⁸¹ 47 CFR § 1.21001(b)(7).

⁴⁸² *5G Fund NPRM*, 35 FCC Rcd at 4042, 4067, para. 143 & n.209, Appx. A, Proposed Rules, Sec. 1.21001(b)(10). As a result of the amendments to the Part 1, Subpart AA rules we adopt herein, current section 1.21001(b)(7) is redesignated as section 1.21001(b)(10). See Appendix A—Final Rules; *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1441, 1520-21, paras. 31, 314 & n.516 (noting that agreeing to a forfeiture payment in the event of an auction default is a condition for participating in bidding in the [CAF Phase II] auction and that such a payment satisfies the requirements of the Commission's rules with respect to auction default payments); *Rural Digital Opportunity Fund Order*, 35 FCC Rcd at 736, para. 117 (“[a]s a condition of participating in the Rural Digital Opportunity Fund auction, [applicants] will acknowledge that they are subject to a forfeiture in the event of an auction default”); *Rural Digital Opportunity Fund Phase I Auction Scheduled for October 29, 2020; Notice and Filing Requirements and Other Procedures for Auction 904 Procedures Public Notice*, Public Notice, 35 FCC Rcd 6077, 6178, para. 321 & n.564 (2020) (*Auction 904 Procedures Public Notice*) (noting that agreeing to a forfeiture payment in the event of an auction default is a condition for participating in bidding in Auction 904 and that such a payment satisfies the requirements of the Commission's rules with respect to auction default payments).

⁴⁸³ *5G Fund NPRM*, 35 FCC Rcd at 4042-43, 4067, para. 144, Appx. A, Proposed Rules, Sec. 1.2001(b)(7); see also *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1472, para. 119; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 724-25, para. 84.

applicant will not attempt to place responsibility for the consequences of its bidding activity on either the Commission or third parties.⁴⁸⁴

194. *Technical and Financial Qualifications Certification.* In connection with the eligibility requirements relating to technical and financial qualifications we adopt herein, we adopt our proposal to require each 5G Fund auction applicant to certify that it is technically and financially capable of meeting the 5G Fund public interest obligations and performance requirements in each area for which it seeks support.⁴⁸⁵ Based on our experience with Mobility Fund Phase I, CAF Phase II, and the Rural Digital Opportunity Fund, this approach is an appropriate screening process to ensure serious participation, without being overly burdensome to applicants and recipients.⁴⁸⁶

195. *Status as an Eligible Telecommunications Carrier.* Although we will not to require an applicant to obtain an ETC designation prior to applying to participate in a 5G Fund auction, consistent with the approach taken in the CAF Phase II and Rural Digital Opportunity Fund auctions, we adopt our proposal to require each 5G Fund auction applicant to disclose in its short-form application its status as an ETC in any area for which it will seek 5G Fund support or as an entity that will become an ETC in any such area after if it is a winning bidder for 5G Fund support, and to certify that its disclosure is accurate.⁴⁸⁷ As for CAF Phase II and the Rural Digital Opportunity Fund, we will also require each auction applicant to disclose in the short-form application any study area codes (SACs) associated with an applicant (or its parent company) if the applicant indicates it is currently an ETC.⁴⁸⁸

196. *Access to Spectrum.* In connection with the eligibility requirements relating to spectrum access we adopt herein, we adopt our proposal to require each 5G Fund auction applicant to describe in its short-form application the spectrum access it plans to use to meet its 5G Fund public interest obligations and performance requirements in the particular area(s) for which it intends to bid.⁴⁸⁹ Specifically, an applicant must (1) disclose whether it currently holds or leases the spectrum, (2) identify the license applicable to the spectrum to be accessed, the type of service covered by the license, the particular frequency band(s), the call sign, and any necessary renewal expectancy, and (3) indicate whether such spectrum access is contingent on obtaining support in a 5G Fund auction.⁴⁹⁰

197. Because the spectrum an applicant plans to use to meet its 5G Fund public interest obligations and performance requirements must be capable of supporting 5G service as it is defined in the performance requirements adopted for 5G Fund support, we will require that entities seeking to receive support from the 5G Fund have access to spectrum and sufficient bandwidth (at a minimum, 10

⁴⁸⁴ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1472, para. 119; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 725, para. 85.

⁴⁸⁵ *5G Fund NPRM*, 35 FCC Rcd 4044-45, 4079, para. 151, Appx. A, Proposed Rules, Sec. 54.1014(a)(1).

⁴⁸⁶ See *USF/ICC Transformation Order*, 29 FCC Rcd at 17801, para. 403; *April 2014 Connect America Order and Further Notice*, 29 FCC Rcd at 7066, para. 47; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 719, para. 72.

⁴⁸⁷ *5G Fund NPRM*, 35 FCC Rcd 4045, 4079, para. 152, Appx. A, Proposed Rules, Sec. 54.1014(a)(2); *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1465, para. 98; *CAF Phase II Auction Order*, 31 FCC Rcd at 6001, para. 147; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 723, para. 81.

⁴⁸⁸ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1465, para. 98; *Auction 904 Procedures Public Notice*, 35 FCC Rcd at 6111, para. 94. Any time that a service provider is designated as an ETC by a state or the Commission, the Universal Service Administrative Company will assign that service provider a SAC before the provider begins receiving universal service support.

⁴⁸⁹ See *5G Fund NPRM*, 35 FCC Rcd at 4045-46, 4079, paras. 153-54, Appx. A, Proposed Rules, Sec. 54.1014(a)(3).

⁴⁹⁰ See *id.* at 4045, 4079, para. 153, Appx. A, Proposed Rules, § 54.1014(a)(3). We note that any other contingency would render the relevant spectrum access insufficient to meet our requirements for participation.

megahertz x 10 megahertz using frequency division duplex (FDD) or 20 megahertz using time division duplex (TDD)) capable of supporting 5G services in the particular area(s) for which it intends to bid.⁴⁹¹ An applicant will be required to disclose the total amount of bandwidth (in megahertz) to which the applicant has access under the license applicable to the spectrum to be accessed.

198. In addition, we will permit an applicant to rely only on licensed spectrum to which the applicant has exclusive use (i.e., spectrum licensed by the Commission for which the applicant holds a license or lease and that it is not required to share use of with others pursuant to such license or lease) to meet its 5G Fund public interest obligations and performance requirements, and will require an applicant to have secured any Commission approvals necessary for the required spectrum access prior to submitting an auction application for the described spectrum access to be considered sufficient.⁴⁹² Each applicant will be required to certify in its short-form application that it has access to spectrum in each area in which it intends to bid for 5G Fund support within each state and/or Tribal land area selected in this application, that it will retain such access for at least ten (10) years after the date on which it is authorized to receive support, and that the description of spectrum access in the area(s) for which it intends to bid for support provided in its application is accurate.⁴⁹³

199. AST&Science supports requiring applicants to demonstrate that they have access to spectrum in an area sufficient to satisfy the 5G Fund performance requirements, but asks the Commission to clarify that an applicant with a binding contract to gain access to the requisite spectrum at the time of the auction meets this eligibility requirement.⁴⁹⁴ AST&Science submits that a contractual right to access spectrum should be sufficient even if Commission approval is necessary to consummate the contract, as long as there is no apparent regulatory disability that would prevent the applicant from securing the requisite consent, and advocates allowing a winning bidder to file the requisite request for Commission approval promptly (e.g., within 30 days) after the auction concludes, rather than having to demonstrate the receipt of all necessary Commission spectrum access approvals in advance of the auction, as is the case with post-auction securing of ETC designations.⁴⁹⁵

200. We decline to allow a winning bidder to obtain any necessary spectrum access approvals after the auction because we find that doing so in an auction where spectrum is the sole technology that will be relied upon by a winning bidder to meet the public interest obligations and performance requirements associated with receiving support could increase the risk of defaults if it is ultimately unable to secure the necessary approvals. Unlike the post-auction ETC designation process with state entities or the Commission, pre-auction agreements between private parties for exclusive use of licensed spectrum that are contingent upon a party winning in the auction could raise auction integrity concerns involving, for example, prohibited communications between potential bidders and joint bidding. In addition, such agreements present more risk of default for multiple reasons, including the statutory requirements for Commission approval of such agreements. In addition, it would not be appropriate for the short-form application review process to effectively grant an advisory opinion on whether an applicant is likely to receive Commission approval for spectrum access after due consideration of the spectrum screen and any potential competitive implications. Accordingly, we conclude that requiring an applicant to have secured

⁴⁹¹ See *id.* at 4046, para. 154. As noted in the *5G Fund NPRM*, 3GPP, Release 16 has finalized various frequency bands for North America that appear to be capable of supporting 5G. See *id.* (citing 3GPP, *Release 16* (Oct. 2, 2019), <https://www.3gpp.org/release-16>).

⁴⁹² See *id.* at 4046, para. 153. A pending request for such an approval would not be considered sufficient to satisfy this requirement.

⁴⁹³ *Id.* at 4045-46, 4079, para. 153, Appx. A, Proposed Rules, Sec. 54.1014(a)(3). Because we adopt a 10-year term of support for the 5G Fund, the spectrum access rule we adopt requires an applicant to certify that it will retain such spectrum access for 10 years after it is authorized to receive 5G Fund support.

⁴⁹⁴ AST&Science Comments at 33.

⁴⁹⁵ *Id.*

any Commission approvals necessary for the required spectrum access prior to submitting its short-form application to participate in a 5G Fund auction, as we did for Mobility Fund Phase I, CAF Phase II, and the Rural Digital Opportunity Fund,⁴⁹⁶ will serve to avoid these issues.

201. RWA supports our proposal to require 5G Fund auction applicants to demonstrate that they have access to sufficient bandwidth to meet their 5G Fund public interest obligations and performance requirements, and submits that a minimum of 15 megahertz of spectrum should be available in a given census tract that can be devoted to 5G use because 15 megahertz is a sufficient amount of spectrum to support 35/3 Mbps speed when used in coordination with Multiple Input Multiple Output (MIMO).⁴⁹⁷ We find that RWA's proposed minimum amount of dedicated 15 megahertz TDD spectrum for 5G is sufficient to meet the 35/3 Mbps speeds requirement when the downlink to uplink ratio is 2:1. However, we conclude that 15 megahertz FDD paired spectrum (or 7.5 megahertz x 7.5 megahertz) is insufficient to satisfy the 35/3 Mbps speeds requirement even for mid-band spectrum which generally has higher spectral efficiency than low-band spectrum.⁴⁹⁸

202. RWA opposes allowing unlicensed spectrum to be used to satisfy the spectrum access eligibility criterion because its availability cannot be relied upon, but submits that General Authorized Access (GAA) spectrum in the Citizens Broadband Radio Service should be considered qualifying spectrum if enough is available in the rural area due to the presence of Spectrum Access System (SAS) administrators in the 3550-3700 MHz band (3.5 GHz band).⁴⁹⁹ The Commission adopted a three-tiered access and authorization framework to coordinate shared federal and non-federal use of the 3.5 GHz band, with incumbents comprising the first tier (Incumbent Access) and receiving protection from all other users, followed by Priority Access Licenses (PALs) in the second tier, and GAA in the third tier.⁵⁰⁰ GAA spectrum is available on a shared/non-exclusive basis throughout the 3550-3700 MHz band (3.5 GHz band), and GAA users are also permitted to use frequencies in the 3550-3650 MHz band when higher-tier Incumbent Access tier users and Priority Access Licensees are not using the spectrum, as determined by the SAS, and consistent with the rules governing PAL protection areas.⁵⁰¹ GAA users must avoid causing harmful interference to higher-tier users and must accept interference from all other users, including other GAA users.⁵⁰² We decline to allow 5G Fund support recipients to rely only on GAA spectrum to satisfy the spectrum access requirements we adopt for the 5G Fund. We find that the criteria for gaining and retaining access to GAA spectrum and the interference provisions associated with its use are inconsistent with the spectrum access requirements we adopt for an applicant seeking to

⁴⁹⁶ See *Mobility Fund Phase I Auction Scheduled for September 27, 2012; Notice and Filing Requirements and Other Procedures for Auction 901*, Public Notice, 27 FCC Rcd 4725, 4754-55, para. 96 (WTB 2012) (*Mobility Fund Phase I Auction Public Notice*); *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1461, para. 87; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 723-24, para. 82.

⁴⁹⁷ RWA Comments at 20.

⁴⁹⁸ The minimum bandwidth requirement of 10 megahertz x 10 megahertz FDD (or 20 megahertz TDD in ratio of 1:1) we adopt is based on the need for 10 megahertz of downlink spectrum to achieve the required download speed of 35 Mbps that we adopt for 5G Fund support recipients. For this reason, we would consider 15 megahertz TDD of dedicated bandwidth to be sufficient if it has a downlink to uplink ratio of 2:1 and thus provides 10 megahertz of bandwidth for downlink, but would not consider 15 megahertz FDD (i.e., 7.5 megahertz x 7.5 megahertz) of dedicated bandwidth to be sufficient because it does not provide the minimum amount of spectrum (i.e., at least 10 megahertz of downlink spectrum) necessary to achieve a download speed of 35 Mbps.

⁴⁹⁹ *Id.* SASs are automated frequency coordinators that coordinate operations between and among users in different access tiers in the 3.5 GHz band. See *Promoting Investment in the 3550-3700 MHz Band*, Report and Order, 33 FCC Rcd 10598, 10600, para. 3 (2018) (*2018 3.5 GHz Report and Order*).

⁵⁰⁰ See *2018 3.5 GHz Report and Order*, 33 FCC Rcd at 10599-600, para. 3.

⁵⁰¹ 47 CFR § 96.35(a), (b).

⁵⁰² *Id.* § 96.35(c), (d); see *2018 3.5 GHz Report and Order*, 33 FCC Rcd at 10600, para. 3.

participate in the 5G Fund, which require an applicant to demonstrate that it has secured access to spectrum and sufficient bandwidth to meet the 5G Fund public interest obligations and performance requirements in the areas for which it seeks support prior to submitting its short-form application and to certify that it will retain such access over the ten year support term if it is authorized to receive 5G Fund support. We therefore conclude that, similar to unlicensed spectrum, the availability of GAA spectrum cannot be relied upon by a 5G Fund support recipient to meet its public interest obligations and performance requirements because the recipient may not be able to predictably and/or consistently gain and/or retain access to GAA spectrum throughout the support term, which could significantly increase its risk of default. Thus, while we will permit a 5G Fund support recipient to use GAA spectrum to augment its spectrum access in its provision of 5G service in areas for which it is awarded support, it must have exclusive access to a sufficient amount of spectrum that enables it to meet the 5G Fund public interest obligations and performance requirements independently of any GAA spectrum use.⁵⁰³

203. *Technical and Financial Qualifications.* Similar to the approach adopted for CAF Phase II and the Rural Digital Opportunity Fund,⁵⁰⁴ we establish two pathways for a 5G Fund auction applicant to demonstrate its technical and financial qualifications to participate in a 5G Fund auction.⁵⁰⁵ To determine which pathway an applicant needs to take, we will first require the applicant to indicate in its application whether it has been providing mobile wireless voice and/or mobile wireless broadband service for at least three years prior to the short-form application deadline (or that it is a wholly-owned subsidiary of an entity that has been providing such service for at least three years).⁵⁰⁶

204. *Applicants That Have Been Providing Mobile Wireless Service for at Least Three Years.* We adopt our proposal to require an applicant that indicates it has been providing mobile wireless voice and/or mobile wireless broadband service to end user subscribers for at least three years prior to the short-form application deadline (or is a wholly owned subsidiary of an entity that has been providing such service for at least three years) to certify to that effect, and to: (1) specify the number of years it (or its parent company, if it is a wholly owned subsidiary) has been providing such service, (2) certify that it (or its parent company, if it is a wholly owned subsidiary) has submitted mobile wireless voice and/or mobile wireless broadband data on FCC Form 477 as required during that time period, and (3) provide any FCC Registration Numbers (FRNs) that the applicant or its parent company (and in the case of a holding company applicant, its operating companies) have used to submit mobile wireless voice and/or mobile

⁵⁰³ Consistent with our decision not to allow 5G Fund support recipients to rely on GAA spectrum alone to satisfy the spectrum access requirements we adopt for the 5G Fund, we will similarly not allow 5G Fund support recipients to rely on GAA spectrum alone to meet the associated minimum bandwidth requirement we adopt. Thus, while a 5G Fund support recipient may use GAA spectrum to augment the amount of bandwidth it has available to meet the 5G Fund public interest obligations and performance requirements, it must have access to sufficient bandwidth that enables it to meet the minimum bandwidth requirement independently of any GAA spectrum use.

⁵⁰⁴ See 47 CFR § 54.315(a)(7); *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 719-20, paras. 73-75.

⁵⁰⁵ See *5G Fund NPRM*, 35 FCC Rcd at 4046-48, paras. 155-59; AST&Science Comments at 34 (adopting two separate pathways for applicants to demonstrate technical and financial qualifications is a generally sound approach).

⁵⁰⁶ See *5G Fund NPRM*, 35 FCC Rcd at 4046, 4079, para. 155, Appx. A, Proposed Rules, Sec. 54.1014(b)(4)(i). As for applicants in the CAF Phase II auction, an applicant for a 5G Fund auction will be deemed to have started providing mobile wireless broadband service on the date it began commercially offering service to end users. *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1444, para. 41. If the applicant is applying as a consortium or joint venture, we will allow the applicant to rely on the length of time a member of the consortium or joint venture has been providing mobile service prior to the short-form application deadline in responding to this question. *Id.* at 1444, n.85; AST&Science Comments at 34-35 (asking the Commission to clarify that in the case of a cooperative venture with more than one applicant, an applicant be deemed to have the requisite technical and financial qualifications if at least one party to the application has been providing service for at least three years).

wireless broadband data with FCC Form 477 data for the past three years.⁵⁰⁷ We conclude that data regarding where a service provider offers mobile wireless voice and/or mobile wireless broadband service, the number of mobile wireless voice and/or mobile wireless broadband subscribers it has, and the mobile wireless broadband speeds it offers will provide insight into an applicant's experience in providing such service that will help Commission staff in determining whether an applicant can reasonably be expected to be capable of meeting the 5G Fund public interest obligations and performance requirements.⁵⁰⁸ We also expect that it will generally be sufficient to review FCC Form 477 data (and/or Digital Opportunity Data Collection filings, as applicable) from only the past three years because those data would reflect the services that the applicant is currently offering or recently offered and will illustrate the extent to which an applicant was able to scale its network in the recent past.⁵⁰⁹

205. *Applicants That Have Been Providing Mobile Wireless Service for Fewer Than Three Years, or Not at All.* If an applicant indicates that it has not been providing mobile wireless voice and/or mobile wireless broadband service for at least three years prior to the short-form application deadline (or is not a wholly owned subsidiary of an entity that has been providing such service for at least three years), we will require the applicant to submit certain high-level operational history, technical, and financial information to enable Commission staff to determine whether the applicant can reasonably be expected to be capable of meeting the 5G Fund public interest obligations and performance requirements.⁵¹⁰ Specifically, we will require such an applicant to submit (1) information concerning its operational history and a preliminary project description,⁵¹¹ (2) a letter of interest from a qualified bank stating that the bank would provide a letter of credit to the applicant if the applicant becomes a winning bidder for bids of a certain dollar magnitude, as well as the maximum dollar amount for which the bank would be

⁵⁰⁷ See *5G Fund NPRM*, 35 FCC Rcd 4046-47, 4079-80, para. 156, Appx. A, Proposed Rules, Sec. 54.1014(b)(4)(ii). By collecting the FRNs that an applicant (or its parent company, if it is a wholly owned subsidiary) has used to submit mobile wireless voice and/or mobile wireless broadband data as required on FCC Form 477, Commission staff will be able to cross-reference the FCC Form 477 data filed by the applicant (or its parent company) for the past three years. The specific FCC Form 477 filing periods covering this three-year period will be announced in the public notice adopting the procedures for the auction. We note that the Commission has initiated a new Digital Opportunity Data Collection that is distinct from the existing FCC Form 477 collection and that will gather geospatial broadband service availability data specifically targeted toward advancing our universal service goals. See *Digital Opportunity Data Collection Order and Further Notice*, 34 FCC Rcd at 7506, para. 2. The Commission has indicated it expects that the Digital Opportunity Data Collection will largely displace the FCC Form 477 process over the long term, at least with respect to collection of granular deployment data, and that the broadband deployment data collection that is part of FCC Form 477 to be discontinued after the Digital Opportunity Data Collection has been established. See *id.* at 7559, para. 135. We have also asked if there are other portions of FCC Form 477 collection we should consider sunsetting. *Id.* In the event the Commission discontinues the requirement to file FCC Form 477 in the future, we will require a 5G Fund auction applicant that certifies that it has been providing mobile wireless voice and/or mobile wireless broadband service to end user subscribers for at least three years prior to the short-form application deadline to certify that it has made the required FCC Form 477 and/or Digital Opportunity Data Collection filings, as applicable, during the specified filing periods covering this three-year period and provide information regarding the FRNs used to make such filings.

⁵⁰⁸ See *5G Fund NPRM*, 35 FCC Rcd 4046-47, para. 156.

⁵⁰⁹ *Id.*

⁵¹⁰ See *id.* at 4047, paras. 157.

⁵¹¹ Because we expect that applicants will already have started planning to deploy the required mobile wireless voice and mobile wireless broadband services upon authorization of 5G Fund support, and based on our experience with CAF Phase II and the Rural Digital Opportunity Fund, we find it will not be unduly burdensome for an applicant to provide information about the network it plans to build or upgrade and the technologies it plans to use to provide mobile wireless broadband service if it were to become a winning bidder for 5G Fund support. In addition, we note that we are adopting a requirement that winning bidders submit a detailed project plan that contains this type of information in their long-form applications. See *infra* para. 221.

willing to issue a letter of credit to the applicant,⁵¹² and (3) a statement that the bank would be willing to issue a letter of credit that is substantially in the same form as set forth in the model letter of credit in Appendix C to this *Report and Order*.⁵¹³ Consistent with the procedures adopted for CAF Phase II and the Rural Digital Opportunity Fund, we will treat the information submitted by an applicant concerning its operational history and its preliminary project description, along with any associated supporting information, as confidential, and will withhold such information from routine public inspection both during and after a 5G Fund auction.⁵¹⁴

206. As in any Commission auction for universal service fund support, we seek to balance the burdens on 5G Fund auction applicants of completing a short-form application with the Commission's statutory obligation to protect universal service funds, the integrity of the auction, and rural consumers. We conclude that requiring a potential bidder to submit evidence in its short-form application that it can meet the 5G Fund public interest obligations and performance requirements in the area(s) for which it seeks 5G Fund support strikes the correct balance of helping to safeguard consumers from situations where bidders unable to meet such obligations divert support from bidders that can meet them while not being unduly burdensome for auction applicants.

207. *Limit on Filing Applications.* To simplify the application process for applicants, reduce the administrative burden on Commission staff, and align with the Commission's spectrum auction rules and the approach adopted in recent universal service auctions,⁵¹⁵ we will prohibit the filing of more than one application by the same entity or by commonly controlled entities in a single universal service auction under any circumstances.⁵¹⁶ We adopt the definitions for the terms "controlling interest," "consortium," and "joint venture" proposed in the *5G Fund NPRM*, which we will use to identify commonly controlled entities for purposes of this prohibition and for purposes of an applicant making any required auction application certifications.⁵¹⁷ As in our spectrum auctions, in the case of a consortium, each member of the consortium would be considered to have a controlling interest in the consortium filing an application for an auction and thus a consortium member would not be able to separately file its own application to participate in that auction (or be a member of another consortium applicant in that auction).⁵¹⁸ In addition, we adopt our proposal that in the event that applications for a universal service auction are filed by applicants with overlapping controlling interests, both applications will be deemed incomplete and at most only one such applicant may be deemed qualified to bid.⁵¹⁹ In our experience in the spectrum

⁵¹² The bank issuing the letter of interest must meet the acceptability requirements we adopt herein for banks issuing letters of credit to 5G Fund winning bidders.

⁵¹³ *5G Fund NPRM*, 35 FCC Rcd at 4047-48, paras. 158-59.

⁵¹⁴ *Id.* at 4047, para. 158; *see Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1455, 1474, 1475-76, paras. 75, 123, 126; *Auction 904 Procedures Public Notice*, 35 FCC Rcd at 6103, para. 74.

⁵¹⁵ *See* 47 CFR §§ 1.2105(a)(3), 1.2105(b)(1)(ii)(A); *Auction 904 Procedures Public Notice*, 35 FCC Rcd at 6091-92, paras. 42-44.

⁵¹⁶ *5G Fund NPRM*, 35 FCC Rcd at 4043, 4067-68, para. 145, Appx. A, Proposed Rules, Sec. 1.21001(c). As a result of the amendments to the Part 1, Subpart AA rules we adopt herein, current section 1.21001(c) is redesignated as section 1.21001(e). *See* Appendix A—Final Rules. To be clear, we will not restrict smaller carriers that do not individually submit short-form applications from entering into joint ventures and bidding consortia in order to combine resources and achieve other efficiencies.

⁵¹⁷ *5G Fund NPRM*, 35 FCC Rcd at 4043, 4068, para. 145, Appx. A, Proposed Rules, Sec. 1.21001(d). As a result of the amendments to the Part 1, Subpart AA rules we adopt herein, current section 1.21001(d) is redesignated as section 1.21001(f). *See* Appendix A—Final Rules.

⁵¹⁸ 47 CFR § 1.2105(a)(3).

⁵¹⁹ *5G Fund NPRM*, 35 FCC Rcd at 4043, 4068, para. 145, Appx. A, Proposed Rules, Secs. 1.21001(d), (f)(3); *see infra* para. 209 (adopting changes to the Part 1, Subpart AA short-form application processing rules to address situations involving applications filed by commonly controlled entities).

auction context, this has helped to minimize unnecessary burdens on the Commission's resources by eliminating the need to process duplicative, repetitious, or conflicting applications.

208. *Certification Concerning Non-Controlling Interests.* Although we prohibit the filing of more than one application by commonly controlled entities in a single universal service auction, we recognize that in some circumstances, entities may have non-controlling interests in other entities and both entities may wish to bid in an auction. To the extent that there is no overlap between the employees in both entities that leads to the sharing of bidding information, such an arrangement may not implicate our concerns over joint bidding among separate applicants in an auction. However, such an arrangement could allow for the non-controlling interest or shared employees to act as a conduit for communication of bidding information unless the applicants establish internal controls to ensure that bidding information would not flow between them. To address this possibility and ensure that such arrangements do not serve or appear to be conduits for information, and align with the Commission's spectrum auction rules,⁵²⁰ we will require an applicant that has a non-controlling interest with respect to more than one application in a single universal service auction to certify that it is not, and will not be, privy to, or involved in, in any way, the bids or bidding strategy of more than one auction applicant and that it has established internal control procedures to preclude any person acting on behalf of the applicant from possessing information about the bids or bidding strategies of more than one applicant or communicating such information with respect to either applicant to another person acting on behalf of and possessing such information regarding another applicant.⁵²¹

209. *Application Processing.* Consistent with the limits on filing applications we adopt, we adopt our proposed amendment to the application processing rules to specify that if an entity submits multiple applications in a single universal service auction, or if entities that are commonly controlled by the same individual or same set of individuals submit more than one application in a single auction, only one of such applications may be found to be complete when reviewed for completeness and compliance with the Commission's rules.⁵²² In our experience in the spectrum auction context, this has helped to minimize unnecessary burdens on the Commission's resources by eliminating the need to process duplicative, repetitious, or conflicting applications. We also adopt our clarifying amendments to the application processing rules in order to simplify the application process for applicants, reduce the administrative burden on Commission staff, and align with the Commission's spectrum auction rules and the approach adopted in recent universal service auctions.⁵²³

210. *Prohibition on Joint Bidding Arrangements; Prohibited Communications Rule.* In view of our decision to prohibit commonly controlled entities from filing more than one application in a single universal service auction, and to align with the Commission's practice in spectrum auctions and with the approach adopted for the Rural Digital Opportunity Fund Phase I auction, we adopt our proposal to prohibit applicants from entering into joint bidding arrangements relating to their participation in a universal service auction.⁵²⁴ We also adopt our proposals to amend the definition of "applicant" and add a

⁵²⁰ 47 CFR §§ 1.2105(a)(2)(x), (c)(2).

⁵²¹ *5G Fund NPRM*, 35 FCC Rcd at 4043-44, 4067, para. 146, Appx. A, Proposed Rules, Sec. 1.21001(b)(6). We caution, however, that submission of such certification by an applicant will not outweigh specific evidence that a communication violating the Commission's rules has occurred, nor will it preclude the initiation of an investigation when warranted.

⁵²² *5G Fund NPRM*, 35 FCC Rcd at 4043, 4068-69, 145, Appx. A, Proposed Rules, Sec. 1.21001(f)(3). As a result, the amendments to the Part 1, Subpart AA rules we adopt herein, section 1.21001(d) is redesignated as section 1.21001(f). See Appendix A—Final Rules.

⁵²³ *5G Fund NPRM*, 35 FCC Rcd at 4068-69, Appx. A, Proposed Rules, Sec. 1.2001(f).

⁵²⁴ *Id.* at 4044, 4069, para. 147, Appx. A, Proposed Rules, Sec. 1.21002(b); see *Updating Part 1 Competitive Bidding Rules et al.*, Report and Order, Order on Reconsideration of the First Report and Order, Third Order on Reconsideration of the Second Report and Order, Third Report and Order, 30 FCC Rcd 7493, 7573, para. 187

(continued....)

definition of “bids or bidding strategies” in section 1.21002(a),⁵²⁵ and add a requirement that each universal service auction applicant certify in its short-form application that it has not entered into any explicit or implicit agreements, arrangements, or understandings of any kind related to the support to be sought through the auction, other than those disclosed in the short-form application.⁵²⁶

211. Further, we adopt our other proposed amendments to section 1.21002 to better align with our spectrum auction rules and the decisions adopted herein.⁵²⁷ We will require an applicant that has a non-controlling interest with respect to more than one application to implement internal controls that preclude any person acting on behalf of the applicant from possessing information about the bids or bidding strategies of more than one applicant or communicating such information with respect to either applicant to another person acting on behalf of and possessing such information regarding another applicant.⁵²⁸ We will also require an applicant to modify its application for an auction to reflect any changes in ownership or in membership of a consortium or a joint venture or agreements or understandings related to the support being sought.⁵²⁹ In addition, we adopt our proposed clarification and accuracy amendments to section 1.21002 concerning the procedure for reporting a prohibited communication.⁵³⁰

2. Red Light Rule for Universal Service Auctions

212. The Commission adopted rules, including a provision referred to as the “red light rule,” that implement the Commission’s obligation under the Debt Collection Improvement Act of 1996, which governs the collection of debts owed to the United States, including debts owed to the Commission.⁵³¹ Under the red light rule, applications and other requests for benefits filed by parties that have outstanding debts owed to the Commission will not be processed.⁵³² Applicants seeking to participate in a universal service auction are subject to the Commission’s red light rule.⁵³³ Pursuant to the red light rule, unless otherwise expressly provided for, the Commission will withhold action on an application by any entity found to be delinquent in its debt to the Commission.⁵³⁴

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(2015) (2015 Part 1 Report and Order) (modified by Erratum, 30 FCC Rcd 8518 (2015)); *Auction 904 Procedures Public Notice*, 35 FCC Rcd at 6092-94, paras. 45-47.

⁵²⁵ *5G Fund NPRM*, 35 FCC Rcd at 4044, para. 147, Appx. A, Proposed Rules, Sec. 1.21002(a)(1)-(2).

⁵²⁶ *Id.* at 4042, 4069, para. 142, Appx. A, Proposed Rules, Sec. 1.21001(b)(5).

⁵²⁷ *Id.* at 4044, 4070, paras. 148-49, Appx. A, Proposed Rules, Secs. 1.21002(c)-(f). As a result of our amendments to section 1.21002, current sections 1.21002(c) and (d) are redesignated as sections 1.21002(e) and (f). *See* Appendix A—Final Rules.

⁵²⁸ *See* 47 CFR § 1.2105(c)(2).

⁵²⁹ *See id.* § 1.2105(c)(3).

⁵³⁰ *5G Fund NPRM*, 35 FCC Rcd at 4044, 4070, para. 149, Appx. A, Proposed Rules, Secs. 1.21002(e), (f).

⁵³¹ *Amendment of Parts 0 and 1 of the Commission’s Rules; Implementation of the Debt Collection Improvement Act of 1996 and Adoption of Rules Governing Applications or Requests for Benefits by Delinquent Debtors*, Report and Order, 19 FCC Rcd 6540 (2004) (implementing Pub. L. No. 104-134, 110 Stat. 1321, 1358 (1996)) (*Debt Collection Report and Order*); 47 CFR Part 1, Subpart O.

⁵³² 47 CFR § 1.1910(b)(2).

⁵³³ Parties familiar with spectrum license auctions should note that the stricter spectrum license application rules supersede the Commission’s red light rules in the context of a spectrum license auction. *See* 47 CFR § 1.1902(f). However, no corresponding provision applies with respect to an auction for universal service fund support. Accordingly, the Commission’s standard red light rules apply.

⁵³⁴ 47 CFR § 1.1910(b)(2).

213. Concluding that robust participation would be critical to the success of the CAF Phase II auction, the Commission provided a limited waiver of the red light rule for any CAF Phase II auction applicant seeking to participate in the auction that was red lighted for debt owed to the Commission at the time it timely filed its short-form application.⁵³⁵ Because we consider robust participation to be critical to the success of any universal service auction, including a 5G Fund auction, we adopt our proposed amendments to the Commission's rules to codify the relief granted by the CAF Phase II auction limited waiver, to provide an applicant seeking to participate in any universal service auction the opportunity to resolve its red light issue(s) by the close of the application resubmission filing window.⁵³⁶ Under this approach, a red lighted applicant seeking to participate in a universal service auction will have until the close of the application resubmission filing window for that auction to resolve with its red light issue(s). If the applicant has not resolved its red light issue(s) by the close of the initial application filing window for a given auction, its application would be deemed incomplete, and if the applicant has not resolved its red light issue(s) by the close of the application resubmission window for the auction, Commission staff will immediately cease all processing of the applicant's short-form application, and the applicant will be deemed not qualified to bid in the auction.

214. We provide no further opportunity for an applicant to cure any red light issue beyond what we describe here. Moreover, we emphasize that the amendments we adopt here do not waive or otherwise affect the Commission's right or obligation to collect any debt owed to the Commission by a universal service auction applicant by any means available to the Commission, including set off, referral of debt to the United States Treasury for collection, and/or by red lighting other applications or requests filed by the affected auction applicant.

3. Long-Form Application Requirements

215. After the close of the auction, a public notice will be released declaring the auction closed, identifying the winning bidders, and establishing details and deadlines for next steps. A winning bidder will then be required to submit a post-auction long-form application with more extensive information about its qualifications, funding, and the network it intends to use to meet its 5G Fund public interest obligations and performance requirements, allowing for a further in-depth review of its qualifications prior to authorization of support.⁵³⁷

216. We adopt our proposal to apply the Commission's existing Part 1, Subpart AA universal service competitive bidding rules (including the amendments to those rules adopted herein) to 5G Fund auction winning bidders applying for 5G Fund support, as well as our proposed amendments to such rules.⁵³⁸ We also adopt our proposal to require 5G Fund auction winning bidders to provide the information described below in their post-auction long-form applications to demonstrate their qualifications for support.⁵³⁹ We conclude the long-form application requirements we adopt here provide for a fair and efficient review process and will best serve the Commission's ability to determine whether the applicants are ultimately eligible for 5G Fund support authorization funding.⁵⁴⁰

⁵³⁵ See *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1486-87, paras. 167.

⁵³⁶ *5G Fund NPRM*, 35 FCC Rcd at 4048-49, 4066, paras. 163-65, Appx. A, Proposed Rules, Secs. 1.1902(f), 1.21001(b)(11), 1.21001(f)(2), (f)(5), (f)(6); see *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1486-87, paras. 167. We received no comment on our proposed amendments to the red light rule.

⁵³⁷ *5G Fund NPRM*, 35 FCC Rcd at 4049-51, 4080-4081, paras. 166-74, Appx. A, Proposed Rules, Sec. 54.1014(b)(1).

⁵³⁸ 47 CFR § 1.21004; see *infra* para. 253 (adopting amendments to 47 CFR § 1.21004).

⁵³⁹ *5G Fund NPRM*, 35 FCC Rcd at 4049, para. 166.

⁵⁴⁰ We received no comment on our long-form application proposals.

217. *Ownership Disclosures.* We will require a winning bidder to disclose in its long-form application ownership information as set forth in section 1.2112(a) of the Commission's rules.⁵⁴¹ Ownership reported by a winning bidder during the short-form application process must be updated in the long-form application if any ownership disclosed in its short-form application has changed.

218. *Agreement Disclosures.* We will require a winning bidder to provide in its long-form application any updated information regarding the agreements, arrangements, or understandings related to its 5G Fund support disclosed in its short-form application.⁵⁴² A winning bidder may also be required to disclose in its long-form application the specific terms, conditions, and parties involved in any agreement into which it has entered and the agreement itself.⁵⁴³

219. *ETC Designation.* Consistent with our decision to permit a winning bidder to obtain its ETC designation after the close of the auction,⁵⁴⁴ we will require a winning bidder to submit appropriate documentation of its ETC designation in all the areas for which it will receive support in its long-form application, or certify that it will do so within 180 days of the public notice identifying winning bidders.⁵⁴⁵ We will also require a winning bidder to demonstrate that it has been designated an ETC covering each of the geographic areas for which it seeks to be authorized for support and that its ETC designation allows it to fully comply with the 5G Fund coverage requirements within the time provided to meet this requirement before 5G Fund support is authorized.⁵⁴⁶

220. *Financial and Technical Capability Certification.* As for the short-form application, we will require a winning bidder to certify in its long-form application that it is financially and technically capable of providing the required coverage and performance levels within the specified timeframe in the geographic areas in which it won support.⁵⁴⁷

221. *Project Description.* We will require a winning bidder to submit for its winning bids a detailed project description that describes the network to be built; identifies the proposed technology; demonstrates that the project is technically feasible; discloses the complete project budget; discusses each specific phase of the project (e.g., network design, construction, deployment, and maintenance); and includes a complete project schedule with timelines, milestones, and costs.⁵⁴⁸ As we did for the Rural Digital Opportunity Fund, additional details and guidance concerning the project description will be provided during the pre-auction process.⁵⁴⁹

222. *Spectrum Access.* As for the short-form application, we will require a winning bidder to provide in its long-form application a description of the spectrum access that will be used to meet its obligations in areas for which it is the winning bidder, including whether it currently holds or leases the spectrum, the license applicable to the spectrum to be accessed, the type of service covered by the license, the particular frequency band(s), and the call sign, the total amount of bandwidth (in megahertz) to which the applicant has access under the license applicable to the spectrum to be accessed, and any necessary

⁵⁴¹ *5G Fund NPRM*, 35 FCC Rcd at 4049, 4080, para. 167, Appx. A, Proposed Rules, Sec. 54.1014(b)(2)(i); see 47 CFR § 1.2112(a).

⁵⁴² *5G Fund NPRM*, 35 FCC Rcd at 4050, 4080, para. 168, Appx. A, Proposed Rules, Sec. 54.1014(b)(2)(ii).

⁵⁴³ *Id.*

⁵⁴⁴ See *supra* para. 158.

⁵⁴⁵ *5G Fund NPRM*, 35 FCC Rcd at 4050, 4080, para. 169, Appx. A, Proposed Rules, Sec. 54.1014(b)(2)(iv).

⁵⁴⁶ *Id.*

⁵⁴⁷ *5G Fund NPRM*, 35 FCC Rcd at 4050, 4080, para. 170, Appx. A, Proposed Rules, Sec. 54.1014(b)(2)(iii).

⁵⁴⁸ *Id.* at 4050, 4080, para. 171, Appx. A, Proposed Rules, Sec. 54.1014(b)(2)(vi).

⁵⁴⁹ See *Auction 904 Procedures Public Notice*, 35 FCC Rcd at 6168-74, paras. 304-311.

renewal expectancy.⁵⁵⁰ We will also require a winning bidder to certify that the description is accurate, that it has access to spectrum in the area(s) for which it is applying for support, and that it will retain such access for the entire 10-year support term.⁵⁵¹ Consistent with the requirements adopted for 5G Fund auction applicants, we will permit winning bidders to rely only on licensed spectrum to which they have exclusive use (i.e., spectrum licensed by the Commission for which a winning bidder holds a license or lease and that it is not required to share use of with others pursuant to such license or lease).

223. *Certifications as to Program Requirements.* We will require a winning bidder to make various certifications in its long-form application as to program requirements.⁵⁵² Specifically, a winning bidder must certify that it has the funds available for all project costs that exceed the amount of support to be received and that it will comply with all program requirements, including the public interest obligations and performance requirements adopted for the 5G Fund. A winning bidder must also certify that it will meet the applicable deadlines and requirements for demonstrating interim and final construction milestones adopted for the 5G Fund, and will comply with the data speed, data latency, data allowance, collocation, voice and data roaming, and reasonably comparable rate performance requirements and public interest obligations adopted for the 5G Fund.⁵⁵³

224. *Additional Information.* Similar to what the Commission is afforded under its Part 1, Subpart AA rules for competitive bidding for universal service support with respect to short-form applications,⁵⁵⁴ we adopt our proposal to permit the Commission to request in connection with its review of long-form applications such additional information as the Commission may require to determine whether a long-form applicant should be authorized to receive 5G Fund support.⁵⁵⁵

4. Letters of Credit and Bankruptcy Opinion Letters

225. *Letters of Credit.* Consistent with the requirements adopted for Mobility Fund Phase I, CAF Phase II, and for the Rural Digital Opportunity Fund, we adopt our proposal to require a long-form applicant to submit an irrevocable standby letter of credit prior to being authorized for support.⁵⁵⁶ As the Commission has previously explained, requiring all long-form applicants to obtain a letter of credit is “an effective means for accomplishing [the Commission’s] role as stewards of the public’s funds” because they “permit the Commission to immediately reclaim support” from support recipients that are not meeting their auction obligations.⁵⁵⁷ The letter of credit requirements we adopt for the 5G Fund will

⁵⁵⁰ *5G Fund NPRM*, 35 FCC Rcd at 4050, 4080, para. 172, Appx. A, Proposed Rules, Sec. 54.1014(b)(2)(v).

⁵⁵¹ *Id.*

⁵⁵² *Id.* at 4050-51, 4081, para. 173, Appx. A, Proposed Rules, Sec. 54.1014(b)(2)(vii), (viii).

⁵⁵³ *Id.*

⁵⁵⁴ *See* 47 CFR § 1.21001(b)(9).

⁵⁵⁵ *5G Fund NPRM*, 35 FCC Rcd at 4051, 4081, para. 174, Appx. A, Proposed Rules, Sec. 54.1014(b)(2)(x).

⁵⁵⁶ *Id.* at 4051, 4054, 4081, 4083, 4102-06, paras. 175, 184, Appx. A, Proposed Rules, Secs. 54.1014(b)(2)(viii), 54.1016(a), Appx. D; *see* 47 CFR §§ 54.315(b)(6)(v), 54.315(c), 54.804(b)(6)(v), 54.804(c), 54.1005(b)(3)(v), 54.1007(a)-(b); *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 732-33, para. 107.

⁵⁵⁷ *See e.g.*, *CAF Phase II Auction Order*, 31 FCC Rcd at 5990, 6045, paras. 119-21, Appx. B. The value of the letter of credit must escalate as more funds are disbursed, until such time as the recipient has met the Interim Milestones, which would permit reductions. 47 CFR § 54.315(c)(1); *CAF Phase II Auction Order*, 31 FCC Rcd at 5991, 5997-98, paras. 122, 135-36; *CAF Phase II Auction Reconsideration Order*, 33 FCC Rcd at 1405, para. 64. Note that in accordance with the model letter of credit, annual letters of credit were required to contain an evergreen provision. *CAF Phase II Auction Order*, 31 FCC Rcd at 6045-49, Appx. B. The Commission will draw on the letter of credit in the event that the support recipient does not meet its service milestones or take advantage of the opportunities to cure or pay back the relevant support. *CAF Phase II Auction Order*, 31 FCC Rcd at 6016-18, paras. 189-94. A support recipient must maintain an open letter of credit until its certifications and data reporting regarding the final service milestone have been verified by USAC. *Id.* at 5991, para. 123.

establish a mechanism to recover disbursed funding efficiently in the event of non-compliance and fulfill our responsibility to protect program funds, while also reducing the costs for applicants to participate in the 5G Fund.

226. We adopt the same letter of credit rules for the 5G Fund as adopted for the Rural Digital Opportunity Fund, inclusive of subsequent guidance concerning the issuance of letters of credit by non-United States banks.⁵⁵⁸ Letters of credit must be issued by a bank that is acceptable to the Commission in substantially the same form as set forth in the model letter of credit in Appendix C to this *Report and Order* and that is otherwise acceptable in all respects to the Commission.⁵⁵⁹ Letters of credit must be obtained from a domestic or foreign bank meeting the requirements adopted herein. For United States banks, the bank must be insured by the Federal Deposit Insurance Corporation (FDIC) and have a Weiss bank safety rating of B- or higher.⁵⁶⁰ Similarly, for non-United States banks, the bank must be among the 100 largest non-United States 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 letter of credit, determined on a U.S. dollar equivalent basis as of such date) and must meet the Commission's other non-United States bank eligibility requirements.⁵⁶¹ Winning bidders also have the option of obtaining a letter of credit from CoBank or the National Rural Utilities Cooperative Finance Corporation so long as they continue to meet the Commission's requirements.⁵⁶²

227. In addition, to ensure uniformity and transparency across our high-cost universal service rules, we adopt our proposed amendments to the Commission's letter of credit rules for other universal service programs to codify the expansion of the definition of branch offices of non-United States banks that are considered eligible to issue letters of credit concerning such programs.⁵⁶³

228. Prior to being authorized for support, a 5G Fund long-form applicant must obtain a letter of credit valued at an amount equal to one year of the total support it will receive.⁵⁶⁴ For Year Two of its support term, a 5G Fund support recipient must obtain a letter of credit valued at an amount equal to eighteen months of its total support, and for Year Three, must obtain a letter of credit valued at an amount

⁵⁵⁸ *5G Fund NPRM*, 35 FCC Rcd at 4052-55, 4083-85, paras. 177-87, Appx. A, Proposed Rules, Sec. 54.1016; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 729-33, paras. 97-104, 106-07; *Wireline Competition Bureau Provides Guidance Regarding the Eligibility of Non-United States Banks*, Public Notice, 35 FCC Rcd 2804, 2804, 2805 (WCB 2020) (providing guidance to applicants for and recipients of universal service support allocated through a competitive bidding mechanism regarding the eligibility of non-United States banks to issue letters of credit and stating that a non-United States bank that has a branch office located in New York City, New York and will accept a letter of credit presentation from USAC via overnight courier, in addition to in-person presentations, will be considered qualified to issue letters of credit if it also meets the Commission's other non-United States bank eligibility requirements).

⁵⁵⁹ *5G Fund NPRM*, 35 FCC Rcd at 4051, 4102-06, para. 175, Appx. D; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 732-33, para. 107.

⁵⁶⁰ *5G Fund NPRM*, 35 FCC Rcd at 4084, Appx. A, Proposed Rules, Sec. 54.1016(a)(2)(i); *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 732-33, para. 107.

⁵⁶¹ *5G Fund NPRM*, 35 FCC Rcd at 4084, Appx. A, Proposed Rules, Sec. 54.1016(a)(2)(iv); *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 732-33, para. 107; *Wireline Competition Bureau Provides Guidance Regarding the Eligibility of Non-United States Banks*, 35 FCC Rcd 2804-05.

⁵⁶² *5G Fund NPRM*, 35 FCC Rcd at 4084, Appx. A, Proposed Rules, Sec. 54.1016(a)(2)(ii), (iii); *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 732-33, para. 107.

⁵⁶³ See *Wireline Competition Bureau Provides Guidance Regarding the Eligibility of Non-United States Banks*, Public Notice, 35 FCC Rcd 2804, 2804, 2805 (WCB 2020); *5G Fund NPRM*, 35 FCC Rcd at 4051, para. 175, Appx. A, Proposed Rules, Secs. 47 CFR §§ 54.315(c), 54.804(d), 54.1508; Appendix A—Final Rules.

⁵⁶⁴ *5G Fund NPRM*, 35 FCC Rcd at 4052, 4083, para. 178, Appx. A, Proposed Rules, Sec. 54.1016(a)(1)(i); see *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 730, para. 101.

equal to two years of its total support.⁵⁶⁵ For Year Four of its support term, a support recipient must obtain a letter of credit valued at an amount equal to three years of its total support, which it must maintain at that level until the support recipient meets the requirements we adopt herein for reducing the value of letters of credit.⁵⁶⁶

229. Consistent with the rules adopted for the Rural Digital Opportunity Fund, we will allow a 5G Fund support recipient to reduce the value of its letter of credit after it meets—and USAC verifies that a support recipient has completed—a relevant service milestone deadline.⁵⁶⁷ Specifically, we require support recipients to submit their service milestone reports to USAC by March 1 of the calendar year following each applicable December 31 milestone deadline.⁵⁶⁸ Upon verification by USAC that the support recipient has timely met a service milestone, we will then allow the recipient to reduce the value of its letter of credit to an amount equal to only one year of total support. Once a support recipient reduces the value of its letter of credit to an amount equal to one year of total support, we will allow the recipient to maintain its letter of credit at that level for the remainder of the service milestones, as long as USAC verifies that the support recipient has successfully and timely met each of its remaining service milestone obligations and deadlines.

230. Additionally, consistent with the rules adopted for the Rural Digital Opportunity Fund, we adopt our proposal to create an Optional Year Two Interim Service Milestone to provide an accelerated approach for a 5G Fund support recipient to reduce its letter of credit. Under this approach, a support recipient may reduce the value of its letter of credit to an amount equal to one year of total support if it is providing—and USAC has verified that it is providing—service that meets the performance requirements adopted for the 5G Fund to at least 20% of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state by December 31 of the second full calendar year following support authorization.⁵⁶⁹ This approach allows a support recipient to demonstrate concrete progress in service deployment earlier than its required milestones (i.e., 40% in Year Three), thereby enabling it to reduce its letter of credit earlier than it could otherwise. We reiterate that this 20% service deployment benchmark is optional; if a support recipient does not meet this optional milestone, it will not be able to reduce the value of its letter of credit, but it also will not face any reductions in support.

231. Consistent with the approach adopted for the Rural Digital Opportunity Fund, a 5G Fund support recipient does not need to wait for a specific support year to end to meet a deployment milestone.⁵⁷⁰ For example, if a support recipient is able to deploy to 20% of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state by the end of Year One, it may report its deployment progress and request that USAC complete the verification process in order to allow it to reduce the value of its letter of credit to an amount equal to one year of support. In

⁵⁶⁵ *5G Fund NPRM*, 35 FCC Rcd at 4052, 4083, para. 178, Appx. A, Proposed Rules, Secs. 54.1016(a)(1)(ii), (iii); *see Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 730, para. 101.

⁵⁶⁶ *5G Fund NPRM*, 35 FCC Rcd at 4052, 4083, para. 178, Appx. A, Proposed Rules, Sec. 54.1016(a)(1)(iv); *see Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 730, para. 101.

⁵⁶⁷ *5G Fund NPRM*, 35 FCC Rcd at 4053, 4083-84, para. 180, Appx. A, Proposed Rules, Sec. 54.1016(a)(1)(v); *see Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 729-30, para. 98. In instances where the amount of the letter of credit fails to satisfy the amount owed, such deficiency will be a debt due to the Commission and, if not paid, will be collected pursuant to the Commission's rules. *See* 47 CFR § 1.1901 *et seq.* Where the draw on the letter of credit results in a greater recovery than is required to satisfy the default, we direct the Wireline Competition Bureau to take appropriate measures to promptly return any excess funds.

⁵⁶⁸ *See supra* para. 136.

⁵⁶⁹ *5G Fund NPRM*, 35 FCC Rcd at 4053, 4083-84, para. 181, Appx. A, Proposed Rules, Sec. 54.1016(a)(1)(v); *see Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 730, para. 99.

⁵⁷⁰ *See Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 730, para. 100.

those instances, we require that a support recipient be able to promptly produce the necessary documentation to minimize the time required for USAC to verify its milestone.

232. As we determined for the Rural Digital Opportunity Fund, we find it necessary to maintain larger letters of credit for support recipients that fail to meet their service deployment milestones by the applicable deadlines.⁵⁷¹ Specifically, if a support recipient misses a required interim service milestone, it will be required to obtain a new letter of credit (or renew its existing letter of credit) that it is valued at an amount equal to its existing letter of credit, plus an additional year of support, up to a maximum of three years of its total support.⁵⁷²

233. Likewise, any support recipient that fails to meet two or more service milestones (that is, fails to catch up after missing a service deployment milestone and remains behind on service deployed to the required percentage of square kilometers at the next service milestone deployment deadline) will be required to maintain a letter of credit in the amount of three years of support and will be subject to the additional non-compliance measures we adopt herein.⁵⁷³ We find that these increased letter of credit requirements will both protect federal funds from potential non-compliance and serve as an incentive to timely deployment.

234. We will require a 5G Fund support recipient to maintain a letter of credit until it has certified, and USAC has verified, that it is providing service that meets the 5G Fund performance requirements to at least 85% of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state, and at least 75% of the total square kilometers in each eligible census tract in a state, by the Year Six Final Service Milestone deadline.⁵⁷⁴ Consistent with the approach adopted for CAF Phase II and the Rural Digital Opportunity Fund, a 5G Fund support recipient may be subject to other action if it does not comply with the public interest obligations or any other terms and conditions associated with receiving 5G Fund support, including but not limited to the Commission's existing enforcement procedures and penalties, reductions in support amounts, revocation of ETC designations, and suspension or debarment.⁵⁷⁵

235. We find that the letter of credit schedule we adopt for 5G Fund support recipients balances the need to safeguard federal funds with the costs a support recipient may incur to maintain a letter of credit.

236. Consistent with CAF Phase II and the Rural Digital Opportunity Fund, we will only authorize USAC to draw on the letter of credit for the entire amount of the letter of credit if the entity does not repay the Commission for the support associated with its compliance gap.⁵⁷⁶ Additionally, as

⁵⁷¹ *Id.* at 730, para. 102. A support recipient that fails to meet any required service milestone must file a letter informing the Commission of the missed milestone within 10 business days of the conclusion of the relevant support year for which that milestone was applicable. *See supra* paras. 147-149. This requirement allows the Wireline Competition Bureau to determine whether it is necessary to direct USAC to suspend disbursements to the recipient or engage other mechanisms, including requiring a greater value letter of credit going forward.

⁵⁷² *5G Fund NPRM*, 35 FCC Rcd at 4052-53, 4084, para. 179, Appx. A, Proposed Rules, Sec. 54.1016(a)(1)(vi); *see Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 730, para. 102.

⁵⁷³ *5G Fund NPRM*, 35 FCC Rcd at 4053, 4084, para. 179, Appx. A, Proposed Rules, Sec. 54.1016(a)(1)(vii); *see Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 730, para. 102.

⁵⁷⁴ *5G Fund NPRM*, 35 FCC Rcd at 4053, 4083, para. 182, Appx. A, Proposed Rules, Sec. 54.1016(a)(1); *see CAF Phase II Auction Order*, 31 FCC Rcd at 5991, para. 123; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 731, para. 103.

⁵⁷⁵ *5G Fund NPRM*, 35 FCC Rcd at 4053-54, 4083, 4085, para. 182, Appx. A, Proposed Rules, Secs. 54.1015(g), 54.1017(c); *see* 47 CFR § 54.320(c).

⁵⁷⁶ *See supra* Section III.G.3; *CAF Phase II Auction Order*, 31 FCC Rcd at 5992, para. 124; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 732, para. 106.

stated in CAF Phase II, “[i]f the entity fails to pay this support amount, we conclude that the risk that the entity will be unable to continue to serve its customers or may go into bankruptcy is more likely, and thus it is necessary to ensure that the Commission can recover the entire amount of support that it has disbursed.”⁵⁷⁷

237. As we have previously recognized, we will again allow greater flexibility regarding letter of credit for Tribally owned and controlled winning bidders.⁵⁷⁸ Consistent with our approach for CAF Phase II and the Rural Digital Opportunity Fund, if any Tribally owned and controlled 5G Fund winning bidder is unable to obtain a letter of credit, it may file a petition for a waiver of the letter of credit requirement.⁵⁷⁹ Consistent with our precedent, a petitioner must show, with evidence acceptable to the Commission, that the Tribally owned and controlled winning bidder is unable to obtain a letter of credit.⁵⁸⁰

238. As for the Rural Digital Opportunity Fund, we provide a letter of credit trajectory for 5G Fund support recipients that recognizes that once a recipient has demonstrated significant and verifiable progress toward meeting its service deployment obligations, it should have the opportunity to avoid some of the more costly letter of credit requirements.⁵⁸¹ For support recipients that elect to deploy service quickly and meet the Optional Year Two Service Milestone early in their support term, and continue to meet all of their service milestones, their letters of credit may never exceed 18 months’ support at any time during their support term.⁵⁸² At the same time, the more gradual increase in the letter of credit requirements we adopt for support recipients that do not chose to take advantage of the Optional Year Two Service Milestone will nonetheless reduce potential financial strain on support recipients, and still allow those support recipients to maintain a smaller letter of credit after they timely meet their Year Three Interim Service Milestone.⁵⁸³

239. Only two parties commented on our letter of credit proposals. RWA supports our proposal to adopt an early service milestone that would allow a support recipient to reduce the value of its letter of credit if it offers service that meets the established 5G performance requirements in at least 20% of the total square kilometers in its winning bid areas in a state by the end of Year Two.⁵⁸⁴ RWA submits that the letter of credit should be further reduced by another 20% at the end of Year Four, provided the recipient has met its Year Four 40% benchmark coverage, and by another 20% at the end of Year Six, provided the recipient has met its 60% coverage benchmark.⁵⁸⁵

⁵⁷⁷ *CAF Phase II Auction Order*, 31 FCC Rcd at 5992, para. 124.

⁵⁷⁸ *CAF Phase II Auction Order*, 31 FCC Rcd at 5999, para. 140; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 733, para. 109.

⁵⁷⁹ *CAF Phase II Auction Order*, 31 FCC Rcd at 5999, para. 140; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 733, para. 109.

⁵⁸⁰ *See CAF Phase II Auction Order*, 31 FCC Rcd at 5999, para. 140. For the CAF Phase II auction, a Tribal waiver petitioner had to show it was unable to obtain a letter of credit because of limitations on the ability to collateralize its real estate, and that CAF Phase II support would be used for its intended purposes, and that the funding would be used in the best interests of the Tribal Nation and would not be wasted. *See id.* Tribally owned and controlled winning bidders were defined to include (1) Tribes which are federally recognized American Indian Tribes and Alaska Native Villages; (2) consortia of Tribes; and (3) entities that are more than 50% owned and controlled by a Tribe or Tribes. *Id.* at 5999, para. 140 & n.295.

⁵⁸¹ *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 731, para. 104.

⁵⁸² *Id.*

⁵⁸³ *Id.*

⁵⁸⁴ RWA Comments at 14.

⁵⁸⁵ *Id.*

240. We decline to adopt the additional letter of credit reductions at the end of Year Four and Year Six advanced by RWA. We note that RWA's proposal is similar to proposals we received in the Rural Digital Opportunity Fund proceeding which we declined to adopt after determining that such proposals fail to sufficiently account for the Commission's interests in ensuring that universal service dollars are being used efficiently and for their intended purposes, as well as protecting against the potential for those carriers that may fail to fulfill their broadband deployment obligations.⁵⁸⁶ We conclude that the rules we adopt permitting 5G Fund support recipients to reduce their letters of credit after meeting the Optional Year Two Interim Milestone or the Year Three Interim Milestone—which are modeled on those adopted for the Rural Digital Opportunity Fund, and which took into account lessons learned from CAF Phase II and comments received in the Rural Digital Opportunity Fund proceeding—provide sufficient flexibility and will help reduce the costs of participating in the 5G Fund.

241. The National Association of Surety Bond Producers (NASBP) supports broadening the range of options for performance security to include a surety bond because it asserts that doing so would help rural internet service providers (ISPs) who are having difficulty securing sufficient collateral to obtain a letter of credit, and creates greater competition and participation, which may reduce costs while still protecting the government's financial interest.⁵⁸⁷ NASBP submits that a performance bond assures that carrier awarded support is qualified to perform its obligations under the award, and serves as a “deep pocket” in the event the carrier fails.⁵⁸⁸ It states that by comparison, a letter of credit is secured by a specific liquid asset(s), has a specific expiration date, and does not provide the same financial guarantee to the government.⁵⁸⁹ RWA supports NASBP's request to allow surety bonds as an option for performance security, stating that they are more economical than letters of credit, and that allowing their use would enable support recipients to make greater investment in their networks rather than tying up money on securing letters of credit.⁵⁹⁰

242. We decline to allow the use of a surety bond as security for a 5G Fund participant's failure to meet its public interest obligations and/or performance requirements. We note that these commenters' requests are similar to those we received in the Rural Digital Opportunity Fund proceeding, where we noted that letters of credit, unlike performance bonds, allow for an immediate reclamation of support in the event the recipient is not properly using those funds, and that performance bonds would not provide the same level of protection and would require the involvement of a third party to adjudicate any disputes that arise, which would complicate our process and unnecessarily limit the Commission's authority to allocate funds.⁵⁹¹ A letter of credit, unlike a performance bond, has the benefit of the “independence principle” in that the letter of credit is independent of the underlying transaction.⁵⁹² The bank's obligation to pay under the letter of credit does not depend on the auction winner's default but on the presentation of documents evidencing the default.⁵⁹³ As in the Rural Digital Opportunity Fund, we conclude that being independent in this way assures that USAC can collect monies due to it promptly without engaging in disputes with the winning bidder, the performance bond guarantor or the winning

⁵⁸⁶ *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 731, para. 105 & n.285.

⁵⁸⁷ National Association of Surety Bond Producers Comments at 1-2.

⁵⁸⁸ *Id.* at 2. NASBP maintains that the first form of protection, prequalification, is the result of the surety's review of the financial strength and capabilities of the carrier in determining whether to provide a bond, and that the Commission would benefit from this prequalification because bonds are only provided to those carriers that the surety believes can perform. *Id.*

⁵⁸⁹ *Id.*

⁵⁹⁰ RWA Reply Comments at 16.

⁵⁹¹ See *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 734, para. 111.

⁵⁹² *Id.* (citing *In re Lancaster Steel Co.*, 284 B.R. 152, 159 (S.D. Fla. 2002)).

⁵⁹³ *Id.* (citing *Andy Marine, Inc. v. Zidell, Inc.*, 812 F.2d 534, 536 (9th Cir. 1987)).

bidder's trustee in bankruptcy over whether the funds should be paid or even whether the funds are available to the 5G Fund due to competing claims of creditors.⁵⁹⁴

243. As we noted in the *Rural Digital Opportunity Fund Report and Order*, while we appreciate that there are costs associated with the letter of credit, we find that the letter of credit requirement will best protect the 5G Fund and continue to believe that bidders can incorporate these costs when determining their bidding strategies prior to an auction.⁵⁹⁵ And as we have previously stated, letters of credit 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.”⁵⁹⁶ We therefore conclude that the letter of credit requirements we adopt here, which establish a mechanism to easily recover disbursed funding in the event of non-compliance, fulfill our responsibility to protect program funds while also reducing the costs of participating in the 5G Fund.

244. *Opinion Letter.* Consistent with our requirements for past universal service fund auctions, we will require a winning bidder to also submit with its letter(s) of credit a bankruptcy opinion letter from outside legal counsel.⁵⁹⁷ The 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 letter of credit or proceeds of the letter of credit as property of the winning bidder’s bankruptcy estate, or the bankruptcy estate of any other winning bidder-related entity requesting issuance of the letter of credit under section 541 of the Bankruptcy Code.⁵⁹⁸

5. Defaults

245. *Forfeiture in the Event of an Auction Default.* In the *5G Fund NPRM*, we made proposals for establishing the framework pursuant to which a 5G Fund winning bidder would be subject to a forfeiture under section 503 of the Act if it defaults on its winning bid(s) before it is authorized to begin receiving support.⁵⁹⁹ We received no comments on any aspect of our 5G Fund auction default proposals and adopt them as proposed, with one modification described below.

246. A winning bidder will be considered in default and will be subject to forfeiture if it is not authorized to receive 5G Fund support (e.g., it fails to timely file or prosecute a long-form application, fails to meet any document submission deadline, has its long-form application dismissed or denied, is found ineligible or unqualified to receive support, or otherwise defaults on its bid or is disqualified for any reason prior to the authorization of 5G Fund support).⁶⁰⁰ Consistent with the approach taken in CAF

⁵⁹⁴ *Id.*

⁵⁹⁵ *Id.* at 733, para. 110.

⁵⁹⁶ *CAF Phase II Auction Order*, 31 FCC Rcd at 5990, para. 120.

⁵⁹⁷ *5G Fund NPRM*, 35 FCC Rcd at 4055, 4081, para. 188, Appx. A, Proposed Rules, Secs. 54.1014(b)(2)(viii), 54.1016(b); *see Auction 901 Procedures Public Notice*, 27 FCC Rcd at 4771, para. 171; *Auction 902 Procedures Public Notice*, 28 FCC Rcd at 11681, para. 189; *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8769, 8789, para. 58 (2014) (*Rural Broadband Experiments Order*); *CAF Phase II Auction Order*, 31 FCC Rcd at 5992, para. 125; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 735, para. 113. We received no comments on our proposal to require winning bidders to submit an opinion letter.

⁵⁹⁸ 11 U.S.C. § 541.

⁵⁹⁹ *5G Fund NPRM*, 35 FCC Rcd at 4055-56, paras. 189-92.

⁶⁰⁰ *Id.* at 4055-56, para. 190; *CAF Phase II Auction Order*, 31 FCC Rcd at 6000, para. 144; *Auction 903 Procedures Public Notice*, 33 FCC Rcd at 1520-21, paras. 314 & n.516; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 735, para. 114; *see also* 47 CFR § 1.21004; 47 U.S.C. § 503(b)(2)(B). We adopt our proposal to amend section 1.21004(b) to allow the Commission to adopt either a default payment mechanism or a forfeiture mechanism for addressing auction defaults in order to afford it the flexibility to decide which approach it wishes to use on an

(continued....)

Phase II and the Rural Digital Opportunity Fund, a winning bidder will be subject to a \$3,000 base forfeiture for each separate violation of the Commission's rules.⁶⁰¹ We define a violation as any form of default with respect to each geographic unit subject to a bid, in order to ensure that each violation has a relationship to the area affected by the auction default.⁶⁰² Similar to the approach taken in CAF Phase II and the Rural Digital Opportunity Fund, we will limit the total base forfeiture in order to ensure that the amount of the base forfeiture is not disproportionate or unduly punitive.⁶⁰³ Notwithstanding the limitation on the total base forfeiture, in instances where the facts of an auction default in a 5G Fund auction indicate that a winning bidder engaged in anticompetitive behavior, the total forfeiture that could be owed by winning bidder in such circumstances may be adjusted up to the amount associated with preservation of service in the applicable area.⁶⁰⁴

247. We conclude that it is reasonable to subject all bidders to the same \$3,000 base forfeiture per violation subject to adjustment based on the criteria set forth in our forfeiture guidelines.⁶⁰⁵ To determine the final forfeiture amount, the Commission's Enforcement Bureau will consider the "nature, circumstances, extent and gravity of the violations and, with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and such other matters as justice may require."⁶⁰⁶

248. As the Commission has previously stated, auction defaults undermine the stability and predictability of the auction process and impose costs on the Commission and higher support costs for the

(Continued from previous page)

_____ auction by auction basis. *5G Fund NPRM*, 35 FCC Rcd at 4055, 4071, para. 190 n.265, Appendix A, Proposed Rules, Sec. 1.21004(c). For consistency, we also adopt our proposal to amend section 1.21004(c) to reference forfeiture payments in addition to default payments. *5G Fund NPRM*, 35 FCC Rcd at 4055, 4071, para. 190 n.265, Appx. A, Proposed Rules, Sec. 1.21004(d). As a result of other amendments to section 1.21004 we adopt herein, current sections 1.21004(b) and (c) are redesignated as sections 1.21004(c) and (d), respectively. See Appendix A—Final Rules. As discussed in the short-form application requirements section, as a condition of participating in a universal service auction, we will require an applicant to certify in its auction application that it will be subject to either a default payment or a forfeiture in the event of an auction default. Consistent with the approach adopted for CAF Phase II and the Rural Digital Opportunity Fund, we will consider any entity that files a short-form application to participate in a 5G Fund auction to be "an applicant for any common carrier license, permit, certificate, or other instrument of authorization issued by the Commission" pursuant to section 503(b)(2)(B) of the Act, 47 U.S.C. § 503(b)(2)(B), and therefore subject to a forfeiture in the event of an auction default. 47 U.S.C. § 503(b)(2)(B); *CAF Phase II Auction Order*, 31 FCC Rcd at 5980, 5984, paras. 92 n.186, 104 n.206; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 717, para. 68 n.186.

⁶⁰¹ *5G Fund NPRM*, 35 FCC Rcd at 4055-56, paras. 190-91; *CAF Phase II Auction Order*, 31 FCC Rcd at 6000, para. 143; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 735, para. 114.

⁶⁰² 47 CFR § 1.80(b)(2), note to paragraph (b)(8); *5G Fund NPRM*, 35 FCC Rcd at 4055-56, paras. 190-91; *CAF Phase II Auction Order*, 31 FCC Rcd at 6000-01, paras. 143-44; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 735-36, paras. 114-15. In other words, there shall be separate violations for each geographic unit assigned in a bid.

⁶⁰³ See *CAF Phase II Auction Order*, 31 FCC Rcd at 6000-01, para. 144; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 736, para. 117.

⁶⁰⁴ *5G Fund NPRM*, 35 FCC Rcd at 4056, para. 191.

⁶⁰⁵ 47 CFR § 1.80(b)(8), note to paragraph (b)(8). As the Commission reasoned in its CAF Phase II decision, \$3,000 base forfeiture amount is equivalent to the base forfeiture that is imposed for failing to file required forms or information with the Commission. *CAF Phase II Auction Order*, 31 FCC Rcd at 6000, para. 143; see *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 735-36, para. 115. While not all defaults will relate to the failure to submit the required forms or information, for administrative simplicity, and to provide bidders with certainty as to the base forfeiture that will apply for all auction defaults, we will subject all bidders to the same \$3,000 base forfeiture per violation. *CAF Phase II Auction Order*, 31 FCC Rcd at 6000, para. 143.

⁶⁰⁶ 47 CFR § 1.80(b)(8); see also 47 U.S.C. § 503(b)(2)(B) (describing per-violation caps); 47 CFR § 1.80(b)(8), note to paragraph (b)(8) (Guidelines for Assessing Forfeiture).

Universal Service Fund.⁶⁰⁷ They also hinder the disbursement of funds that could have gone to another carrier, and thereby further delay the deployment of broadband service offerings in unserved areas. The 5G Fund represents our biggest undertaking for any mobile universal service program thus far, and will award the largest amount of support for mobile service deployments to date.⁶⁰⁸ The areas eligible for 5G Fund support will be those that have been determined to lack unsubsidized 4G LTE and 5G broadband service by at least one carrier.⁶⁰⁹ Therefore, in keeping with our goal of facilitating the deployment of 5G mobile services to as many of these areas as possible with the limited funds that are available, and as responsible stewards of 5G Fund support, it is imperative that we ensure that there are appropriate safeguards in place to deter auction defaults by 5G Fund winning bidders to the greatest extent possible.

249. In adopting procedures for competitive bidding in advance of an auction, the Commission makes a determination through notice and comment regarding how it will calculate payments or forfeitures for an auction default, taking into account the nature of the auction, lessons learned from past auctions, and other relevant factors.⁶¹⁰ We note that in our typical spectrum auctions, where the *highest bid* is the winning bid, basing the amount owed for an auction default on a percentage of the defaulted winning bid, which will increase with each round of bidding as bids increase, serves as a sufficient deterrent to auction defaults. However, in an auction where the *lowest bid* is the winning bid, basing the amount owed for an auction default on a percentage of the winning bid, which will decrease with each round of bidding as bids decrease, could increase the risk that an auction default will not sufficiently deter insincere bidding or anti-competitive behavior. We find this risk to be especially concerning in the context of a 5G Fund auction, where the stakes for closing the mobile digital divide have never been higher.

250. In view of this, we modify our proposal to limit the total base forfeiture to a percentage of a winning bidder's total winning bid amount for the support term,⁶¹¹ and will instead limit the total base forfeiture to 15% of the support at the opening price for an area for the entire 10-year support term for

⁶⁰⁷ See *USF/ICC Transformation Order*, 26 FCC Rcd at 17814, para. 460; *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2229, para. 211; see also *Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures*, Report and Order, 21 FCC Rcd 891, 902-03, para. 29 (2006) (*CSEA/Part 1 Report and Order*) (noting in the context of spectrum auctions that defaults weaken the integrity of the auction process and may impede the deployment of service to the public).

⁶⁰⁸ The overall 5G Fund budget adopted herein is approximately twice the amount adopted for Mobility Fund Phase II. See *Mobility Fund Phase II Report and Order*, 32 FCC Rcd at 2160, para. 23 (adopting a Mobility Fund Phase II budget of \$4.53 billion over 10 years for support to eligible areas outside of Alaska).

⁶⁰⁹ See *supra* Section III.B.

⁶¹⁰ See e.g., *USF/ICC Transformation Order*, 26 FCC Rcd at 17814, para. 460 (recognizing that the "...the size of the [default] payment and the method by which it is calculated may vary depending on the procedures established for the auction, including auction design," and directing that a determination of whether a default payment should be a percentage of the defaulted bid amount or should be calculated using another method be made in advance of the auction); *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 736, paras. 116-17 (proposing to limit of the total base forfeiture for an auction default to 5% of a bidder's total bid amount for the support term limit consistent with the limit adopted for CAF Phase II, but ultimately adopting a limit of 15% based on lessons learned from CAF Phase II and comments that the 5% limit in the CAF Phase II auction was modest and not substantial enough to prevent uncommitted bidders from participating); *Auction of Priority Access Licenses for the 3550-3650 MHz Band; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 105; Bidding in Auction 105 Scheduled to Begin June 25, 2020*, Public Notice, 35 FCC Rcd 2140, 2204, para. 228 (concluding that given the large number Priority Access Licenses available for bidding in Auction 105, adopting the highest allowable additional default payment percentage of 20% is necessary to ensure that bidders only bid on those licenses that they reasonably expect to use).

⁶¹¹ *5G Fund NPRM*, 35 FCC Rcd at 4056, para. 191.

each separate violation.⁶¹² Given the nature of 5G Fund auctions, we find that basing the limit of the forfeiture on the support at the opening price for an area, rather than the winning bid price for an area, will better balance our interest in ensuring that the amount of any forfeiture assessed for a 5G Fund auction default is sufficient to deter insincere bidding while at the same time having a relationship to the area affected by the auction default, and is thus a better approach for achieving our desired effect. We recognize this is a departure from the approach taken in our recent universal service auctions but find it appropriate under these circumstances after taking into account the nature of auctions for 5G Fund support and what is at stake to meet our goals for the 5G Fund.

251. As we did for CAF Phase II and the Rural Digital Opportunity Fund, we conclude that the rules we adopt governing forfeitures for auction defaults and requiring auction applicants to acknowledge in their short-form applications that they will be subject to a forfeiture in the event of an auction default will impress upon entities that apply to participate in a 5G Fund auction the importance of being prepared to meet the requirements adopted for the post-auction support authorization process, and highlight the need to conduct a due diligence review to ensure that they are qualified to both participate in the 5G Fund competitive bidding process and to meet the terms and conditions for being authorized to receive support if they become winning bidders.⁶¹³

252. *Dismissal of Long-Form Application for Failure to Prosecute.* Section 1.21004(a) of the Commission's rules requires a winning bidder in any universal service auction to submit a timely and sufficient application for universal service support associated with its winning bids and provides that a winning bidder that fails to file an application for support or that for any other reason is not authorized to receive support has defaulted on its winning bids.⁶¹⁴ However, this rule does not discuss the timing within which a winning bidder with a pending support application must respond to Commission staff requests for additional information regarding its application and become authorized for support before that winning bidder will be considered to have failed to prosecute its application. The rule also does not specify the timing or circumstances pursuant to which the Commission can take action to dismiss an application for the winning bidder's failure to prosecute and deem the winning bidder to be in default.

253. To allow the Commission to more efficiently and effectively process pending applications for universal service support, and taking into account lessons learned from the Mobility Fund Phase I and CAF Phase II post-auction application processes such as significant delays or failures by applicants in prosecuting their applications, we adopt our proposal to amend section 1.21004 to add a new rule that permits the Commission to dismiss any universal service auction winning bidder's long-form application with prejudice and deem the winning bidder to be in default if the winning bidder fails to prosecute its long-form application, fails to respond substantially within a specified time period to official correspondence or requests for additional information, or otherwise fails to comply with requirements for becoming authorized to receive universal service support.⁶¹⁵ We received no comments on our proposal and adopt the rule as proposed in the *5G Fund NPRM*. The new rule will apply to winning bidders in any 5G Fund auction and all future universal service auctions. We conclude that this approach will encourage winning bidders to timely and diligently prosecute their long-form applications and take the steps necessary to become authorized to receive support, and will allow the Commission to efficiently dispose of applications for a winning bidder's failure to prosecute its application or otherwise comply with the requirements for becoming authorized to receive support and in turn deem the winning bidder to be in default.

⁶¹² The opening price multiplied by the number of adjusted square kilometers in an area represents the highest support amount that a winning bidder could receive for that area in the auction for the 10-year support term.

⁶¹³ See *CAF Phase II Auction Order*, 31 FCC Rcd at 6000, para. 145; *Rural Digital Opportunity Fund Report and Order*, 35 FCC Rcd at 736, para. 117.

⁶¹⁴ 47 CFR § 1.21004(a).

⁶¹⁵ *5G Fund NPRM*, 35 FCC Rcd at 4056-57, 4070, para. 193, Appx. A, Proposed Rules, Sec. 1.21004(b).

IV. PROCEDURAL MATTERS

254. *Paperwork Reduction Act Analysis.* This Report and Order contains new and modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA) Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements adopted in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002,⁶¹⁶ 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*.

255. *Final Regulatory Flexibility Analysis.* The Regulatory Flexibility Act of 1980, as amended, (RFA)⁶¹⁷ 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.”⁶¹⁸ Accordingly, we have prepared a FRFA concerning the possible impact of the rule changes contained in this Report and Order on small entities. The FRFA is set forth in Appendix B.

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

V. ORDERING CLAUSES

257. Accordingly, IT IS ORDERED that, pursuant to the authority contained in sections 4(i), 214, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 214, 254, 303(r), and 403, this Report and Order IS ADOPTED.

258. IT IS FURTHER ORDERED that the rules and requirements adopted herein WILL BECOME EFFECTIVE thirty (30) days after publication in the *Federal Register*, with the exception of sections 1.21001(b)(1), 1.21001(b)(2), 1.21001(b)(3), 1.21001(b)(4), 1.21001(b)(5), 1.21001(b)(6), 1.21001(b)(7), 1.21001(b)(8), 1.21001(b)(9), 1.21001(b)(10), 1.21001(b)(11), 1.21001(b)(12), 1.21001(b)(13), 1.21001(e), 1.21002(e), 1.21002(f), 54.313(n), 54.322(b), 54.322(c)(4), 54.322(g), 54.322(h), 54.322(i), 54.322(j), 54.1014(a), 54.1014(b)(2), 54.1016(b), 54.1018(a), 54.1018(b), 54.1018(c), 54.1019(a)(1), 54.1019(a)(2), 54.1019(a)(3), 54.1019(a)(4), 54.1020(a), 54.1020(b), 54.1020(c)(1), and 54.1020(c)(2), which contain new or modified information collection requirements that require review and approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act. The Commission will announce the effective date of those information collections in a document published in the *Federal Register* after the Commission receives OMB approval, and will cause sections 1.21001(b)(1), 1.21001(b)(2), 1.21001(b)(3), 1.21001(b)(4), 1.21001(b)(5), 1.21001(b)(6), 1.21001(b)(7), 1.21001(b)(8), 1.21001(b)(9), 1.21001(b)(10), 1.21001(b)(11), 1.21001(b)(12), 1.21001(b)(13), 1.21001(e), 1.21002(e), 1.21002(f), 54.313(n), 54.322(b), 54.322(c)(4), 54.322(g), 54.322(h), 54.322(i), 54.322(j), 54.1014(a), 54.1014(b)(2), 54.1016(b), 54.1018(a), 54.1018(b),

⁶¹⁶ Small Business Paperwork Relief Act of 2002, Pub. L. No. 107-198, 116 Stat 729 (2002); see 44 U.S.C. § 3506(c)(4).

⁶¹⁷ See 5 U.S.C. §§ 601–612. The RFA has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

⁶¹⁸ 5 U.S.C. § 605(b).

54.1018(c), 54.1019(a)(1), 54.1019(a)(2), 54.1019(a)(3), 54.1019(a)(4), 54.1020(a), 54.1020(b), 54.1020(c)(1), and 54.1020(c)(2) to be revised accordingly.

259. IT IS FURTHER ORDERED that the Petition to Correct Mobility Fund Phase II Map of Presumptively Eligible and Ineligible Areas and to Extend Challenge Process Filing Window filed by Missouri RSA 5 Partnership d/b/a Chariton Valley Wireless Services in WC Docket No. 10-90 and WT Docket No. 10-208 on November 26, 2018, IS DISMISSED AS MOOT as indicated herein.

260. IT IS FURTHER ORDERED that the Petition for Waiver to Accept Certain Mobility Fund Challenge Records filed by Jeanne Dietsch in WC Docket No. 10-90 and WT Docket No. 10-208 on November 27, 2018, IS DISMISSED AS MOOT as indicated herein.

261. IT IS FURTHER ORDERED that the Request for Limited Waiver of Mobility Fund Phase II Designated Handset Requirements filed by the Vermont Department of Public Service in WC Docket No. 10-90 and WT Docket No. 10-208 on June 28, 2019, IS DISMISSED AS MOOT as indicated herein.

262. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this Report and Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. § 801(a)(1)(A).

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

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A**Final Rules**

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 1 and 54 to read as follows:

PART 1 – PRACTICE AND PROCEDURE

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

Authority: 47 U.S.C. chs. 2, 5, 9, 13; 28 U.S.C. 2461, unless otherwise noted.

2. Amend § 1.1902 to revise paragraph (f) to read as follows:

§ 1.1902 Exceptions.

* * * * *

(f) Nothing in this subpart shall supersede or invalidate other Commission rules, such as the part 1 general competitive bidding rules (47 CFR part 1, subparts Q and AA) or the service specific competitive bidding rules, as may be amended, regarding the Commission's rights, including but not limited to the Commission's right to cancel a license or authorization, obtain judgment, or collect interest, penalties, and administrative costs.

3. Amend § 1.21001 to revise paragraphs (b) and (b)(1) through (b)(4) to read as follows, add new paragraphs (b)(5) through (b)(7), revise paragraph (b)(5) to read as follows and redesignate it as paragraph (b)(8), revise paragraph (b)(6) to read as follows and redesignate it as paragraph (b)(9), revise paragraph (b)(7) to read as follows and redesignate it as paragraph (b)(10), add new paragraph (b)(11), redesignate paragraph (b)(8) as paragraph (b)(12) without change, redesignate paragraph (b)(9) as paragraph (b)(13) without change, add new paragraphs (c) and (d), redesignate paragraph (c) as paragraph (e) without change, redesignate (d) as paragraph (f), revise paragraphs (f)(1) and (f)(2) to read as follows, add new paragraph (f)(3), revise paragraphs (f)(3) through (f)(6) to read as follows and redesignate them as paragraphs as paragraphs (f)(4) through (f)(7), and add new paragraph (f)(8).

§ 1.21001 Participation in competitive bidding for support.

* * * * *

(b) *Application contents.* Unless otherwise established by public notice, an applicant to participate in competitive bidding pursuant to this subpart shall provide the following information in an acceptable form:

- (1) The identity of the applicant, i.e., the party that seeks support, and the ownership information as set forth in § 1.2112(a);
- (2) The identities of up to three individuals authorized to make or withdraw a bid on behalf of the applicant. No person may serve as an authorized bidder for more than one auction applicant;
- (3) The identities of all real parties in interest to, and a brief description of, any agreements relating to the participation of the applicant in the competitive bidding;

-
- (4) Certification that the applicant has provided in its application a brief description of, and identified each party to, any partnerships, joint ventures, consortia or other agreements, arrangements or understandings of any kind relating to the applicant's participation in the competitive bidding and the support being sought, including any agreements that address or communicate directly or indirectly bids (including specific prices), bidding strategies (including the specific areas on which to bid or not to bid), or the post-auction market structure, to which the applicant, or any party that controls as defined in paragraph (d)(1) of this section or is controlled by the applicant, is a party;
- (5) Certification that the applicant (or any party that controls as defined in paragraph (d)(1) of this section or is controlled by the applicant) has not entered and will not enter into any partnerships, joint ventures, consortia or other agreements, arrangements, or understandings of any kind relating to the support to be sought that address or communicate, directly or indirectly, bidding at auction (including specific prices to be bid) or bidding strategies (including the specific areas on which to bid or not to bid for support), or post-auction market structure with any other applicant (or any party that controls or is controlled by another applicant);
- (6) Certification that if the applicant has ownership or other interest disclosed pursuant to paragraph (b)(1) of this section with respect to more than one application in a given auction, it will implement internal controls that preclude any individual acting on behalf of the applicant as defined in § 1.21002(a) from possessing information about the bids or bidding strategies (including post-auction market structure), of more than one party submitting an application for the auction or communicating such information with respect to a party submitting an application for the auction to anyone possessing such information regarding another party submitting an application for the auction;
- (7) Certification that the applicant has sole responsibility for investigating and evaluating all technical and marketplace factors that may have a bearing on the level of support it submits as a bid, and that if the applicant wins support, it will be able to build and operate facilities in accordance with the obligations applicable to the type of support it wins and the Commission's rules generally;
- (8) Certification that the applicant and all applicable parties have complied with and will continue to comply with § 1.21002;
- (9) Certification that the applicant is in compliance with all statutory and regulatory requirements for receiving the universal service support that the applicant seeks, or, if expressly allowed by the rules specific to a high-cost support mechanism, a certification that the applicant acknowledges that it must be in compliance with such requirements before being authorized to receive support;
- (10) Certification that the applicant will be subject to a default payment or a forfeiture in the event of an auction default and that the applicant will make any payment that may be required pursuant to § 1.21004;
- (11) Certification that the applicant is not delinquent on any debt owed to the Commission and that it is not delinquent on any non-tax debt owed to any Federal agency as of the deadline for submitting applications to participate in competitive bidding pursuant to this subpart, or that it will cure any such delinquency prior to the end of the application resubmission period established by public notice.
- (12) Certification that the individual submitting the application is authorized to do so on behalf of the applicant; and
- (13) Such additional information as may be required.
- (c) *Limit on filing applications.* In any auction, no individual or entity may file more than one application to participate in competitive bidding or have a controlling interest (as defined in paragraph (d)(1) of this section) in more than one application to participate in competitive bidding. In the case of a consortium,

each member of the consortium shall be considered to have a controlling interest in the consortium. In the event that applications for an auction are filed by applicants with overlapping controlling interests, pursuant to paragraph (f)(3) of this section, both applications will be deemed incomplete and only one such applicant may be deemed qualified to bid.

(d) *Definitions.* For purposes of the certifications required under paragraph (b) of this section and the limit on filing applications in paragraph (c) of this section:

(1) The term *controlling interest* includes individuals or entities with positive or negative *de jure* or *de facto* control of the applicant. *De jure* control includes holding 50 percent or more of the voting stock of a corporation or holding a general partnership interest in a partnership. Ownership interests that are held indirectly by any party through one or more intervening corporations may be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that if the ownership percentage for an interest in any link in the chain meets or exceeds 50 percent or represents actual control, it may be treated as if it were a 100 percent interest. *De facto* control is determined on a case-by-case basis. Examples of *de facto* control include constituting or appointing 50 percent or more of the board of directors or management committee; having authority to appoint, promote, demote, and fire senior executives that control the day-to-day activities of the support recipient; or playing an integral role in management decisions. In the case of a consortium, each member of the consortium shall be considered to have a controlling interest in the consortium.

(2) The term *consortium* means an entity formed to apply as a single applicant to bid at auction pursuant to an agreement by two or more separate and distinct legal entities.

(3) The term *joint venture* means a legally cognizable entity formed to apply as a single applicant to bid at auction pursuant to an agreement by two or more separate and distinct legal entities.

(e) *Financial Requirements for Participation.* As a prerequisite to participating in competitive bidding, an applicant may be required to post a bond or place funds on deposit with the Commission in an amount based on the default payment or forfeiture that may be required pursuant to § 1.21004. The details of and deadline for posting such a bond or making such a deposit will be announced by public notice. No interest will be paid on any funds placed on deposit.

(f) *Application Processing.*

(1) Any timely submitted application will be reviewed by Commission staff for completeness and compliance with the Commission's rules. No untimely applications will be reviewed or considered.

(2) Any application to participate in competitive bidding that does not identify the applicant or does not include all of the certifications required pursuant to this section is unacceptable for filing and cannot be corrected subsequent to the applicable deadline for submitting applications. The application will be deemed incomplete and the applicant will not be found qualified to bid.

(3) If an individual or entity submits multiple applications in a single auction, or if entities that are commonly controlled by the same individual or same set of individuals submit more than one application in a single auction, then at most only one of such applications may be deemed complete, and the other such application(s) will be deemed incomplete, and such applicants will not be found qualified to bid.

(4) An applicant will not be permitted to participate in competitive bidding if the applicant has not provided any bond or deposit of funds required pursuant to paragraph (e) of this section, as of the applicable deadline.

(5) The Commission will provide applicants a limited opportunity to cure defects (except for failure to sign the application and to make all required certifications) during a resubmission period established by public notice and to resubmit a corrected application. During the resubmission period for curing defects, an application may be amended or modified to cure defects identified by the Commission or to make minor amendments or modifications. After the resubmission period has ended, an application may be amended or modified to make minor changes or correct minor errors in the application. An applicant may not make major modifications to its application after the initial filing deadline. An applicant will not be permitted to participate in competitive bidding if Commission staff determines that the application requires major modifications to be made after that deadline. Major modifications include, but are not limited to, any changes in the ownership of the applicant that constitute an assignment or transfer of control, or any changes in the identity of the applicant, or any changes in the required certifications. Minor amendments include, but are not limited to, the correction of typographical errors and other minor defects not identified as major. Minor modifications may be subject to a deadline established by public notice. An application will be considered to be newly filed if it is amended by a major amendment and may not be resubmitted after applicable filing deadlines.

(6) An applicant that fails to cure the defects in their applications in a timely manner during the resubmission period as specified by public notice will have its application dismissed with no further opportunity for resubmission.

(7) An applicant that is found qualified to participate in competitive bidding shall be identified in a public notice.

(8) Applicants shall have a continuing obligation to make any amendments or modifications that are necessary to maintain the accuracy and completeness of information furnished in pending applications. Such amendments or modifications shall be made as promptly as possible, and in no case more than five business days after applicants become aware of the need to make any amendment or modification, or five business days after the reportable event occurs, whichever is later. An applicant's obligation to make such amendments or modifications to a pending application continues until they are made.

4. Amend § 1.21002 to revise paragraphs (a) and (a)(1) to read as follows, add new paragraph (a)(2), revise paragraph (c) to read as follows, add new paragraphs (d) and (e), revise paragraphs (c) and (d) to read as follows and redesignate them as paragraphs (e) and (f).

§ 1.21002 Prohibition of certain communications during the competitive bidding process.

(a) *Definitions.* For purposes of this section:

(1) The term “applicant” shall include all controlling interests in the entity submitting an application to participate in a given auction, as well as all holders of partnership and other ownership interests and any stock interest amounting to 10 percent or more of the entity, or outstanding stock, or outstanding voting stock of the entity submitting the application, and all officers and directors of that entity. In the case of a consortium, each member of the consortium shall be considered to have a controlling interest in the consortium; and

(2) The term *bids* or *bidding strategies* shall include capital calls or requests for additional funds in support of bids or bidding strategies.

(b) *Certain communications prohibited.* After the deadline for submitting applications to participate, an applicant is prohibited from cooperating or collaborating with any other applicant with respect to its own, or one another's, or any other competing applicant's bids or bidding strategies, and is prohibited from communicating with any other applicant in any manner the substance of its own, or one another's, or any

other competing applicant's bids or bidding strategies, until after the post-auction deadline for winning bidders to submit applications for support.

(1) *Example 1.* Company A is an applicant in area 1. Company B and Company C each own 10 percent of Company A. Company D is an applicant in area 1, area 2, and area 3. Company C is an applicant in area 3. Without violating the Commission's Rules, Company B can enter into a consortium arrangement with Company D or acquire an ownership interest in Company D if Company B certifies either:

(i) That it has communicated with and will communicate neither with Company A or anyone else concerning Company A's bids or bidding strategy, nor with Company C or anyone else concerning Company C's bids or bidding strategy, or

(ii) That it has not communicated with and will not communicate with Company D or anyone else concerning Company D's bids or bidding strategy.

(2) [Reserved]

(c) *Internal controls required.* Any party submitting an application for a given auction that has an ownership or other interest disclosed with respect to more than one application for an auction must implement internal controls that preclude any individual acting on behalf of the applicant as defined in paragraph (a)(1) of this section from possessing information about the bids or bidding strategies as defined in paragraph (a)(2) of this section of more than one party submitting an application for the auction or communicating such information with respect to a party submitting an application for the auction to anyone possessing such information regarding another party submitting an application for the auction. Implementation of such internal controls will not outweigh specific evidence that a prohibited communication has occurred, nor will it preclude the initiation of an investigation when warranted.

(d) *Modification of application required.* An applicant must modify its application for an auction to reflect any changes in ownership or in membership of a consortium or a joint venture or agreements or understandings related to the support being sought.

(e) *Duty to report potentially prohibited communications.* An applicant that makes or receives communications that may be prohibited pursuant to paragraph (b) of this section shall report such communications to the Commission staff immediately, and in any case no later than 5 business days after the communication occurs. An applicant's obligation to make such a report continues until the report has been made.

(f) *Procedures for reporting potentially prohibited communications.* Any report required to be filed pursuant to this section shall be filed as directed in public notices detailing procedures for the bidding that was the subject of the reported communication. If no such public notice provides direction, the party making the report shall do so in writing to the Chief of the Auctions Division, Office of Economics and Analytics, by the most expeditious means available, including electronic transmission such as email.

5. Amend § 1.21004 to add new paragraph (b), and revise paragraphs (b) and (c) to read as follows and redesignate them as paragraphs (c) and (d):

§ 1.21004 Winning bidder's obligation to apply for support.

* * * * *

(b) *Dismissal for failure to prosecute.* The Commission may dismiss a winning bidder's application with prejudice for failure of the winning bidder to prosecute, failure of the winning bidder to respond substantially within the time period specified in official correspondence or requests for additional

information, or failure of the winning bidder to comply with requirements for becoming authorized to receive support. A winning bidder whose application is dismissed for failure to prosecute pursuant to this paragraph has defaulted on its bid(s).

(c) *Liability for default payment or forfeiture in the event of auction default.* A winning bidder that defaults on its bid(s) is liable for either a default payment or a forfeiture, which will be calculated by a method that will be established as provided in an order or public notice prior to competitive bidding. If the default payment is determined as a percentage of the defaulted bid amount, the default payment will not exceed twenty percent of the amount of the defaulted bid amount.

(d) *Additional liabilities.* In addition to being liable for a default payment or a forfeiture pursuant to paragraph (c) of this section, a winning bidder that defaults on its winning bid(s) shall be subject to such measures as the Commission may provide, including but not limited to disqualification from future competitive bidding pursuant to this subpart.

PART 54 – UNIVERSAL SERVICE

6. The authority citation for part 54 continues to read as follows:

Authority: 47 U.S.C. 151, 154(i), 155, 201, 205, 214, 219, 220, 229, 254, 303(r), 403, 1004, and 1302 unless otherwise noted.

7. Amend § 54.5 to add a new definition for “Mobile competitive eligible telecommunications carrier” between the definitions for “LAN” and “Qualifying Competitor,” and to revise the definitions of “Administrator,” “High-cost support,” and “Tribal lands” to read as follows:

§ 54.5 Terms and definitions.

* * * * *

Administrator. The term “Administrator” or “USAC” shall refer to the Universal Service Administrative Company that is an independent subsidiary of the National Exchange Carrier Association, Inc., and that has been appointed the permanent Administrator of the federal universal service support mechanisms.

* * * * *

High-cost support. “High-cost support” refers to those support mechanisms in existence as of October 1, 2011, specifically, high-cost loop support, safety net additive and safety valve provided pursuant to subpart F of part 36, local switching support pursuant to § 54.301, forward-looking support pursuant to § 54.309, interstate access support pursuant to §§ 54.800 through 54.809, and interstate common line support pursuant to §§ 54.901 through 54.904, support provided pursuant to §§ 51.915, 51.917, and 54.304, support provided to competitive eligible telecommunications carriers as set forth in § 54.307(e), Connect America Fund support provided pursuant to § 54.312, and Mobility Fund and 5G Fund support provided pursuant to subpart L of this part.

* * * * *

Mobile competitive eligible telecommunications carrier. A “mobile competitive eligible telecommunications carrier” is a carrier that meets the definition of a “competitive eligible telecommunications carrier” in this section and that provides a terrestrial-based service meeting the definition of “commercial mobile radio service” in § 51.5 of this chapter.

* * * * *

Tribal lands. For the purposes of high-cost support, “Tribal lands” include any federally recognized Indian tribe’s reservation, pueblo or colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688) and Indian Allotments, see § 54.400(e), as well as Hawaiian Home Lands – areas held in trust for native Hawaiians by the state of Hawaii, pursuant to the Hawaiian Homes Commission Act, 1920, July 9, 1921, 42 Stat 108, et seq., as amended, and any land designated as such by the Commission.

8. Amend § 54.207 to add new paragraph (f):

* * * * *

(f) *Geographic flexibility provided for mobile competitive eligible telecommunications carriers receiving legacy high-cost support:* A mobile competitive eligible telecommunications carrier receiving legacy high-cost support pursuant to § 54.307(e)(5), (6), or (7) for a particular subsidized service area may use the support for the provision, maintenance, and upgrading of facilities and services within any of the designated service areas for which it or an affiliated mobile competitive eligible telecommunications carrier (e.g., where several mobile competitive eligible telecommunications carriers share a common holding company) receives legacy high-cost support regardless of whether the service areas span more than one state or territory. This paragraph does not affect a mobile competitive eligible telecommunications carrier’s obligations and requirements pursuant to §§ 54.7 and 54.322.

9. Amend § 54.307 to revise paragraphs (e)(2), (e)(5), (e)(6) to read as follows, add new paragraph (e)(7), redesignate paragraphs (e)(7) and (e)(8) as paragraphs (e)(8) and (e)(9), respectively, without change.

§ 54.307 Support to a competitive eligible telecommunications carrier.

* * * * *

(e) * * *

(2) *Monthly support amounts.* Competitive eligible telecommunications carriers shall receive the following support amounts, except as provided in paragraphs (e)(3) through (7) of this section.

(i) From January 1, 2012, to June 30, 2012, each competitive eligible telecommunications carrier shall receive its monthly baseline support amount each month.

(ii) From July 1, 2012 to June 30, 2013, each competitive eligible telecommunications carrier shall receive 80 percent of its monthly baseline support amount each month.

(iii) Beginning July 1, 2013, each competitive eligible telecommunications carrier shall receive 60 percent of its monthly baseline support amount each month.

* * * * *

(5) *Eligibility for interim support before 5G Fund Phase I auction.* Beginning the first day of the month following the effective date of the Report and Order, FCC 20-150, a competitive eligible telecommunications carrier that receives support pursuant to paragraph (a) or (e)(2) of this section shall no longer receive such support and shall instead receive support as described in this paragraph.

(i) A competitive eligible telecommunications carrier that is not a mobile competitive eligible telecommunications carrier, as that term is defined in § 54.5, shall no longer receive monthly baseline support.

(ii) Until the first day of the month following the release of a public notice by the Office of Economics and Analytics and Wireline Competition Bureau announcing the final areas eligible for support in the 5G Fund Phase I auction:

(A) A mobile competitive eligible telecommunications carrier that receives support pursuant to paragraph (a) of this section shall receive “monthly baseline support” in an amount equal to one-twelfth (1/12) of its total support received for the preceding 12-month period.

(B) A mobile competitive eligible telecommunications carrier that receives support pursuant to paragraph (e)(2) of this section shall receive support at the same level described in paragraph (e)(2)(iii) of this section.

(iii) Beginning the first day of the month following the release of a public notice by the Office of Economics and Analytics and Wireline Competition Bureau announcing the final areas eligible for support in the 5G Fund Phase I auction and until the first day of the month following release of a public notice announcing the close of the 5G Fund Phase I auction, a mobile competitive eligible telecommunications carrier that receives support pursuant to paragraph (e)(5)(ii) of this section for any such eligible area shall receive an adjusted, disaggregated amount of monthly support for that area, which shall be calculated by multiplying the monthly support level described in paragraph (e)(5)(ii) of this section by the areal percentage of the eligible portion of the competitive eligible telecommunications carrier’s service area, weighted by applying the 5G Fund adjustment factor methodology and values adopted by the Office of Economics and Analytics and Wireline Competition Bureau and announced in a public notice.

(iv) Beginning the first day of the month following the release of a public notice by the Office of Economics and Analytics and Wireline Competition Bureau announcing the final areas eligible for support in the 5G Fund Phase I auction, a mobile competitive eligible telecommunications carrier that receives support pursuant paragraph (e)(5)(ii) of this section for any ineligible area shall receive an adjusted, disaggregated amount of monthly support for that area, which shall be calculated by multiplying the monthly support level described in paragraph (e)(5)(ii) of this section by the areal percentage of the ineligible portion of the competitive eligible telecommunications carrier’s service area, weighted by applying the 5G Fund adjustment factor methodology and values adopted by the Office of Economics and Analytics and Wireline Competition Bureau and announced in a public notice, and reduced as follows:

(A) For the first 12 months, each mobile competitive eligible telecommunications carrier shall receive monthly support that is two-thirds (2/3) of the level described in paragraph (e)(5)(iv) of this section for the ineligible area.

(B) For 12 months starting the first day of the month following the period described in paragraph (e)(5)(iv)(A) of this section, each mobile competitive eligible telecommunications carrier shall receive monthly support that is one-third (1/3) of the level described in paragraphs (e)(5)(iv) of this section for the ineligible area.

(C) Following the period described in paragraph (e)(5)(iv)(B) of this section, no mobile competitive eligible telecommunications carrier shall receive monthly support for any ineligible area pursuant to this section.

(6) *Eligibility for support after 5G Fund Phase I auction.* (i) Notwithstanding the schedule described in paragraph (e)(5)(iii) of this section, a mobile competitive eligible telecommunications carrier that receives monthly support pursuant to paragraph (e)(5)(iii) of this section and is a winning bidder in the 5G Fund Phase I auction shall continue to receive support at the same level it was receiving support for such area at the time of the release of a public notice announcing the close of the 5G Fund Phase I auction until such

time as the Office of Economics and Analytics and Wireline Competition Bureau determine whether or not to authorize the carrier to receive 5G Fund Phase I support.

(A) Upon the Office of Economics and Analytics and Wireline Competition Bureau's release of a public notice approving a mobile competitive eligible telecommunications carrier's application for support submitted pursuant to § 54.1014(b) and authorizing the carrier to receive 5G Fund Phase I support, the carrier shall no longer receive support at the level of monthly support described in paragraph (e)(5)(iii) of this section for such area. Thereafter, the carrier shall receive monthly support in the amount of its 5G Fund Phase I winning bid pursuant to § 54.1017, provided that the Administrator shall decrease the amount of the carrier's support to the extent necessary to account for any support the carrier received during the period between the close of the 5G Fund Phase I auction and the release of the public notice authorizing the carrier to receive 5G Fund Phase I support.

(B) A mobile competitive eligible telecommunications carrier that is a winning bidder in the 5G Fund Phase I auction but is not subsequently authorized to receive 5G Fund Phase I support shall no longer receive support at the level of monthly support described in paragraph (e)(5)(iii) of this section for such area following the determination not to authorize the carrier for 5G Fund Phase I support. Thereafter, the carrier shall receive monthly support as set forth in paragraph (e)(6)(iv) of this section for such area, provided that the Administrator shall decrease the amount of the carrier's support to the extent necessary to account for any support the carrier received during the period between the close of the 5G Fund Phase I auction and the Office of Economics and Analytics and Wireline Competition Bureau's authorization determination.

(ii) A mobile competitive eligible telecommunications carrier that does not receive monthly support pursuant to this section and is a winning bidder in the 5G Fund Phase I auction shall receive monthly support pursuant to § 54.1017.

(iii) A mobile eligible telecommunications carrier that receives monthly support pursuant to paragraph (e)(5)(iii) of this section for an area for which support is not won in the 5G Fund Phase I auction shall continue to receive support at the level of monthly support described in paragraph (e)(5)(iii) of this section provided that it is the carrier receiving the minimum level of sustainable support for the area, but for no more than 60 months from the first day of the month following the release of a public notice by the Office of Economics and Analytics and Wireline Competition Bureau announcing the close of the 5G Fund Phase I auction. The "minimum level of sustainable support" is the lowest monthly support received by a mobile competitive eligible telecommunications carrier for the area that has deployed the highest level of technology (e.g., 5G) within the state encompassing the area.

(iv) All other mobile competitive eligible telecommunications carriers that receive monthly support pursuant to paragraph (e)(5)(iii) of this section for eligible areas shall instead receive the following monthly support amounts for such areas:

(A) For 12 months starting the first day of the month following release of a public notice announcing the close of the 5G Fund Phase I auction, each mobile competitive eligible telecommunications carrier shall receive monthly support that is two-thirds (2/3) of the level described in paragraph (e)(5)(iii) of this section for the area.

(B) For 12 months starting the month following the period described in paragraph (e)(6)(iv)(A) of this section, each mobile competitive eligible telecommunications carrier shall receive monthly support that is one-third (1/3) of the level described in paragraph (e)(5)(iii) of this section for the area.

(C) Following the period described in paragraph (e)(6)(iv)(B) of this section, no mobile competitive eligible telecommunications carrier shall receive monthly support for the area pursuant to this section.

(7) *Eligibility for support after 5G Fund Phase II auction.* (i) Notwithstanding the schedule described in paragraphs (e)(6)(iii) or (iv) of this section, a mobile competitive eligible telecommunications carrier that receives monthly support pursuant to paragraphs (e)(6)(iii) or (iv) of this section, as applicable, and is a winning bidder in the 5G Fund Phase II auction shall receive support at the same level it was receiving support for such area at the time of the release of a public notice announcing the close of the 5G Fund Phase II auction until such time as the Office of Economics and Analytics and Wireline Competition Bureau determine whether or not to authorize the carrier to receive 5G Fund Phase II support.

(A) Upon the Office of Economics and Analytics and Wireline Competition Bureau's release of a public notice approving a mobile competitive eligible telecommunications carrier's application for support submitted pursuant to § 54.1014(b) and authorizing the carrier to receive 5G Fund Phase II support, the carrier shall no longer receive support at the level of monthly support pursuant to this section for such area. Thereafter, the carrier shall receive monthly support in the amount of its 5G Fund Phase II winning bid pursuant to § 54.1017, provided that the Administrator shall decrease the amount of the carrier's support to the extent necessary to account for any support the carrier received during the period between the close of the 5G Fund Phase II auction and the release of the public notice authorizing the carrier to receive 5G Fund Phase II support.

(B) A mobile competitive eligible telecommunications carrier that is a winning bidder in the 5G Fund Phase II auction but is not subsequently authorized to receive 5G Fund Phase II support shall no longer receive support at the level of monthly support pursuant to paragraph (e)(6)(iii) or (iv) of this section for such area, as applicable, following the determination not to authorize the carrier for 5G Fund Phase II support. Thereafter, the carrier shall receive monthly support as set forth in paragraphs (e)(7)(iv) or (v) of this section for such area, as applicable, provided that the Administrator shall decrease the amount of the carrier's support to the extent necessary to account for any support received during the period between the close of the 5G Fund Phase II auction and the Office of Economics and Analytics and Wireline Competition Bureau's authorization determination.

(ii) A mobile competitive eligible telecommunications carrier that does not receive monthly support pursuant to this section and is a winning bidder in the 5G Fund Phase II auction shall receive monthly support pursuant to § 54.1017.

(iii) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to paragraph (e)(6)(iii) of this section for an area for which support is not won in the 5G Fund Phase II auction shall continue to receive support for that area as described in paragraph (e)(6)(iii) of this section.

(iv) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to paragraph (e)(6)(iii) of this section for an area for which support is won in the 5G Fund Phase II auction and for which the carrier is not the winning bidder shall receive the following monthly support amounts for such areas:

(A) For 12 months starting the first day of the month following release of a public notice announcing the close of the 5G Fund Phase II auction, the mobile competitive eligible telecommunications carrier shall receive monthly support that is two-thirds (2/3) of the level described in paragraph (e)(6)(iii) of this section for the area.

(B) For 12 months starting the month following the period described in paragraph (e)(7)(iv)(A) of this section, the mobile competitive eligible telecommunications carrier shall receive monthly support that is one-third (1/3) of the level described in paragraph (e)(6)(iii) of this section for the area.

(C) Following the period described in paragraph (e)(7)(iv)(B) of this section, the mobile competitive eligible telecommunications carrier shall not receive monthly support for the area pursuant to this section.

(v) All other mobile competitive eligible telecommunications carriers that receive monthly support pursuant to paragraph (e)(6)(iv) of this section for an area shall continue to receive support for the area pursuant to that paragraph.

10. Amend § 54.313 to revise paragraph (k) to read as follows and add new paragraph (n):

§ 54.313 Annual reporting requirements for high-cost recipients.

* * * * *

(k) This section does not apply to recipients that solely receive support from Phase I of the Mobility Fund.

* * * * *

(n) In addition to the information and certifications in paragraph (a) of this section, a mobile competitive eligible telecommunications carrier receiving legacy high-cost support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) shall certify whether it used any support pursuant to § 54.207(f), and if so, whether it used such support in compliance with § 54.7.

11. Amend § 54.315 to revise paragraph (c)(2)(iv)(B) to read as follows:

§ 54.315 Application process for Connect America Fund phase II support distributed through competitive bidding.

* * * * *

(c) * * *

(2) * * *

(iv) * * *

(B) Has a branch office:

(1) located in the District of Columbia; or

(2) located in New York City, New York, or such other branch office agreed to by the Commission, that will accept a letter of credit presentation from the Administrator via overnight courier, in addition to in-person presentations;

12. Add new § 54.322 to read as follows:

§ 54.322 Public Interest Obligations and Performance Requirements, Reporting Requirements, and Non-Compliance Mechanisms for Mobile Legacy High-Cost Support Recipients.

(a) *General.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(ii), (e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall deploy voice and broadband data services that meet at least the 5G-NR (New Radio) technology standards developed by the 3rd Generation Partnership Project with Release 15, or any successor release that may be adopted by the Office of Economics and Analytics and the Wireline Competition Bureau after notice and comment.

(b) *Service milestones and deadlines.* A mobile competitive eligible telecommunications carrier that

receives monthly support pursuant to § 54.307(e)(5)(ii), (e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall deploy 5G service that meets the performance requirements specified in paragraph (d) of this section to a percentage of the service areas for which the carrier receives monthly support and on a schedule as specified and adopted by the Office of Economics and Analytics and Wireline Competition Bureau after notice and comment.

(c) *Support usage.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(ii), (e)(5)(iii), (e)(6)(iii) or (e)(7)(iii) shall use an increasing percentage of such support for the deployment, maintenance, and operation of mobile networks that provide 5G service as specified in paragraph (a) of this section and that meet the performance requirements specified in paragraph (d) of this section as follows:

(1) *Year one support usage.* The carrier shall use at least one-third (1/3) of the total monthly support received pursuant to § 54.307(e)(5)(ii), (e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) in calendar year 2021 as specified in paragraph (c) of this section by December 31, 2021.

(2) *Year two support usage.* The carrier shall use at least two-thirds (2/3) of the total monthly support received pursuant to § 54.307(e)(5)(ii), (e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) in calendar year 2022 as specified in paragraph (c) of this section by December 31, 2022.

(3) *Year three and subsequent year support usage.* The carrier shall use all monthly support received pursuant to § 54.307(e)(5)(ii), (e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) as specified in paragraph (c) of this section in 2023 and thereafter.

(4) *Year one support usage flexibility.* If the carrier is unable to meet the support usage requirement in paragraph (c)(1) of this section, the carrier shall have the flexibility to instead proportionally increase the support usage requirement in paragraph (c)(2) of this section such that its combined usage of monthly support received pursuant to § 54.307(e)(5)(ii), (e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) in calendar years 2021 and 2022 is equal to the total amount of such support that the carrier receives annually, provided that the carrier certifies to the Wireline Competition Bureau this amount and that it will make up for any shortfall in a filing due by March 31, 2021 or 30 days after Paperwork Reduction Act approval, whichever is later.

(d) *Performance requirements.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(ii), (e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall meet the following minimum baseline performance requirements for data speeds, data latency, and data allowances in areas that it has deployed 5G service as specified in paragraph (a) of this section and for which it receives support for at least one plan that it offers:

(1) Median data transmission rates of 35 Mbps download and 3 Mbps upload, and with at least 90 percent of measurements recording data transmission rates of not less than 7 Mbps download and 1 Mbps upload;

(2) Transmission latency of 100 milliseconds or less round trip for successfully transmitted measurements (i.e., ignoring lost or timed-out packets); with at least 90 percent of measurements recording latency of 100 milliseconds or less round trip, and

(3) At least one service plan offered must include a data allowance that is equivalent to the average United States subscriber data usage as specified and adopted by the Office of Economics and Analytics and Wireline Competition Bureau after notice and comment.

(e) *Collocation obligations.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) shall allow for reasonable collocation by other carriers of services that would meet the technological requirements specified in paragraph (a) of this section on all cell-site infrastructure constructed with universal service funds that it owns or manages in

the area for which it receives such monthly support. In addition, during the time that the mobile competitive eligible telecommunications carrier receives such support, the carrier may not enter into facilities access arrangements that restrict any party to the arrangement from allowing others to collocate on the cell-site infrastructure.

(f) *Voice and data roaming obligations.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) shall comply with the Commission's voice and data roaming requirements that are currently in effect on networks that are built with universal service funds.

(g) *Reasonably comparable rates.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) shall offer its services in the areas for which it receives such monthly support at rates that are reasonably comparable to those rates offered in urban areas and must advertise the voice and broadband services it offers in its subsidized service areas. A mobile competitive eligible telecommunications carrier's rates shall be considered reasonably comparable to urban rates, based upon the most recently-available decennial U.S. Census Bureau data identifying areas as urban, if rates for services in rural areas fall within a reasonable range of urban rates for reasonably comparable voice and broadband services.

(1) If the carrier offers service in urban areas, it may demonstrate that it offers reasonably comparable rates if it offers the same rates, terms, and conditions (including usage allowances, if any, for a specific rate) in both urban and rural areas or if one of the carrier's stand-alone voice service plans and one service plan offering data are substantially similar to plans it offers in urban areas.

(2) If the carrier does not offer service in urban areas, it may demonstrate that it offers reasonably comparable rates by identifying a carrier that does offer service in urban areas and the specific rate plans to which its plans are reasonably comparable, along with submission of corroborating evidence that its rates are reasonably comparable, such as marketing materials from the identified carrier.

(h) *Initial report of current service offerings.* (1) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) shall submit an initial report describing its current service offerings in its subsidized service areas and how the monthly support it is receiving is being used in such areas no later than three months after the effective date of the Report and Order, FCC 20-150, and Paperwork Reduction Act approval. This report shall include the following information:

(i) Information regarding the carrier's current service offerings in its subsidized service areas, including the highest level of technology deployed, a target date for when 5G broadband service meeting the performance requirements specified in paragraph (d) of this section will be deployed within the subsidized service area, and an estimate of the percentage of area covered by 5G deployment meeting the performance requirements specified in paragraph (d) of this section within the subsidized service area;

(ii) A brief narrative describing its current service offerings and providing an accounting of how monthly support has been used to provide mobile wireless services for the 12-month period prior to the deadline of this report;

(iii) Detailed cell-site and sector infrastructure information for infrastructure that the carrier uses to provide service in its subsidized service areas;

(iv) Certification that the carrier has filed relevant deployment data (either via FCC Form 477 or the Digital Opportunity Data Collection, as appropriate) that reflect its current deployment covering its subsidized service areas;

(v) Certification that the carrier is in compliance with the public interest obligations as set forth in this section and all of the terms and conditions associated with the continued receipt of such monthly support disbursements; and

(vi) Additional information as required by the Office of Economics and Analytics and Wireline Competition Bureau after release of a public notice detailing the procedures to file this report.

(2) The party submitting the report must certify that it has been authorized to do so by the mobile competitive eligible telecommunications carrier that receives support.

(3) Each initial report of current service offerings shall be submitted solely via the Administrator's online portal.

(i) The Commission and the Administrator shall treat infrastructure data submitted as part of such reports as presumptively confidential.

(ii) The Administrator shall make such reports available to the Commission and to the relevant state, territory, and Tribal governmental entities, as applicable.

(4) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) shall have a continuing obligation to maintain the accuracy and completeness of the information provided in its initial report. Any substantial change in the accuracy or completeness of such a report must be reported as an update to its submitted report within ten (10) business days after the reportable event occurs.

(5) The Commission shall retain the authority to look behind a mobile competitive eligible telecommunications carrier's initial report and to take action to address any violations.

(i) *Annual reports.* (1) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) shall submit an annual report no later than July 1 in each year following the year in which its initial report of current service offerings as specified in paragraph (h) of this section is submitted. Each such report shall include the following information:

(i) Except for areas for which the carriers receives monthly support pursuant to § 54.307(e)(5)(iv), (e)(6)(iv), or (e)(7)(iv), updated information regarding the carrier's current service offerings in its subsidized service areas for the previous calendar year, including the highest level of technology deployed, a target date for when 5G broadband service meeting the performance requirements specified in paragraph (d) of this section will be deployed within the subsidized service area, and an estimate of the percentage of area covered by 5G deployment meeting the performance requirements specified in paragraph (d) of this section within the subsidized service area;

(ii) A brief narrative providing an accounting of the support the carrier has received and how monthly support has been used to provide mobile wireless services for the previous calendar year, with an indication of which of these expenditures were used to meet the requirements specified in paragraph (c) of this section within the subsidized service area;

(iii) Detailed cell-site and sector infrastructure information for infrastructure that the carrier uses to provide service in its subsidized service areas;

(iv) Certification that the carrier has filed relevant deployment data (either via FCC Form 477 or the Digital Opportunity Data Collection, as appropriate) that reflect its current deployment covering its subsidized service areas;

- (v) Certification that the carrier is in compliance with the public interest obligations as set forth in this section and all of the terms and conditions associated with the continued receipt of monthly support; and
- (vi) Additional information as required by the Office of Economics and Analytics and Wireline Competition Bureau after release of a public notice detailing the procedures to file these reports.
- (2) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) shall supplement the information provided to the Administrator in any annual report within ten (10) business days from the onset of any reduction in the percentage of areas for which the recipient receives support being served after the filing of an initial or annual certification report or in the event of any failure to comply with any of the requirements for continued receipt of such support.
- (3) The party submitting the annual report must certify that it has been authorized to do so by mobile competitive eligible telecommunications carrier that receives support.
- (4) Each annual report shall be submitted solely via the Administrator's online portal.
- (i) The Commission and the Administrator shall treat infrastructure data submitted as part of such a report as presumptively confidential.
- (ii) The Administrator shall make such reports available to the Commission and to the relevant state, territory, and Tribal governmental entities, as applicable.
- (5) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) shall have a continuing obligation to maintain the accuracy and completeness of the information provided in its annual reports. Any substantial change in the accuracy or completeness of any such report must be reported as an update to the submitted annual report within ten (10) business days after the reportable event occurs.
- (6) The Commission shall retain the authority to look behind a mobile competitive eligible telecommunications carrier's annual reports and to take action to address any violations.
- (j) *Service milestone reports.* (1) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(ii), (e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall submit a report after each of the service milestones described in paragraph (b) of this section by the deadlines established by the Office of Economics and Analytics and Wireline Competition Bureau demonstrating that it has deployed 5G service that meets the performance requirements specified in paragraph (d) of this section, which shall include information as required by the Office of Economics and Analytics and Wireline Competition Bureau in a public notice.
- (2) All data submitted in or certified to in any service milestone report shall be subject to verification by the Administrator for compliance with the performance requirements specified in paragraph (d) of this section.
- (k) *Non-compliance measures for failure to comply with performance requirements or public interest obligations.* (1) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) that fails to comply with the public interest obligations set forth in paragraphs (e) through (j) of this section, fails to comply with the performance requirements set forth in paragraph (d) of this section at the prescribed level by the applicable service milestone deadline established in paragraph (b) of this section, or that fails to use monthly support as set forth in paragraph (c) of this section must notify the Wireline Competition Bureau and the Administrator within 10 business days of its non-compliance.

(2) Upon notification by a carrier of its non-compliance pursuant to paragraph (k) of this section, or a determination by the Administrator or Wireline Competition Bureau of a carrier's non-compliance with any of the public interest obligations set forth in paragraphs (e) through (j) of this section or the performance requirements set forth in paragraph (d) of this section, the carrier will be deemed to be in default, and for monthly support received pursuant to § 54.307(e)(5), (e)(6), or (e)(7), will no longer be eligible to receive such support, will receive no further support disbursements, and may be subject to recovery of up to the amount of support received since the effective date of the Report and Order, FCC 20-150, that was not used for the deployment, maintenance, and operation of mobile networks that provide 5G service as specified in paragraph (a) of this section and that meet the performance requirements specified in paragraph (d) of this section. The carrier may also be subject to further action, including the Commission's existing enforcement procedures and penalties, potential revocation of ETC designation, and suspension or debarment pursuant to § 54.8.

(3) A mobile competitive eligible telecommunications carrier that voluntarily relinquishes receipt of monthly support pursuant to § 54.307(e)(5), (e)(6), or (e)(7) will no longer be required to comply with the public interest obligations specified in this section, except that the carrier may be deemed to be in default and subject to recovery of support as set forth in paragraph (k)(2) of this section.

13. Amend 47 CFR § 54.804 to revise paragraph (d)(2)(iv)(B) to read as follows:

§ 54.804 Rural Digital Opportunity Fund application process.

* * * * *

(d) * * *

(2) * * *

(iv) * * *

(B) Has a branch office:

(1) located in the District of Columbia; or

(2) located in New York City, New York, or such other branch office agreed to by the Commission, that will accept a letter of credit presentation from the Administrator via overnight courier, in addition to in-person presentations;

14. Revise the heading for subpart L and §§ 54.1011 through 54.1021 to read as follows:

Subpart L – Mobility Fund and 5G Fund

Sec.

§ 54.1011 5G Fund.

§ 54.1012 Geographic areas eligible for support.

§ 54.1013 Applicant eligibility.

§ 54.1014 Application process.

§ 54.1015 Public interest obligations and performance requirements for 5G Fund support recipients.

§ 54.1016 Letter of credit.

§ 54.1017 5G Fund support disbursements.

§ 54.1018 Annual reports.

§ 54.1019 Interim service and final service milestone reports.

§ 54.1020 Non-compliance measures for 5G Fund support recipients.

§ 54.1021 Record retention for the 5G Fund.

* * * * *

§ 54.1011 5G Fund.

(a) The Commission will use competitive bidding, as provided in part 1, subpart AA, of this chapter, to determine the recipients of support available through the 5G Fund and the amount(s) of support that they may receive for specific geographic areas, subject to applicable post-auction procedures.

(b) 5G Fund support will be awarded in two phases using multi-round, descending clock auctions.

(c) Areas eligible for 5G Fund Phase I support will be those areas identified by the Office of Economics and Analytics and Wireline Competition Bureau in a public notice as showing a lack of 4G Long Term Evolution (LTE) and 5G coverage on an unsubsidized basis based on the mobile broadband coverage maps created by the Commission using coverage data submitted in the Digital Opportunity Data Collection pursuant to § 1.7004(c)(3).

(d) The Commission will incorporate an adjustment factor into the 5G Fund auction design that will assign a weight to each geographic area eligible in the 5G Fund Phase I auction using the adjustment factor values adopted by the Office of Economics and Analytics and Wireline Competition Bureau and announced in a public notice.

(e) The Commission will incorporate an adjustment factor into the methodology for disaggregation of high-cost legacy support pursuant to § 54.307(e)(5)(iii) and (e)(5)(iv) that will assign a weight to each geographic area using the adjustment factor values adopted by the Office of Economics and Analytics and Wireline Competition Bureau and announced in a public notice.

§ 54.1012 Geographic Areas Eligible for Support.

(a) 5G Fund support will be made available for geographic areas identified as eligible by public notice.

(b) Coverage units for purposes of conducting competitive bidding and disbursing support based on square kilometers will be identified by public notice for each area eligible for support.

§ 54.1013 Applicant Eligibility.

(a) An applicant for 5G Fund support shall be an eligible telecommunications carrier in an area in order to receive 5G Fund support for that area. The applicant may obtain its designation as an eligible telecommunications carrier after the close of a 5G Fund auction, provided that the applicant submits proof

of its designation within 180 days after the release of the public notice identifying the applicant as a winning bidder. The eligible telecommunications carrier service area of a 5G Fund support recipient will not be required to conform to the service area of the rural telephone company serving the same area. An applicant for 5G Fund support shall not receive such support prior to the submission of proof of its designation as an eligible telecommunications carrier. After such submission, the eligible telecommunications carrier shall receive a balloon payment that will consist of the carrier's monthly 5G Fund support amount multiplied by the number of whole months between the first day of the month after the close of the auction and the issuance of the public notice authorizing the carrier to receive 5G Fund support.

(b) An applicant must have exclusive access to Commission licensed spectrum and sufficient bandwidth in an area that enables it to satisfy the performance requirements specified in § 54.1015 in order to receive 5G Fund support for that area. The applicant shall describe its access to spectrum as specified in § 54.1014(a)(3) and certify, in a form acceptable to the Commission, that it has such access and sufficient bandwidth (at a minimum, 10 megahertz x 10 megahertz using frequency division duplex (FDD) or 20 megahertz using time division duplex (TDD)) in each area in which it intends to bid for support at the time it applies to participate in competitive bidding, and that it will retain such access for at least ten (10) years after the date on which it is authorized to receive support. A winning bidder that applies for 5G Fund support applicant shall describe its access to spectrum as specified in § 54.1014(b)(2)(v) at the time it applies for support and certify, in a form acceptable to the Commission, that it has such access and sufficient bandwidth (at a minimum, 10 megahertz x 10 megahertz using frequency division duplex (FDD) or 20 megahertz using time division duplex (TDD)) in each area in which it is applying for support, and that it will retain such access for at least ten (10) years after the date on which it is authorized to receive support.

(c) An applicant shall certify that it is financially and technically qualified to provide the services supported by the 5G Fund within the ten (10) year support term in each geographic area for which it seeks and is authorized to receive support.

§ 54.1014 Application Process.

(a) *Application to Participate in Competitive Bidding for 5G Fund Support.* In addition to providing the information specified in § 1.21001(b) of this chapter and any other information required by the Commission, an applicant to participate in competitive bidding for 5G Fund support shall:

- (1) Certify that the applicant is financially and technically capable of meeting the public interest obligations and performance requirements in § 54.1015 in each area for which it seeks support;
- (2) Disclose its status as an eligible telecommunications carrier in any area for which it will seek support and associated study area code(s) or as an entity that will file an application to become an eligible telecommunications carrier in any such area after being identified as a winning bidder for such area in a 5G Fund auction, and certify that the disclosure is accurate;
- (3) Describe the Commission licensed spectrum to which the applicant has exclusive access that the applicant plans to use to meet its public interest obligations and performance requirements in areas for which it will bid for support, including whether the applicant currently holds a license for or leases the spectrum, including any necessary renewal expectancy, and whether such spectrum access is contingent upon receiving support in a 5G Fund auction, the license applicable to the spectrum to be accessed, the type of service covered by the license, the particular frequency band(s), the call sign, and the total amount of bandwidth (in megahertz) to which the applicant has access under the license applicable to the spectrum to be accessed, and certify that the description is accurate, that the applicant has access to spectrum in each area for which it intends to bid for support, and that the applicant will retain such access for at least ten (10) years after the date on which it is authorized to receive 5G Fund support;

(4) Submit specified operational and financial information;

(i) Indicate whether the applicant has been providing mobile wireless voice and/or mobile wireless broadband service for at least three years prior to the short-form application deadline (or is a wholly-owned subsidiary of an entity that has been providing such service for at least three years). An applicant for a 5G Fund auction will be deemed to have started providing mobile wireless broadband service on the date it began commercially offering service to end users. If the applicant is applying as a consortium or joint venture, the applicant will be permitted to rely on the length of time a member of the consortium or joint venture has been providing mobile service prior to the short-form application deadline in responding to this question;

(ii) If the applicant has been providing mobile wireless voice and/or mobile wireless broadband service for at least three years prior to the short-form application deadline (or is a wholly-owned subsidiary of an entity that has been providing such service for at least three years), it must:

(A) Certify that the applicant has been providing mobile wireless voice and/or mobile wireless broadband service for at least three years prior to the short-form application deadline (or is a wholly-owned subsidiary of an entity that has been providing such service for at least three years),

(B) Specify the number of years it (or its parent company, if it is a wholly-owned subsidiary) has been providing such service,

(C) Certify that it (or its parent company, if it is a wholly-owned subsidiary) has submitted mobile wireless voice and/or mobile wireless broadband data as required on FCC Form 477 and/or in the Digital Opportunity Data Collection, as applicable, during that time period,

(D) Provide each of the FCC Registration Numbers (FRNs) that the applicant or its parent company (and in the case of a holding company applicant, its operating companies) has used to submit mobile wireless voice and/or mobile wireless broadband data on FCC Form 477 and/or in the Digital Opportunity Data Collection, as applicable, during that time period.

(iii) If the applicant has been providing mobile wireless voice and/or mobile wireless broadband service for fewer than three years prior to the application deadline (or is not a wholly-owned subsidiary of an entity that has been providing such service for at least three years), it must:

(A) submit information concerning its operational history and a preliminary project description as prescribed by the Commission or the Office of Economics and Analytics and the Wireline Competition Bureau in a public notice;

(B) submit a letter of interest from a qualified bank that meets the qualifications set forth in § 54.1016 stating that the bank would provide a letter of credit as described in section to the applicant if the applicant becomes a winning bidder for bids of a certain dollar magnitude, as well as the maximum dollar amount for which the bank would be willing to issue a letter of credit to the applicant; and

(C) submit a statement that the bank would be willing to issue a letter of credit that is substantially in the same form as the Commission's model letter of credit.

(5) Certify that it will be subject to a forfeiture pursuant to § 1.21004 in the event of an auction default; and

(6) Certify that the party submitting the application is authorized to do so on behalf of the applicant.

(b) *Application by Winning Bidders for 5G Fund Support.*

(1) *Deadline.* Unless otherwise provided by public notice, winning bidders for 5G Fund support shall file an application for 5G Fund support no later than ten (10) business days after the public notice identifying them as winning bidders.

(2) *Application Contents.* An application for 5G Fund support must contain:

(i) Identification of the party seeking the support, including ownership information as set forth in § 1.2112(a) of this chapter;

(ii) Updated information regarding the agreements, arrangements, or understandings related to 5G Fund support disclosed in the application to participate in competitive bidding for 5G Fund support. A winning bidder may also be required to disclose in its application for 5G Fund support the specific terms, conditions, and parties involved in any agreement into which it has entered and the agreement itself;

(iii) Certification that the applicant is financially and technically capable of providing the required coverage and performance levels within the specified timeframe in the geographic areas in which it won support;

(iv) Proof of the applicant's status as an eligible telecommunications carrier, or a statement that the applicant will become an eligible telecommunications carrier in any area for which it seeks support within 180 days of the public notice identifying them as winning bidders, and certification that the proof is accurate;

(v) A description of the Commission licensed spectrum to which the applicant has exclusive access that the applicant plans to use to meet its public interest obligations and performance requirements in areas for which it is winning bidder for support, including whether the applicant currently holds a license for or leases the spectrum, along with any necessary renewal expectancy, the license applicable to the spectrum to be accessed, the type of service covered by the license, the particular frequency band(s), the call sign, and the total amount of bandwidth (in megahertz) to which the applicant has access under the license applicable to the spectrum to be accessed, and certification that the description is accurate, that the winning bidder has access to spectrum in each area for which it is applying for support, and that the applicant will retain such access for the entire ten (10) year 5G Fund support term;

(vi) A detailed project description that describes the network to be built, identifies the proposed technology, demonstrates that the project is technically feasible, discloses the complete project budget, and discusses each specific phase of the project (e.g., network design, construction, deployment, and maintenance), as well as a complete project schedule, including timelines, milestones, and costs;

(vii) Certifications that the applicant has available funds for all project costs that exceed the amount of support to be received from 5G Fund and that the applicant will comply with all program requirements, including the public interest obligations and performance requirements set forth in § 54.1015;

(viii) Any guarantee of performance that the Commission may require by public notice or other proceedings, including but not limited to the letters of credit and opinion letter required in § 54.1016, or a written commitment from an acceptable bank, as defined in § 54.1016, to issue such a letter of credit;

(ix) Certification that the applicant will offer services in supported areas at rates that are reasonably comparable to the rates the applicant charges in urban areas;

(x) Certification that the party submitting the application is authorized to do so on behalf of the applicant; and

(xi) Such additional information as the Commission may require.

(3) *Application Processing.*

(i) No application will be considered unless it has been submitted in an acceptable form during the period specified by public notice. No applications submitted or demonstrations made at any other time shall be accepted or considered.

(ii) Any application that, as of the submission deadline, either does not identify the applicant seeking support as specified in the public notice announcing application procedures, or does not include required certifications, shall be denied.

(iii) An applicant may be afforded an opportunity to make minor modifications to amend its application or correct defects noted by the applicant, the Commission, the Administrator, or other parties. Minor modifications include correcting typographical errors in the application and supplying non-material information that was inadvertently omitted or was not available at the time the application was submitted.

(iv) Applications to which major modifications are made after the deadline for submitting applications shall be denied. Major modifications include, but are not limited to, any changes in the ownership of the applicant that constitute an assignment or change of control, or the identity of the applicant, or the certifications required in the application.

(v) After receipt and review of the applications, a public notice shall identify each winning bidder that may be authorized to receive 5G Fund support, after the winning bidder submits a Letter of Credit and an accompanying opinion letter from its outside legal counsel as required by § 54.1016, in a form acceptable to the Commission, and any final designation as an eligible telecommunications carrier that any applicant may still require. Each such winning bidder shall submit a Letter of Credit and an accompanying opinion letter from its outside legal counsel as required by § 54.1016, in a form acceptable to the Commission, and any required final designation as an eligible telecommunications carrier no later than ten (10) business days following the release of the public notice.

(vi) After receipt of all necessary information, a public notice will identify each winning bidder that is authorized to receive 5G Fund support.

§ 54.1015 Public Interest Obligations and Performance Requirements for 5G Fund Support Recipients.

(a) *General.* A 5G Fund support recipient shall deploy voice and data services that meet at least the 5G-NR (New Radio) technology standards developed by the 3rd Generation Partnership Project with Release 15, or any successor release that may be adopted by the Office of Economics and Analytics and the Wireline Competition Bureau after notice and comment.

(b) *Interim and final service milestones and deadlines.* A 5G Fund support recipient shall deploy 5G service as specified in paragraph (a) of this section as follows:

(1) *Year Three Interim Service Milestone Deadline.* A support recipient shall deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 40 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the third full calendar year following authorization of support.

(2) *Year Four Interim Service Milestone Deadline.* A support recipient shall deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 60 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the fourth full calendar year following authorization of

support.

(3) *Year Five Interim Service Milestone Deadline.* A recipient shall deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 80 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the fifth full calendar year following authorization of support.

(4) *Year Six Final Service Milestone Deadline.* A support recipient shall deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 85 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the sixth full calendar year following funding authorization. In addition, a recipient shall deploy service meeting the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 75 percent of the total square kilometers associated with every census tract or census block group for which it was authorized to receive 5G Fund support no later than December 31 of the sixth full calendar year following authorization of support.

(5) *Optional Year Two Interim Service Milestone Deadline.* A support recipient may, at its option, deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 20 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the second full calendar year following funding authorization. Meeting this optional interim service milestone would permit the support recipient, after confirmation of the service deployment by the Administrator, to reduce its letter of credit so that it is valued at an amount equal to one year of support as described in § 54.1016(a)(1)(v).

(c) *Performance Requirements.* A recipient authorized to receive 5G Fund support shall meet the following minimum baseline performance requirements for data speeds, data latency, and data allowances in areas where it receives support:

- (1) Median of 35 Mbps download and 3 Mbps upload, and with at least 90 percent of measurements recording data transmission rates of not less than 7 Mbps download and 1 Mbps upload; and
- (2) Transmission latency of 100 milliseconds or less round trip for successfully transmitted measurements (i.e., ignoring lost or timed-out packets), with at least 90 percent of measurements recording latency of 100 milliseconds or less round trip.
- (3) At least one service plan offered must include a data allowance that is equivalent to the average United States subscriber data usage as specified by public notice.

(d) *Collocation Obligations.* During the 5G Fund support term, a recipient authorized to receive 5G Fund support shall allow for reasonable collocation by other carriers of services that would meet the technological requirements of the 5G Fund on all newly constructed cell-site infrastructure constructed with universal service funds that it owns or manages in the area(s) for which it receives 5G Fund support. In addition, during the 5G Fund support term, the recipient may not enter into facilities access arrangements that restrict any party to the arrangement from allowing others to collocate on the newly constructed cell-site infrastructure.

(e) *Voice and Data Roaming Obligations.* A recipient authorized to receive 5G Fund support shall comply with the Commission's voice and data roaming requirements that are currently in effect on networks that are built with 5G Fund support.

(f) *Reasonably Comparable Rates.* A recipient authorized to receive 5G Fund support shall offer its services in the areas for which it is authorized to receive support at rates that are reasonably comparable to those rates offered in urban areas and must advertise the voice and broadband services it offers in its subsidized service areas. A 5G Fund support recipient's rates shall be considered reasonably comparable to urban rates, based upon the most recently available decennial U.S. Census Bureau data identifying areas as urban, if rates for services in rural areas fall within a reasonable range of urban rates for reasonably comparable voice and broadband services.

(1) If the recipient offers service in urban areas, it may demonstrate that it offers reasonably comparable rates if it offers the same rates, terms, and conditions (including usage allowances, if any, for a specific rate) in both urban and rural areas or if one of the carrier's rural stand-alone voice service plans and one rural service plan offering data are substantially similar to plans it offers in urban areas.

(2) If the recipient does not offer service in urban areas, it may demonstrate that it offers reasonably comparable rates by identifying a carrier that does offer service in urban areas and the specific rate plans to which its rural plans are reasonably comparable, along with submission of corroborating evidence that its rates are reasonably comparable, such as marketing materials from the identified carrier.

(g) *Liability for Failure to Comply with Performance Requirements and Public Interest Obligations.* A support recipient that fails to comply with the performance requirements set forth in paragraph (c) of this section is subject to the non-compliance measures set forth in § 54.1020. A support recipient that fails to comply with the public interest obligations or any other terms and conditions associated with receiving 5G Fund support may be subject to action, including the Commission's existing enforcement procedures and penalties, reductions in support amounts, revocation of eligible telecommunications carrier designation, and suspension or debarment pursuant to § 54.8.

§ 54.1016 Letter of Credit.

(a) Before being authorized to receive 5G Fund support, a winning bidder shall obtain an irrevocable standby letter of credit which shall be acceptable in all respects to the Commission.

(1) Each winning bidder that becomes authorized to receive 5G Fund support shall maintain the standby letter of credit in an amount equal to, at a minimum, one year of support, until the Administrator has verified that the support recipient serves at least 85 percent of the eligible square kilometers for which it is authorized to receive support in a state, and at least 75 percent of the eligible square kilometers in each eligible census tract, by the Year Six Final Service Milestone.

(i) For Year One of a support recipient's support term, it must obtain a letter of credit valued at an amount equal to one year of support.

(ii) For Year Two of a support recipient's support term, it must obtain a letter of credit valued at an amount equal to eighteen months of support.

(iii) For Year Three of a support recipient's support term, it must obtain a letter of credit valued at an amount equal to two years of support.

(iv) For Year Four of a support recipient's support term, and for each year thereafter unless the support recipient is allowed to reduce it pursuant to § 54.1015(b), it must obtain a letter of credit valued at an amount equal to three years of support.

(v) A support recipient may obtain a new letter of credit or renew its existing letter of credit so that it is valued at an amount equal to one year of support once it meets its optional or required service milestones as specified in § 54.1015(b). The recipient may obtain or renew this letter of credit upon verification by

the Administrator that it has deployed service that meets the 5G Fund deadlines as specified in § 54.1015(b) and performance requirements as specified in § 54.1015(c). The recipient may maintain its letter of credit at this level for the remainder of its deployment term, so long as the Administrator verifies that the recipient successfully and timely meets its remaining required interim and final service milestones.

(vi) A support recipient that fails to meet its required interim service milestones must obtain a new letter of credit or renew its existing letter of credit valued at an amount equal to its existing letter of credit, plus an additional year of support, up to a maximum of three years of support.

(vii) A support recipient that fails to meet two or more required interim service milestones must maintain a letter of credit valued at an amount equal to three years of support and may be subject to additional noncompliance penalties as set forth in § 54.1020.

(2) The bank issuing the letter of credit shall be acceptable to the Commission. A bank that is acceptable to the Commission is:

(i) Any United States bank:

(A) That is insured by the Federal Deposit Insurance Corporation, and

(B) That has a bank safety rating issued by Weiss of B- or better; or

(ii) CoBank, so long as it maintains assets that place it among the 100 largest United States Banks, determined on basis of total assets as of the calendar year immediately preceding the issuance of the letter of credit and it has 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); or

(iii) The National Rural Utilities Cooperative Finance Corporation, so long as it maintains assets that place it among the 100 largest United States Banks, determined on basis of total assets as of the calendar year immediately preceding the issuance of the letter of credit and it has 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); or

(iv) Any non-United States bank:

(A) That is 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 letter of credit (determined on a U.S. dollar equivalent basis as of such date);

(B) Has a branch office

(i) located in the District of Columbia; or

(ii) located in New York City, New York, or such other branch office agreed to by the Commission, that will accept a letter of credit presentation from the Administrator via overnight courier, in addition to in-person presentations; and

(C) Has a long-term unsecured credit rating issued by a widely recognized credit rating agency that is equivalent to a BBB- or better rating by Standard & Poor's; and

(D) Issues the letter of credit payable in United States dollars.

(b) Before being authorized to receive 5G Fund support, a winning bidder shall obtain an opinion letter from its outside legal counsel clearly stating, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. § 101 et seq. (the “Bankruptcy Code”), that the bankruptcy court would not treat the letter of credit or proceeds of the letter of credit as property of the winning bidder’s bankruptcy estate, or the bankruptcy estate of any other winning bidder-related entity requesting issuance of the letter of credit, under section 541 of the Bankruptcy Code.

(c) Authorization to receive 5G Fund support is conditioned upon full and timely performance of all of the performance requirements set forth in § 54.1015(c), and any additional terms and conditions upon which the support was granted.

(1) Failure by a 5G Fund support recipient to meet any of the service milestones set forth in § 54.1015(b) will trigger reporting obligations and the withholding of support as described in § 54.1020. Failure to come into full compliance during the relevant cure period as described in § 54.1020(b)(4)(ii) or § 54.1020(c) will trigger a recovery action by the Administrator set forth in § 54.1020(b)(4)(ii) or § 54.1020(c), as applicable. If the recipient authorized to receive 5G Fund support does not repay the requisite amount of support within six months, the Administrator will be entitled to draw upon the entire amount of the letter of credit and may disqualify the 5G Fund support recipient from the receipt of 5G Fund support or additional universal service support.

(2) The default will be evidenced by a letter issued by the Chief of the Wireline Competition Bureau, or its respective designees, which letter, describing the performance default and attached to a standby letter of credit draw certificate, shall be sufficient for a draw on the standby letter of credit for the entire amount of the standby letter of credit.

§ 54.1017 5G Fund Support Disbursements.

(a) A winning bidder of 5G Fund support will be advised by public notice whether it has been authorized to receive support.

(b) 5G Fund support will be disbursed on a monthly basis to a recipient for ten (10) years following the date on which it is authorized to receive support.

(c) If a 5G Fund support recipient fails to comply with the performance requirements of the 5G Fund, the Administrator shall reduce, pause, or freeze, the monthly payments to the recipient until the recipient cures the non-compliance, as provided in § 54.1020. As set forth in § 54.1015(g), if a support recipient fails to comply with the public interest obligations or any other terms and conditions associated with receiving 5G Fund support, it may be subject reductions or suspension of support amounts.

(d) A winning bidder of 5G Fund support may not use such support to fulfill any enforceable commitments with the Commission to deploy 5G service.

§ 54.1018 Annual Reports.

(a) A 5G Fund support recipient authorized to receive 5G Fund support shall submit an annual report to the Administrator no later than July 1 of each year after the year in which it was authorized to receive support. Each support recipient shall certify in its annual report that it is in compliance with the public interest obligations, performance requirements, and all of the terms and conditions associated with the receipt of 5G Fund support in order to continue receiving 5G Fund support disbursements.

(b) All 5G Fund support recipients shall supplement the information provided in an annual report to the Administrator within 10 business days from the onset of any reduction in the percentage of the total

eligible square kilometers being served in a state after the filing of an annual certification report or in the event of any failure to comply with any of the 5G Fund requirements.

(c) The party submitting the annual report must certify that it has been authorized to do so by the 5G Fund support recipient.

(d) Each annual report shall be submitted solely via the Administrator's online portal.

(1) The Commission and the Administrator shall treat infrastructure data submitted as part of such a report as presumptively confidential.

(2) The Administrator shall make such reports available to the Commission and to the relevant state, territory, and Tribal governmental entities, as applicable.

(e) A 5G Fund support recipient shall have a continuing obligation to maintain the accuracy and completeness of the information provided in its annual reports. Any substantial change in the accuracy or completeness of any annual report must be reported as an update to the submitted annual report within ten (10) business days after the reportable event occurs.

(f) The Commission shall retain the authority to look behind 5G Fund support recipients' annual reports and to take action to address any violations.

§ 54.1019 Interim Service and Final Service Milestone Reports.

(a) A recipient authorized to receive 5G Fund support shall submit a report to the Administrator on or before March 1 after the third, fourth, fifth, and sixth service milestone deadlines established in § 54.1015(b) demonstrating that it has deployed service meeting the 5G Fund performance requirements specified in § 54.1015(c), which shall include the following:

(1) Certifications to representative data submitted in the Digital Opportunity Data Collection or as part of FCC Form 477, as applicable, demonstrating mobile transmissions to and from the network that establish compliance with the 5G Fund coverage, speed, and latency requirements;

(2) On-the-ground measurement tests to substantiate 5G broadband coverage data:

(i) with at least three tests conducted per square kilometer, measured by overlaying a uniform grid of one square kilometer (1 km by 1 km) on the recipient's submitted in-vehicle 5G coverage maps within the area for which 5G Fund support was awarded;

(ii) for a subset of drive-testable grid cells, such that the minimum percentage of drive-testable grid cells tested equals the minimum percentage of coverage required for each service buildout milestone (i.e., interim milestones of 40 percent, 60 percent, and 80 percent, and the final milestone of 85 percent), with previously reported testing being cumulative; and

(iii) where a drive-testable grid cell is any grid cell that has more than the *de minimis* amount of total roads specified in a public notice, based upon the most recent roadway data from the U.S. Census Bureau available for this purpose, considering roads classified in the primary road (S1100), secondary road (S1200), local road (S1400), and service drive (S1640) categories.

(3) Detailed cell-site and sector infrastructure information; and

(4) Additional information as required by the Commission in a public notice.

- (b) All data submitted and certified to in compliance with a recipient's public interest obligations in the milestone report shall be in compliance with standards set forth in the applicable public notice and shall be certified by a professional engineer.
- (c) Each service milestone report shall be submitted solely via the Administrator's online portal.
- (d) All data submitted in and certified to in any service milestone report shall be subject to verification by the Administrator for compliance with the 5G Fund performance requirements specified in § 54.1015(c).

§ 54.1020 Non-Compliance Measures for 5G Fund Support Recipients.

(a) *General.* A 5G Fund support recipient that has not deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 20 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state by the Year Three Interim Service Milestone deadline must notify the Commission and the Administrator within ten (10) business days after the Year Three Interim Service Milestone deadline that it failed to meet this milestone. Upon such notification, the support recipient will be deemed to be in default. The Wireline Competition Bureau will issue a letter evidencing the default and the support recipient will be subject to full support recovery. The provisions of paragraph (b) of this section will not be applicable to such a support recipient.

(b) *Interim Service Milestones.* A 5G Fund support recipient must notify the Commission, the Administrator, and the relevant state, U.S. Territory, or Tribal government, if applicable, within ten (10) business days after the applicable interim service milestone deadline if it has failed to meet an interim milestone. Upon notification that a support recipient has defaulted on an interim service milestone, the Wireline Competition Bureau will issue a letter evidencing the default. For purposes of determining whether a default has occurred, the support recipient must be offering service meeting the requisite performance requirements specified in § 54.1015(c). The issuance of this letter shall initiate reporting obligations and withholding of a percentage of the 5G Fund support recipient's total monthly 5G Fund support, if applicable, starting the month after issuance of the letter:

(1) *Tier 1.* If a support recipient has a compliance gap of at least five percent but less than 15 percent of the total square kilometers associated with the eligible areas in a state for which it is to have deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) by the interim service milestone, the Wireline Competition Bureau will issue a letter to that effect. Starting three months after the issuance of this letter, a support recipient will be required to file a report with the Administrator every three months that identifies the eligible square kilometers to which the support recipient has newly deployed facilities capable of delivering service that meets the requisite 5G Fund performance requirements in the previous quarter. The support recipient must continue to file quarterly reports until it has reported, and the Administrator has verified, that it has reduced the compliance gap to less than five percent of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state by that interim service milestone and the Wireline Competition Bureau issues a letter to that effect. A support recipient that files a quarterly report late, but within seven days after the due date established by the letter issued by the Wireline Competition Bureau for filing the report, will have its 5G Fund support reduced by an amount equivalent to seven days of support. If a support recipient does not file a report within seven days after the report's due date, it will have its 5G Fund support reduced on a pro-rata daily basis equivalent to the period of non-compliance, plus the minimum seven-day reduction, until such time as the quarterly report is filed.

(2) *Tier 2.* If a support recipient has a compliance gap of at least 15 percent but less than 25 percent of the total square kilometers associated with the eligible areas in a state for which it is to have deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) by the interim service milestone, the Administrator will withhold 15 percent of the support recipient's monthly support for that

state and the support recipient will be required to file quarterly reports with the Administrator. Once the support recipient has reported, and the Administrator has verified, that it has reduced the compliance gap to less than 15 percent of the required eligible square kilometers for that interim service milestone for that state, the Wireline Competition Bureau will issue a letter to that effect, the Administrator will stop withholding support, and the support recipient will receive all of the support that had been withheld. The support recipient will then move to Tier 1 status.

(3) *Tier 3.* If a support recipient has a compliance gap of at least 25 percent but less than 50 percent of the total square kilometers associated with the eligible areas in a state for which it is to have deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) by the interim service milestone, the Administrator will withhold 25 percent of the support recipient's monthly support for that state and the support recipient will be required to file quarterly reports with the Administrator. Once the support recipient has reported, and the Administrator has verified, that it has reduced the compliance gap to less than 25 percent of the required eligible square kilometers for that interim service milestone for that state, the Wireline Competition Bureau will issue a letter to that effect, and the support recipient will move to Tier 2 or Tier 1 status, as applicable.

(4) *Tier 4.* If a support recipient has a compliance gap of 50 percent or more of the total square kilometers associated with the eligible areas in a state for which it is to have deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) by the interim service milestone:

(i) The Administrator will withhold 50 percent of the support recipient's monthly support for that state and the support recipient will then be required to file quarterly reports with the Administrator. As with the other tiers, as the support recipient reports, and the Administrator verifies, that it has lessened the extent of its non-compliance, and the Wireline Competition Bureau issues a letter to that effect, it will move through the tiers until it reaches Tier 1 (or no longer is out of compliance with the applicable interim service milestone).

(ii) If after having 50 percent of its support withheld for six months, the support recipient has not reported that it is eligible for Tier 3 status (or one of the lower tiers), the Administrator will withhold 100 percent of the support recipient's forthcoming monthly support for that state and will commence a recovery action for a percentage of support that is equal to the support recipient's compliance gap plus 10 percent of the support recipient's support in that state that has been disbursed to that date.

(5) If at any point prior to the Year Six Final Service Milestone the support recipient reports, and the Administrator verifies, that it is eligible for Tier 1 status or that it is no longer out of compliance with the 5G Fund performance requirements specified in § 54.1015(c), it will have its support fully restored and the Administrator will repay any funds that were recovered or withheld.

(c) *Year Six Final Service Milestone.* A 5G Fund support recipient must notify the Commission, the Administrator, and the relevant state, U.S. Territory, or Tribal government, if applicable, within 10 business days if it has failed to meet the Year Six Final Milestone. Upon notification that the support recipient has not met the Year Six Final Service Milestone, the support recipient will have twelve months from the date of the Year Six Final Milestone deadline to come into full compliance with this milestone. If the support recipient does not report that it has come into full compliance with the Year Six Final Milestone within twelve months, as verified by the Administrator, the Wireline Competition Bureau will issue a letter to this effect. Recipients of 5G Fund support shall be subject to the following non-compliance measures related to the recovery of support after this grace period:

(1) If a support recipient has deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 80 percent of the total eligible square kilometers in a state, but less than the required 85 percent of the total eligible square kilometers in that state, the Administrator will recover an amount of support that is equal to 1.25 times the average amount of support per square

kilometer that the support recipient has received in the state times the number of square kilometers unserved up to the 85 percent requirement;

(2) If a support recipient has deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 75 percent, but less than 80 percent, of the total eligible square kilometers in that state, the Administrator will recover an amount of support that is equal to 1.5 times the average amount of support per square kilometer that the support recipient has received in the state times the number of square kilometers unserved up to the 85 percent requirement, plus 5 percent of the support recipient's total 5G Fund support for the 10 year support term for that state;

(3) If a support recipient has deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) to less than 75 percent of the total eligible square kilometers in a state, the Administrator will recover an amount of support that is equal to 1.75 times the average amount of support per square kilometer that the support recipient has received in the state times the number of square kilometers unserved up to the 85 percent requirement, plus 10 percent of the support recipient's total 5G Fund support for the 10 year support term for that state.

(d) *Additional Evidence Required at Year Six Final Service Milestone Deadline.* At the Year Six Final Service Milestone deadline, a 5G Fund support recipient is also required to provide evidence, which is subject to verification by the Administrator, that it has provided service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 75 percent of the total square kilometers for each census tract or census tract group in which it was authorized to receive support. If after the grace period permitted in paragraph (c) of this section the Administrator has not verified based on the evidence provided that the support recipient has provided service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 75 percent of the total square kilometers for each census tract or census tract group in which it was authorized to receive support, the Administrator will recover an amount of support that is equal to 1.5 times the average amount of support per square kilometer that the support recipient had received in the eligible area times the number of square kilometers unserved within that eligible area, up to the 75 percent requirement.

(e) *Compliance Reviews.* If the Administrator determines subsequent to the Year Six Final Service Milestone that a support recipient does not have sufficient evidence to demonstrate that it continues to offer service that meets the 5G Fund performance requirements specified in § 54.1015(c) to all of the eligible square kilometers in the state as required by the Year Six Final Service Milestone, the Administrator shall immediately recover a percentage of support from the support recipient as specified in paragraphs (c)(1) through (c)(3) and (d) of this section.

§ 54.1021 Record Retention for the 5G Fund.

A recipient authorized to receive 5G Fund support and its agents are required to retain any documentation prepared for, or in connection with, the award of the 5G Fund support for a period of not less than ten (10) years after the date on which the recipient receives its final disbursement of 5G Fund support.

15. Amend 47 CFR § 54.1508 to revise paragraph (c)(4)(ii) to read as follows:

§ 54.1508 Letter of credit for stage 2 fixed support recipients.

* * * * *

(c) * * *

(4) * * *

(ii) Has a branch office:

(A) located in the District of Columbia, or

(B) located in New York City, New York, or such other branch office agreed to by the Commission, that will accept a letter of credit presentation from the Administrator via overnight courier, in addition to in-person presentations;

APPENDIX B

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980,¹ as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *5G Fund Notice of Proposed Rulemaking*.² The Commission sought written public comment on the proposals in the *5G Fund Notice of Proposed Rulemaking*, including comment on the IRFA. The Commission did not receive any comments in response to this IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

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

2. Our nation is at the dawn of the 5G era of wireless connectivity. Recently, nationwide mobile wireless providers have deployed 5G networks covering more than 200 million Americans. And today we ensure that all Americans benefit from the country's 5G future, no matter where they live. We act on our proposal to replace the Mobility Fund Phase II with the 5G Fund for Rural America and make certain that our limited Universal Service Fund dollars are directed to support the deployment of state-of-the-art wireless networks that are more responsive, more secure, and faster than today's 4G LTE networks. Moreover, by establishing the 5G Fund, we further secure our nation's leadership in 5G, which will promote technological innovation in the United States, enhance our economic prosperity and protect our national security. Closing the digital divide in rural areas of our country will provide all Americans with the opportunity to enjoy the benefits of the most modern, advanced communications technologies offered in the wireless telecommunications marketplace no matter where they live, work, or travel.

3. Many urban and suburban areas of our nation are already benefiting from the evolution to 5G networks. Nationwide providers have begun deploying 5G service in populated parts of our country, with even more widely-available 5G service expected in the near future.⁴ For example, T-Mobile has made enforceable commitments to the Commission as part of its acquisition of Sprint to deploy 5G service covering 85% of the population in rural areas and 97% of all Americans within three years, with coverage rising to 90% of the population in rural areas and 99% nationwide within six years.⁵ Moreover, it committed to deploy 5G service meeting minimum download speed performance benchmarks of at least 50 Mbps available to 90% of the rural population, with two-thirds of rural

¹ 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-12, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). Public Law No. 104-121, 110 Stat. 857 (1996).

² *Establishing a 5G Fund for Rural America*, Notice of Proposed Rulemaking and Order, 35 FCC Rcd 3994 (2020) (*5G Fund Notice of Proposed Rulemaking*).

³ See 5 U.S.C. § 604.

⁴ *Every 5G City and Region for Every Major Carrier in the US (Verizon, AT&T, T-Mobile, and Sprint) (Update: Latest T-Mobile and AT&T Markets)*, Android Police (July 16, 2020), <https://www.androidpolice.com/2020/07/16/verizon-att-sprint-tmobile-5g-cities/> (listing 5G deployments); see also Sarah Barry James & Taimoor Tariq, *As 5G goes nationwide, US carriers' capex, spectrum plans come into focus*, S&P Global Market Intelligence, Mar. 5, 2020, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/as-5g-goes-nationwide-us-carriers-capex-spectrum-plans-come-into-focus-57403396> (detailing plans by AT&T and Verizon Wireless to deliver 5G nationwide in 2020).

⁵ *Applications of T-Mobile US, Inc., and Sprint Corporation For Consent to Transfer Control of Licenses and Authorizations; Applications of American H Block Wireless L.L.C., DBSD Corporation, Gamma Acquisition L.L.C., and Manifest Wireless L.L.C. for Extension of Time*, Memorandum Opinion and Order, Declaratory Ruling, and Order of Proposed Modification, 34 FCC Rcd 10578, 10589-91, paras. 26-32 (2019) (*T-Mobile-Sprint Order*).

Americans able to receive download speeds of at least 100 Mbps.⁶ Late last year, T-Mobile announced that it switched on its 5G network across the nation using low-band spectrum.⁷

4. 5G networks will improve the lives of Americans living and working in rural areas by providing much needed access to telehealth, telework, remote learning opportunities, precision agriculture, and other services and applications. We anticipate that the deployment of 5G-capable networks in rural areas will drive job creation and have a powerful impact on the nation's economy. The framework for the 5G Fund that we adopt today will bring technological innovation and economic benefits to the parts of our country that need them the most. We embark on this new 5G era recognizing that the next decade and beyond hold significant promise for rural America, and we envision that the 5G Fund will be an important catalyst to propel the nationwide deployment of networks capable of closing the digital divide, once and for all.

5. The 5G Fund for Rural America will use multi-round reverse auctions to distribute up to \$9 billion, in two phases, bringing voice and 5G broadband service to those rural areas of our country that, absent subsidies, would be unlikely to see the deployment of 5G-capable networks. Based on lessons learned from the Mobility Fund, and overwhelming record support, we adopt our proposal to determine which areas will be eligible for 5G Fund support through improved mobile broadband coverage data that will be gathered through the Commission's Digital Opportunity Data Collection proceeding. Although this approach will not be the fastest possible path to the Phase I auction, it will allow us to identify with greater precision those areas of the country where support is most needed and will be spent most efficiently.

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

6. There were no comments filed that specifically addressed the rules and policies proposed in the *5G Fund Notice of Proposed Rulemaking*.

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

7. Pursuant to the Small Business Jobs Act of 2010,⁸ which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rule(s) as a result of those comments.

8. The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

D. Description and Estimate of the Number of Small Entities to which the Rules Would Apply

9. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁹ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."¹⁰ In addition, the term "small business" has the

⁶ *Id.*

⁷ See *T-Mobile 5G: It's On!*, <https://investor.t-mobile.com/news-and-events/t-mobile-us-press-releases/press-release-details/2019/T-Mobile-5G-Its-On/> (Dec. 2, 2019).

⁸ 5 U.S.C. § 604(a)(3).

⁹ See 5 U.S.C. § 603(a)(3).

¹⁰ See 5 U.S.C. § 601(6).

same meaning as the term “small-business concern” under the Small Business Act.¹¹ 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.¹²

10. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein.¹³ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.¹⁴ These types of small businesses represent 99.9% of all businesses in the United States, which translates to 30.7 million businesses.¹⁵

11. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹⁶ The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations.¹⁷ Nationwide, for tax year 2018, there were approximately 571,709 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.¹⁸

12. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”¹⁹ U.S. Census Bureau data from the 2017 Census

¹¹ 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.”

¹² See 15 U.S.C. § 632.

¹³ See 5 U.S.C. § 601(3)-(6).

¹⁴ See SBA, Office of Advocacy, What’s New With Small Business?, <https://cdn.advocacy.sba.gov/wp-content/uploads/2019/09/23172859/Whats-New-With-Small-Business-2019.pdf> (Sept 2019).

¹⁵ *Id.*

¹⁶ 5 U.S.C. § 601(4).

¹⁷ The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations — Form 990-N (e-Postcard), Who must file, <https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard>. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

¹⁸ See Exempt Organizations Business Master File Extract (EO BMF), CSV Files by Region, <https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-EO-bmf>. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for Region 1-Northeast Area (76,886), Region 2-Mid-Atlantic and Great Lakes Areas (221,121), and Region 3-Gulf Coast and Pacific Coast Areas (273,702) which includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.

¹⁹ 5 U.S.C. § 601(5).

of Governments²⁰ indicate that there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.²¹ Of this number there were 36,931 general purpose governments (county²², municipal and town or township²³) with populations of less than 50,000 and 12,040 special purpose governments - independent school districts²⁴ with enrollment populations of less than 50,000.²⁵ Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”²⁶

13. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services.²⁷ The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.²⁸ For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year.²⁹ Of this total, 955 firms employed fewer than 1,000

²⁰ See 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Census of Governments, <https://www.census.gov/programs-surveys/cog/about.html>.

²¹ See U.S. Census Bureau, 2017 Census of Governments – Organization Table 2. Local Governments by Type and State: 2017 [CG1700ORG02]. <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also Table 2. CG1700ORG02 Table Notes_Local Governments by Type and State_2017.

²² See *id.* at Table 5. County Governments by Population-Size Group and State: 2017 [CG1700ORG05]. <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

²³ See *id.* at Table 6. Subcounty General-Purpose Governments by Population-Size Group and State: 2017 [CG1700ORG06]. <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 18,729 municipal and 16,097 town and township governments with populations less than 50,000.

²⁴ See *id.* at Table 10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10]. <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 12,040 independent school districts with enrollment populations less than 50,000. See also Table 4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes_Special Purpose Local Governments by State_Census Years 1942 to 2017.

²⁵ While the special purpose governments category also includes local special district governments, the 2017 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

²⁶ This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations Tables 5, 6, and 10.

²⁷ See U.S. Census Bureau, 2017 NAICS Definition, “517312 Wireless Telecommunications Carriers (except Satellite)”, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517312&search=2017+NAICS+Search&search=2017>.

²⁸ See 13 CFR § 121.201, NAICS Code 517312 (previously 517210).

²⁹ See U.S. Census Bureau, 2012 Economic Census of the United States, Table ID: EC1251SSSZ5, Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012, NAICS Code 517210, <https://data.census.gov/cedsci/table?text=EC1251SSSZ5&n=517210&tid=ECNSIZE2012.EC1251SSSZ5&hidePreview=false&vintage=2012>.

employees and 12 firms employed of 1000 employees or more.³⁰ Thus under this category and the associated size standard, the Commission estimates that the majority of Wireless Telecommunications Carriers (except Satellite) are small entities.

14. The Commission's own data—available in its Universal Licensing System—indicate that, as of August 31, 2018 there are 265 Cellular licensees that will be affected by our actions.³¹ The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed 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.³² Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees.³³ Thus, using available data, we estimate that the majority of wireless firms can be considered small.

15. *Internet Service Providers (Broadband)*. Broadband Internet service providers include wired (e.g., cable, DSL) and VoIP service providers using their own operated wired telecommunications infrastructure fall in the category of Wired Telecommunication Carriers.³⁴ Wired Telecommunications Carriers are comprised of establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.³⁵ The SBA size standard for this category classifies a business as small if it has 1,500 or fewer employees.³⁶ U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated that year.³⁷ Of this total, 3,083 operated with fewer than 1,000 employees.³⁸ Consequently, under this size standard the majority of firms in this industry can be considered small.

16. *Satellite Telecommunications*. This category comprises firms “primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or

³⁰ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

³¹ See Federal Communications Commission, *Universal Licensing System*, <http://wireless.fcc.gov/uls>. For the purposes of this FRFA, consistent with Commission practice for wireless services, the Commission estimates the number of licensees based on the number of unique FCC Registration Numbers.

³² See Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, Trends in Telephone Service at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*), https://apps.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

³³ See *id.*

³⁴ See U.S. Census Bureau, *2017 NAICS Definition*, “517311 Wired Telecommunications Carriers,” <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

³⁵ *Id.*

³⁶ See 13 CFR § 121.201, NAICS Code 517311 (previously 517110).

³⁷ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table ID: EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms for the U.S.: 2012*, NAICS Code 517110, [https://data.census.gov/cedsci/table?text=EC1251SSSZ5&n=517110&tid=ECNSIZE2012.EC1251SSSZ5&hidePrev](https://data.census.gov/cedsci/table?text=EC1251SSSZ5&n=517110&tid=ECNSIZE2012.EC1251SSSZ5&hidePreview=false)
[iew=false](https://data.census.gov/cedsci/table?text=EC1251SSSZ5&n=517110&tid=ECNSIZE2012.EC1251SSSZ5&hidePrev).

³⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

reselling satellite telecommunications.”³⁹ Satellite telecommunications service providers include satellite and earth station operators. The category has a small business size standard of \$35 million or less in average annual receipts, under SBA rules.⁴⁰ For this category, U.S. Census Bureau data for 2012 show that there were a total of 333 firms that operated for the entire year.⁴¹ Of this total, 299 firms had annual receipts of less than \$25 million.⁴² Consequently, we estimate that the majority of satellite telecommunications providers are small entities.

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

17. In the *5G Fund Report and Order*, we adopt public interest obligations, performance requirements, and reporting requirements that competitive ETCs receiving legacy high-cost support for mobile wireless service must meet in order to continue receiving legacy high-cost support,⁴³ to ensure that the most advanced mobile services are available in all areas where a carrier is currently supported by legacy high-cost support. We also establish the framework for the 5G Fund by adopting rules that will apply in a 5G Fund auction and to recipients of 5G Fund support.

18. We adopt a public interest obligation for both competitive ETCs receiving legacy high-cost support for mobile wireless service and 5G Fund support recipients to provide mobile voice and 5G broadband service in their subsidized areas, and to satisfy distinct, measured performance requirements as a condition of receiving support. Recipients of both legacy high-cost support and 5G Fund support will have minimum baseline performance requirements for data speed, data latency, and data allowance. Like all high-cost ETCs, both legacy high-cost support recipients and 5G Fund support recipients will be required to offer voice and broadband services meeting the relevant performance requirements at rates that are reasonably comparable to what they offer in urban areas. These performance requirements, along with public interest obligations we adopt for data allowances, reasonably comparable rates, collocation, and voice and data roaming, will ensure that rural areas receive service comparable to high-speed, mobile broadband available in urban areas.

19. We adopt a 10-year support term for 5G Fund support recipients, along with three interim service deployment milestones and a final service deployment milestone at which a support recipient must demonstrate that it provides 5G service that meets the performance requirements we adopt in the *5G Fund Report and Order*. We adopt a requirement that legacy high-cost support recipients use an increasing percentage of their support toward deploying 5G service in their subsidized service areas. Because we recognize that the amount received by each competitive ETC receiving legacy high-cost support for mobile wireless service varies considerably and bears no direct relation to the size of its subsidized service area or to the expected cost of deploying 5G broadband service, we do not adopt our proposal to require legacy high-cost support recipients to meet the uniform 5G service deployment milestone coverage requirements proposed in the *5G Fund NPRM* that would require deployment to a specified

³⁹ See U.S. Census Bureau, *2017 NAICS Definition, “517410 Satellite Telecommunications”*, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517410&search=2017+NAICS+Search&search=2017>.

⁴⁰ See 13 CFR § 121.201, NAICS Code 517410.

⁴¹ See U.S. Census Bureau, *2012 Economic Census of the United States, Table ID: EC1251SSSZ4, Information: Subject Series - Estab and Firm Size: Receipts Size of Firms for the U.S.: 2012*, NAICS Code 517410, <https://data.census.gov/cedsci/table?text=EC1251SSSZ4&n=517410&tid=ECNSIZE2012.EC1251SSSZ4&hidePreview=false&vintage=2012>.

⁴² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of \$35 million or less.

⁴³ The term “legacy high-cost support” and “legacy support” as used herein refers specifically to the high-cost support that was frozen in the *USF/ICC Transformation Order* and is disbursed to competitive ETCs to provide mobile wireless service.

percentage of each legacy support recipient's subsidized service area. Instead, we adopt a general requirement for legacy high-cost support recipients to meet deployment coverage requirements, and direct the Office of Economics and Analytics and the Wireline Competition Bureau to develop and adopt, after notice and comment, specific 5G broadband service deployment coverage requirements and service deployment milestone deadlines for a legacy support recipient that take into consideration the amount of legacy support the carrier receives.

20. We adopt certain eligibility requirements for entities that are interested in participating in a 5G Fund auction, as well as a two-step application process. We will require applicants to submit a pre-auction short-form application that includes information about their ownership, any agreements relating to the support to be sought through the auction, technical and financial qualifications, current status as an ETC, access to spectrum, and an acknowledgement of their responsibility to conduct due diligence. Commission staff will review the applications to determine if applicants are qualified to bid in the auction.

21. After the auction ends, winning bidders will be required to submit a post-bidding long-form application in which they will submit ownership, agreement, and spectrum access information, as well as information about their qualifications, funding, and the networks they intend to use to meet their obligations. During the long-form application review process, we will also require winning bidders to obtain and submit documentation of an ETC designation from the state or the Commission, as appropriate, that covers each of the geographic areas in which they won support within 180 days after the release of the public notice announcing winning bidders. Prior to being authorized to receive support, winning bidders must submit an irrevocable stand-by letter of credit that meets our requirements from an eligible bank along with a bankruptcy opinion letter from outside legal counsel. The letter of credit must be valued at an amount equal to one year of the total support it will receive. Commission staff will review the applications and submitted documentation to determine whether long-form applicants are qualified to be authorized to receive support. We will subject winning bidders or long-form applicants that default during the long-form application process to forfeiture.

22. A 5G Fund support recipient will be required to submit a modified, renewed, or new letter of credit annually in order to receive its next year's support. The value of the letter of credit must cover the support that has been disbursed and that will be disbursed in the coming year, subject to modest adjustments as support recipients meet—and the Universal Service Administrative Company (USAC) has verified they have timely completed—their required service deployment milestones.

23. We also adopt specific reporting requirements to monitor the progress of both competitive ETCs receiving legacy high-cost support for mobile wireless service and 5G Fund support recipients in meeting the public interest obligations and distinct performance requirements we adopt. We will require each legacy high-cost support recipient to file an initial report of its current service offerings that includes accounting information on the support a carrier has received and how legacy support is being used, along with certifications related to its current service offerings and use of legacy high-cost support. We will also require each legacy high-cost support recipient to file annual reports that include updated information about the carrier's service offerings for the previous calendar year in its subsidized service areas, and how legacy support is being used, along with certifications that the support recipient is in compliance with its public interest obligations and performance requirements. We will require a 5G Fund support recipient to file service milestone reports demonstrating that it has met its interim and final milestones for deployment of 5G service that meets the 5G Fund performance requirements we adopt. We will also require a 5G Fund support recipient to file annual reports covering the preceding calendar year along with certifications that the support recipient is in compliance with each of the 5G Fund public interest obligations, performance requirements, and any other terms and conditions associated with receipt of 5G Fund support. As for other high-cost support recipients, both legacy high-cost support recipients and 5G Fund support recipients will be subject to record retention and audit requirements, and to support reductions and/or full recovery for untimely filings.

24. We will subject a 5G Fund support recipient that fails to meet its public interest obligations and/or and performance requirements or other terms and conditions of receiving 5G Fund support to a reduction, or loss, in support, in accordance with the framework for support reductions that is applicable to all high-cost ETCs that are required to meet adopted service deployment milestones and to the process we adopt in the *5G Fund Report and Order* for drawing on letters of credit. Additionally, if a 5G Fund support recipient fails to meet any interim or the final service deployment milestone, it must notify the Wireline Competition Bureau and USAC within 10 business days and provide information explaining its non-compliance. Upon receipt of the notification, we will find the recipient to be default and the recipient will be subject to the non-compliance measures we adopt in the *5G Fund Report and Order* until it is able to come into full compliance. If a support recipient has not deployed service to at least 20% of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state by the Year Three Interim Service Milestone it must notify the Wireline Competition Bureau and USAC of its non-compliance, and upon receipt of this notification, the recipient will be deemed in default and subject to full support recovery, rather than being given additional time to come into compliance.

25. We will require a competitive ETC receiving legacy high-cost support for mobile wireless service that fails to comply with its public interest obligations or performance requirements to notify the Wireline Competition Bureau and USAC within 10 business days of its non-compliance. Upon receipt of the notification, we will find the recipient to be in default, and the recipient will no longer be eligible to receive such support, will receive no further support disbursements, and may be subject to up to full recovery of all such support disbursed since effective date of the public interest obligations and performance requirement rules we adopt in the *5G Fund Report and Order*. In addition to basing a finding of default on a legacy high-cost support recipient's notification of its non-compliance, the Wireline Competition Bureau or USAC may in the absence of any such notification deem the support recipient in to be in default and the same consequences if the they become aware of a recipient's non-compliance.

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

26. 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.”⁴⁴ The Commission has considered the economic impact on small entities in reaching its final conclusions and taking action in this proceeding. The rules that we adopt in the Order will provide greater certainty and flexibility for all carriers, including small entities.

27. We conclude that the minimum geographic area for bidding in a 5G Fund auction will be no larger than a census tract and no smaller than a census block group, as identified by the U.S. Census Bureau. Consistent with our approach in recent universal service auctions, we will determine the exact geographic area for grouping eligible areas when we finalize the auction design during the pre-auction process and have better data for determining eligible areas. We find that this approach is preferable because it ensures that a wide variety of interested bidders, including small entities, have the flexibility to design a network that matches their business model and that allows service providers to achieve their performance benchmarks and public interest obligations efficiently. We decline to adopt census blocks as the minimum geographic unit in a 5G Fund auction, as some commenters suggest, because doing so would significantly increase the complexity of the bidding process both for bidders and the bidding

⁴⁴ 5 U.S.C. § 603(c)(1)-(c)(4).

system and minimize the potential for broad coverage by winning bidders, and using census blocks as the minimum geographic area could create more challenges for providers in putting together a bidding strategy that aligns with their intended network construction or expansion. No commenter suggests that we should adopt a geographic area larger than a census tract.

28. We are reserving up to \$680 million of the \$8 billion 5G Fund Phase I budget to support networks serving eligible areas in Tribal lands—which is double the amount that the Commission had estimated it would reserve to support Tribal lands from the Mobility Fund Phase II budget—to provide an incentive for service providers, including small entities, to bid on and serve Tribal lands.

29. Consistent with the approach taken in recent universal service auctions, we adopt a two-step application process for participating in the 5G Fund consisting of a pre-auction short-form application and a post-auction long-form application. Entities interested in bidding to submit a short-form application in order to be deemed qualified to bid in the auction, which we have found to be an appropriate but not burdensome screen to ensure participation by qualified carriers, including small entities. Only if an applicant becomes a winning bidder will it be required to submit a long-form application, which requires a more detailed information about, and a more thorough review of, an applicant's qualifications to be authorized to receive 5G Fund support.

30. We provide two pathways for an applicant to demonstrate its technical and financial qualifications to participate in a 5G Fund auction based on its experience providing mobile wireless voice and/or broadband service. Entities, including small entities, that have been providing mobile wireless voice and/or broadband service for at least three years will be required to submit information concerning the number of years they have been providing service and their FCC Form 477 filings and/or Digital Opportunity Data Collection filings, as applicable, for the past three years, but will not be required to submit any other technical or financial information, while entities that have been providing such service(s) for fewer than three years (or not at all) will need to submit information concerning their operational history, a preliminary project description, and an acceptable letter of interest from an eligible bank. We expect that by allowing experienced entities to submit less information at the short-form application stage to demonstrate their technical and financial qualifications, more entities, including small entities, will be able to participate in the auction.

31. We will also permit all long-form applicants, including small entities, to obtain their ETC designations after becoming winning bidders so that they do not have to go through the ETC designation process prior to finding out if they won support through the auction. We decline to adopt the alternatives to letters of credit that were suggested by commenters because letters of credit better achieve our objective of protecting the public's funds. But recognizing that some participants in our past universal auctions, including small entities, have expressed concerns about the costs of obtaining and maintaining a letter of credit, we adopt rules allowing support recipients to cover less support with their letters of credit and further reduce the value of their letters of credit once it has been verified that they have met certain service deployment milestones. Additionally, consistent with the approach taken in recent universal service auctions, we will allow greater flexibility regarding letters of credit for Tribally owned and controlled winning bidders by permitting any Tribally owned and controlled 5G Fund winning bidder that is unable to obtain a letter of credit to petition for a waiver of the letter of credit requirement.

32. To streamline the filing of annual reports by both mobile legacy high-cost support recipients and 5G Fund support recipients regarding their efforts to provide 5G services throughout their subsidized service areas that meet the public interest obligations and distinct performance requirements we adopt, we will require these reports to be filed with USAC via a web portal. Moreover, to reduce the burden on mobile legacy high-cost support recipients, these annual report filings will replace a mobile legacy high-cost support recipient's existing obligation to annually file FCC Form 481 with USAC.

33. We also provide a competitive ETC receiving legacy high-cost support for a particular subsidized service area with the flexibility to use such support for the provision, maintenance, and upgrading of facilities and services within any of the designated service areas for which it receives legacy

high-cost support for mobile services, which we conclude could allow for more efficient decisions about use of legacy support while “still satisfying the statutory obligation to use such support for its intended purposes.”⁴⁵

34. The additional public interest obligations, performance requirements, and reporting requirements we adopt for current mobile legacy high-cost support recipients in order to continue receiving high-cost support, as well as the public interest obligations and performance requirements, interim and final construction milestones, reporting obligations, and non-compliance measures we adopt for the 5G Fund, balance our responsibility to monitor the use of universal service funds with minimizing administrative and compliance costs and burdens on mobile legacy high-cost support recipients and 5G Fund support recipients, including small entities. The reporting requirements we adopt for all mobile legacy high-cost support and for all 5G Fund support recipients are tailored to ensuring that support is used for its intended purpose and so that we can monitor the progress of recipients in meeting their public interest obligations and distinct performance requirements. We find that the importance of monitoring the use of the public’s funds outweighs the burden of filing the required information on all entities, including small entities, particularly because much of the information that we require they report is information we expect they will already be collecting to ensure they comply with the terms and conditions of receiving support.

Report to Congress:

35. The Commission will send a copy of the *5G Fund Report and Order*, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.⁴⁶ In addition, the Commission will send a copy of the *5G Fund Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *5G Fund Report and Order* and FRFA (or summaries thereof) will also be published in the Federal Register.⁴⁷

⁴⁵ *5G Fund NPRM*, 35 FCC Rcd at 4017, para. 70. Providing this flexibility effectively makes permanent a waiver, which has since expired, of the Commission’s rules granted by the Wireline Competition Bureau in response to the COVID-19 pandemic as part of the Keep Americans Connected Initiative. *See Connect America Fund*, Order, 35 FCC Rcd 2964, 2965-66, paras. 7-9 (WCB 2020). The waiver expired on June 30, 2020.

⁴⁶ 5 U.S.C. § 801(a)(1)(A).

⁴⁷ *See id.* § 604(b).

APPENDIX C

Model 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 October 27, 2020 by the Federal Communications Commission (“FCC”) in the matter of 5G Fund for Rural America, GN Docket No. 20-32, FCC 20-150 (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 ninety 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 USAC's certificate purportedly signed by two authorized representatives of USAC and purportedly countersigned by a representative of the Federal Communications Commission 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 [5G FUND 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 October 27, 2020 by the Federal Communications Commission in the matter of 5G Fund for Rural America, GN Docket No. 20-32, FCC 20-150 (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 meanings stated in the Order), that:

The [Name of Winning Bidder] has [describe the event that triggers the draw], that is evidenced by a letter signed by the Chief of the [XXXXXX] 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 the 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 October 27, 2020 by the Federal Communications Commission ("FCC") in the matter of 5G Fund for Rural America, GN Docket No. 20-32, FCC 20-150 (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

**STATEMENT OF
CHAIRMAN AJIT PAI**

Re: *Establishing a 5G Fund for Rural America*, GN Docket No. 20-32.

This Commission has taken decisive action to cement United States leadership in 5G. We have freed up unprecedented amounts of low-, mid-, and high-band spectrum for commercial use. We've made it easier and less costly to deploy wireless infrastructure and have encouraged the virtualized infrastructure of the future. We've reformed our rules to promote the deployment of fiber, which serves as backhaul for 5G networks. We've taken critical steps to secure the 5G supply chain.

By any metric, our efforts are paying off. 5G networks already cover more than 200 million Americans, and that number is increasing every day. Devices leveraging the power of 5G are in the hands of consumers, as the recent Apple iPhone 12 illustrates. And other countries are following our lead on spectrum policy and supply chain integrity alike.

But as we enter the 5G era, we need to make sure that rural Americans aren't left behind. 5G can't be a technology that only benefits those in urban and suburban areas; that would only broaden rather than narrow the digital divide. Fortunately, we've already taken steps to make sure that doesn't happen. One of them is the enforceable commitment we secured from T-Mobile during the T-Mobile/Sprint merger proceeding to cover at least 90% of rural Americans with its 5G network within six years. But now, we need to build on that momentum and make sure we bring the benefits of 5G to *all* Americans, no matter where they live. And that means that we need to recognize that there are some sparsely populated areas of our country where the business case for building out 5G networks solely with private capital just doesn't—and won't—exist.

That's why I first proposed last December that we establish a 5G Fund for Rural America. Instead of looking backwards and connecting rural communities with 4G LTE, we should look to the future and ensure that rural Americans have 5G on an equal footing with their urban counterparts. These networks will bring rural Americans the benefits—like increased access to healthcare, education, and precision agriculture—promised by the improved speed, latency, and security of 5G.

So today, less than a year after I proposed it, we're establishing the 5G Fund for Rural America. This will be a two-phased reverse auction that will distribute up to \$9 billion to support deployment of 5G networks in rural America. Phase I will use up to \$8 billion to target nationwide support for rural areas lacking unsubsidized 4G LTE and 5G broadband service, including \$680 million specifically set aside to support deployment on Tribal lands. Phase II will provide at least an additional \$1 billion in support to focus on the deployment of innovative 5G networks that facilitate precision agriculture.

One important point: Today, we adopt what we called "Option B" in our Notice of Proposed Rulemaking. This means that we will hold the Phase I auction after we develop precise, granular broadband maps through our Digital Opportunity Data Collection proceeding and that we will use those maps to help determine eligibility for the Phase I auction. To be sure, Option B doesn't provide the fastest possible path to the Phase I auction. But this measured approach enjoyed broad support in the record and will ensure that we are targeting funding to those areas that need the support the most, allowing us to make the best use of every dollar in the 5G Fund.

Even though we won't immediately conduct the 5G Fund Phase I auction, it's important that we establish these rules today. First, they provide certainty for stakeholders and provide a clear path to the 5G Fund Phase I auction. Second, we adopt broadband public interest obligations that will require carriers currently receiving frozen legacy support to begin spending that support to deploy 5G-capable networks in their service areas beginning next year. This means that we will make better use of universal service funding even before the Phase I auction takes place and will expedite 5G deployment in rural areas. Third, the step we are taking today allows our expert staff to complete their work developing an adjustment factor that will be critical to ensuring that hard-to-serve areas with rougher terrain and more challenging economics will be able to compete fairly for support in the auction. And fourth, we can

finally close the door on the 4G-focused Mobility Fund Phase II and commit to fully closing the mobile digital divide through the 5G Fund.

I would like to thank the many staff that contributed to this item, including: Valerie Barrish, Emily Burke, Jonathan Campbell, Nick Copeland, Patrick DeGraba, Chelsea Fallon, Bill Huber, Paul Lafontaine, Catherine Mataves, Giulia McHenry, Gary Michaels, Murtaza Nasafi, Kelly Quinn, Steve Rosenberg, Martha Stancill, Sean Sullivan, Patrick Sun, and Margaret Wiener in the Office of Economics and Analytics; Kirk Burgee, Audra Hale-Maddox, Michael Janson, and Jonathan McCormack from the Rural Broadband Auctions Task Force; Martin Doczkat, Robert Pavlak, and Barbara Pavon in the Office of Engineering and Technology; Trent Harkrader, Jesse Jachman, Alexander Minard, and Kris Monteith in the Wireline Competition Bureau; Susan Mort, Ziad Sleem, and Thuy Tran in the Wireless Telecommunications Bureau; Matthew Duchesne, Barbara Esbin, and Sayuri Rajapakse in the Consumer and Governmental Affairs Bureau; and Keith McCrickard and Bill Richardson in the Office of General Counsel.

**STATEMENT OF
COMMISSIONER BRENDAN CARR**

Re: *Establishing a 5G Fund for Rural America*, GN Docket No. 20-32.

Over the last few years in this job, I've had the privilege of meeting a whole bunch of Americans where they live—from the packed streets of Philly's Sharswood neighborhood, to the dusty dirt roads outside of Arcadia, Indiana. There have been some interesting conversations around kitchen tables, in firehouses, and even on top of water towers. And in all of those diverse conversations, do you know what I've never been asked?

“When will my family get DOCSIS 4.0?”

“Why don't we have multi-strand fiber to my neighborhood node?”

Not even—and, oh, how I hate to admit this—“How is my local small cell's 5G NR coming along?”

Never, not once, have I ever been asked any of those questions. Instead, I've been asked more times than I can count, in words and in action, the following:

“When will we get fast Internet? My family, my business—we need fast Internet. Please help.”

We have helped, and it's one of the great honors of being at the FCC. Partnering with the private sector, we've made it easier to build broadband networks. We've brought to market more spectrum than ever before. We've fostered a 5G workforce through training, education, and awareness. And this approach has given providers the confidence to invest their resources in infrastructure and services to bridge the digital divide.

Preferring that technology lead and the private sector fund fast Internet has required us to be nimble. As for the technology, this Commission has been focused on results. I've spliced fiber with workers who connected a record-breaking 6.5 million homes last year. I've climbed grain elevators with WISPs that will beam high-speed service from any structure tall enough to see their customers miles away. I've been up a few towers because 5G can provide competitive in-home access, too. In fact, as of last week, all three of our national wireless providers have turned on their broadest-coverage 5G and have in-home offerings delivered over wireless. And the newest tech in space, low-earth orbit satellites, promise to reach nearly every home in our country with speeds and latency that previously only city dwellers had access to.

With this record of results, leveraging a vast variety of technologies, it is now more important than ever that we be careful with how we spend Americans' money on broadband. To be good stewards, to treat ratepayers' dollars as our own, we need to focus on what the people we serve actually care about: fast Internet, by whatever means. And we need to stretch support dollars by ensuring that the government doesn't compete against private sector infrastructure.

This is a good problem to have. If we're concerned about overbuilding, it means the private sector on its own has stepped up to connect hard-to-serve communities. If we're worried about our previously siloed support programs overlapping, it's a sign that providers are converging—that technologies are advancing and competing against each other to serve communities. Convergence gives us new routes to the same destination: fast Internet.

With this backdrop, the item we adopt today moves in the right direction. For a start, it builds off of other successful programs, since providers can use existing support to build fixed networks that support 5G. For example, a provider that receives RDOF funding to build out a network could use their previous investment to submit a lower bid in the 5G Fund auction. And this item seeks better data so that we can target support where it's needed most, mindful of the large and growing investment that the private sector is making on its own. As we go forward in this proceeding, and with our support programs

more generally, we should do so mindful of the increasingly competitive and converged market for connectivity—one where a range of technologies are competing to bridge the last mile in rural America.

I want to thank the Rural Broadband Auctions Task Force, the Wireline Competition Bureau, the Wireless Telecommunications Bureau, and the Office of Economics and Analytics for their work on this item. It has my support.

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL,
APPROVING IN PART, DISSENTING IN PART**

Re: *Establishing a 5G Fund for Rural America*, GN Docket No. 20-32.

A year ago, I had the privilege of crisscrossing the roads of West Virginia with Senator Joe Manchin. Although the leaves were at their seasonal peak, we weren't there to take in the views. We were there to talk to residents of the Mountain State about what it's like to live without broadband, in places where wireless signals are scarce. These are not communities without 5G, they are communities with no G. But if you look at the maps we have at the Federal Communications Commission, you might be surprised. More often than not—in West Virginia and elsewhere—they don't get it right. They suggest wireless service is available when it's not. They say signals are strong when the lived experience of those who reside there will very clearly and quickly tell you otherwise.

The truth is that this agency has known for years that its maps need serious attention but unfortunately, we have little to show for it. This is especially true when it comes to wireless service. In fact, the situation is so bad that Senator Manchin himself filed to protest the state of our maps in our last go-around to determine where to send support to extend the reach of wireless service to rural communities, known as Mobility Fund II. He wasn't alone. Lots of other challengers filed similar protests pointing out how we got it wrong. In fact, together they filed so much material about errors in our data that this year the agency threw in the towel on Mobility Fund II and started anew—which brings us to the new 5G fund before us.

Let's start with the positive. The agency saw clearly that without good mapping data, it couldn't have confidence its universal service funds for wireless communications would be deployed in the communities that need them most. So today we commit to a new course for wireless universal service support that will ensure we have accurate data and better maps before we commit billions in support. This is the right thing to do. Moreover, it's striking that we insist on maps before money and data before deployment with wireless universal service because when it comes to wired universal service this agency has inexplicably run in the other direction. In fact, just days from now the agency will begin a \$16 billion auction for wired services—representing 80% of our funds for the next decade—without first seeking accurate data or better maps. In contrast, the course we choose today is responsible and smart.

But here's the not-so-positive. We're building this auction without grounding it in any real-world data. That's because we are still slow-rolling efforts to fix our maps and in fact, we just missed a key deadline under the Broadband DATA Act. We can't afford to wait longer, we need to find some way to make at least some progress now. Because we need that data to help inform the choices we make about how this auction operates, what speeds it requires, and what build-out it compels. We need that data to know what communities lack wireless service and how much reaching them will truly cost. But instead, we're building the ship and setting sail while the compass is still on backorder.

So many of the choices we make here would benefit from more data and more thinking. For instance, we determine that wireless bidders will have to offer service in 85% of any area won at auction. Why not 100%? What facts support anything less than truly universal service? Today we also determine speed obligations for the next decade—what study has been done to show that this threshold won't be outdated before the auction even begins? We also set aside funds for precision agriculture projects. What data supports the amount selected? How will this effort work in concert with the initial phase of 5G support we commit to today? And what facts support that budget? The answers are less than clear because so many of the choices we make here are not grounded in data.

So while I support today's decision to commit to a wireless future that is supported by more accurate maps, I think a little more humility would serve us well. The framework we have is sound, but the details would benefit from more data-gathering before we proceed. So I think this effort needs some work if

we want to make sure wireless signals reach those roads in West Virginia where I traveled and every other place in the United States. For these reasons, I approve in part, and dissent in part.

One final note. Even when I disagree, I appreciate the speed and enthusiasm with which this agency is developing broadband initiatives to improve deployment in rural communities stuck on the wrong side of the digital divide. But I am gobsmacked at our failure to attend to the other half of the digital divide—and that’s adoption. Remember that three to four times as many households outside of rural areas have no broadband at home. But we have no new initiatives, no new funding proposals, no new policies to address the millions of children locked out of the virtual classroom. This cruel pandemic has revealed the hard truth that our nation’s digital divide is very real and very big. It’s time for a greater sense of urgency in every way to fix it.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS
APPROVING IN PART AND DISSENTING IN PART**

Re: *Establishing a 5G Fund for Rural America*, GN Docket No. 20-32.

This year, our country has faced unprecedented challenges on multiple fronts. The COVID-19 pandemic brought into sharp relief a host of problems that are, at their core, about fairness—issues of racial justice, economic security, and the digital divide, among others. In response to the pandemic, Americans are relying on their wireless devices more than ever for everything from connections to work and school to telehealth applications. They’re also using their smartphones to document both injustice and inspiration. Modern wireless technology that has served as a powerful tool for building movements that are changing our country.

These events should leave no doubt that full participation in civil society requires an internet connection. That’s why we must do more to make high-quality affordable broadband, including 5G wireless service, available to everyone. Our nation’s 5G success will rely on smart policy decision and industry execution. I’ve seen the great work that the wireless industry has done throughout the pandemic, and I recently announced the first group of honorees for my Digital Opportunity Equity Recognition (or DOER) program, which seeks to acknowledge the efforts of individuals, organizations, and companies seeking to close the digital divide in communities without access to affordable, reliable broadband. Those honorees include several wireless representatives who are working hard to ensure that no one gets left offline during this crisis. They include wireless or rural tribal providers like NISHNANET in Iowa, NTUA Wireless for the Navajo Nation, and Triad Wireless in Arizona, as well as Dr. Kiesha Taylor, the National Education Administrator for T-Mobile for Education.

This is great work, but much is required to ensure that everyone shares in the benefits of advanced wireless service. According to the Pew Research Center, a disproportionate number of Black and Latinx Americans rely solely on their mobile devices to connect to the internet. Even before 2020, mobile phones were the only way many in these communities could access online education, health care, and employment. 5G must reach these wireless-only households. They share the ubiquitous need to access the most innovative telehealth treatments, participate in sophisticated distance learning from the kitchen table or the city bus, and be as productive working from home as from the office. Every American deserves the opportunity to participate in the 5G revolution, even if they don’t live in the wealthiest neighborhoods. We otherwise risk devolving into two Americas: one in which those with much get even more, another that is stuck in the past and falling further behind every year.

With stakes this high, it’s important that we get every last drop out of our Universal Service dollars. That starts with gathering adequate data that will allow us to really understand the problem. As the Mobility Fund Phase II staff report released last year made plain, the widespread skepticism about our current data is justified.

Earlier this year, I argued that Option A—under which we would target this funding without first developing the new coverage maps Congress ordered us to develop—was so flawed and unsound that it didn’t even belong in the *Notice of Proposed Rulemaking*. I’m not surprised, then, that commenters overwhelmingly rejected that proposal. Making long-term funding decisions based on deeply flawed maps and data would extend and deepen the problems that have interfered with efforts to close the digital divide for too long. I agree with the conclusion in today’s decision that “requiring new mobile coverage data will result in a better understanding of the unserved areas most in need of our limited universal service funds than existing data.” Option B is the right call.

So where does that leave us? Before distributing the 5G Fund, we need to gather and analyze new wireless coverage data for the vast majority of the United States. Today’s decision tells us to expect that data in 2021 or 2022. Because we are deciding today to make completing that work a precondition to

an auction, we should be doing everything in our power to make new maps and data available as quickly as possible. That's why I am surprised, frankly, to be voting on some of the issues addressed in today's item for two reasons:

First, it makes me question whether the Commission has its priorities in the right order. Last year, in response to bipartisan frustration with the Commission's failure to correct its data, Congress passed the Broadband DATA Act. Among other things, that legislation required the Commission to adopt final new mapping rules by September 2020 at the latest. We fell short and did not meet that deadline. Given the direct instruction from Congress and the centrality of those rules to the ultimate success of the 5G Fund, we should have prioritized them, stayed focused, and finished the job. Instead, in a situation that can only be described as backward, auction rules we plan to use in two years are before us today, and our past-due mapping regulations are not.

Second, because we know that under Option B the 5G Fund auction is more than just a few months away, many of today's decisions seem premature. Central in my mind, for example, is the budget. The *Order* explains "the more precise and granular mobile broadband coverage data that will become available in the Digital Opportunity Data Collection proceeding will show that the number of areas unserved by unsubsidized 4G LTE will be . . . substantial." But it doesn't provide an estimate of how far off the existing data is or an explanation of the assumptions underlying that estimate.

That leaves the *Order* with a paper-thin justification for the Fund's \$9 billion budget. Basically, the *Order* explains, the Commission took the Mobility Fund Phase II budget and doubled it. And the *Order* blows past concerns raised in the record that the budget the Commission adopts today may be insufficient, pointing out that "none of those commenters proposed an alternative amount for the total 5G Fund." Can we really blame them? Without the new maps and data, we don't really know how many and what kind of locations the money needs to cover, and neither do those commenters.

Without that information, the *Order*'s assertions that this budget balances the Act's competing objectives, including "providing support that is sufficient, but not so excessive so as to impose an undue burden on consumers and businesses," lacks a firm grounding. With respect to Phase II, the *Order* recognizes that, with the benefit of more time and more information, we may need to adjust the budget—particularly the budget for tribal lands. In my mind, that conclusion applies equally to Phase I. Those concerns are not allayed by the existence of Phase II at some unspecified date in the future. The *Order* promises to dedicate at least \$1 billion to 5G networks that facilitate precision agriculture in Phase II, as well as any areas left over from the Phase I auction. If the Phase I budget proves insufficient, still-unserved areas will have funding further delayed and then be pitted against as-yet unspecified precision agriculture objectives. A more cautious approach would use time we now have available before the Phase II auction to gather facts and give decisions like the budget a firmer footing.

For those of us that share the commitment to expanding the benefits of 5G to all Americans, this *Order* represents an important milestone. And I am glad that we have decided to distribute the 5G Fund using improved maps. But rural Americans deserve more than a \$9 billion press release. We should withhold judgment on issues that would be better decided with our new maps and data in hand. For that reason, I respectfully approve in part and dissent in part.

I thank the staff in the Wireline Competition Bureau, the Rural Broadband Auctions Task Force, and the Office of Economics and Analytics for their hard work.