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

In the Matter of)
Connect America Fund: A National Broadband Plan for Our Future High-Cost Universal Service Support) WC Docket No. 10-90
ETC Annual Reports and Certifications) WC Docket No. 14-58
Telecommunications Carriers Eligible to Receive Universal Service Support) WC Docket No. 09-197
Connect America Fund – Alaska Plan) WC Docket No. 16-271
Expanding Broadband Service Through the ACAM Program) RM-11868)

REPORT AND ORDER, NOTICE OF PROPOSED RULEMAKING, AND NOTICE OF INQUIRY

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By the Commission: Commissioner Starks approving in part and concurring in part.

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I. INTRODUCTION

- 1. With this Report and Order, Notice of Proposed Rulemaking (NPRM), and Notice of Inquiry (NOI), we take significant next steps in achieving our goal of ensuring all consumers, even those living in the costliest areas in the nation, have access to affordable and reliable broadband service so that they can work, learn, engage, and obtain essential services no matter where they live. We also focus on the future and seek comment on how to reform our high-cost programs so that we can continue to efficiently promote broadband deployment and meaningfully support networks long term in the face of a significantly changing broadband landscape.
- 2. In the Report and Order, we adopt the Enhanced Alternative Connect America Cost Model (A-CAM) program as a voluntary path for supporting the widespread deployment of 100/20 Mbps broadband service¹ throughout the rural areas served by carriers currently receiving A-CAM support and in areas served by legacy rate-of-return support recipients. In adopting this program, we further our long-standing goals by promoting the universal availability of voice and broadband networks, while also taking measures to minimize the burden on the nation's ratepayers. We also adopt requirements for the Enhanced A-CAM program to complement existing federal, state, and local funding programs, so that broadband funding can be used efficiently to maximize the deployment of high-quality broadband service across the United States.
- 3. In the NPRM, we seek comment on how to address the immediate needs of legacy rate-of return support mechanisms, while balancing our objectives of maintaining our commitment to supporting broadband at evolving levels of service and also avoiding unnecessary duplication of support in light of other available funding programs. Finally, in the NOI, we take a longer term view and seek to build a record to help the Commission explore methods for modifying the Universal Service Fund (USF) high-cost program to promote affordable and available broadband services in the years to come.

¹ When referring to broadband service of 100/20 Mbps, we include broadband service of 100/20 Mbps or greater unless otherwise specified.

II. BACKGROUND

A. High-Cost Universal Service Support

- 4. One of the Commission's central missions is to make "available . . . to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges." This principle of "universal service" ensures affordable telecommunications services for all, including consumers living in high-cost areas.
- 5. In the 2011 *USF/ICC Transformation Order*, the Commission comprehensively reformed and modernized the high-cost program and the intercarrier compensation system to focus support on networks capable of providing voice and broadband services and transition outdated support mechanisms to more efficient model-based and competitive bidding programs.⁴ In the years since adoption of the *USF/ICC Transformation Order*, the Commission has taken numerous actions to implement and improve upon these reforms. In 2014, the Commission adopted a forward-looking Connect America Cost Model (CAM) to determine an offer of model-based support to price-cap carriers.⁵ For those carriers receiving rate-of-return support, the Commission adopted the *2016 Rate-of-Return Reform Order*, which made significant changes to support mechanisms for rate-of-return carriers. Among other reforms, that Order provided carriers with a voluntary path to model-based support, known as Alternative Connect America Model (A-CAM) support, as well as support for stand-alone broadband for carriers remaining on the legacy support mechanism, known as Connect America Fund Broadband Loop Support (CAF BLS).⁶ The Commission provided rate-of-return carriers an additional opportunity to elect model-based support in 2018 and established a budget cap for those remaining on legacy support.⁷ In addition, to ensure that carriers are meeting their commitments to provide high-quality broadband services, the Commission has

² 47 U.S.C. § 151.

³ See id. § 254(b).

⁴ Connect America Fund et al., Report and Order and Further Notice of Proposed Rulemaking, WC Docket No. 10-90 et al., 26 FCC Rcd 17663, 17672, para. 17 (2011), aff'd sub nom. In re FCC, 753 F.3d 1015 (10th Cir. 2014) (USF/ICC Transformation Order or FNPRM). The USF/ICC Transformation Order created the Connect America Fund (CAF) and established a budget for the high-cost program. Id. at 17710, para. 123. In the USF/ICC Transformation Order, as noted below, the Commission adopted the Connect America Fund (CAF) Phase II program to provide ongoing support in price-cap areas through a combination of "a new forward-looking model of the cost of constructing modern multi-purpose networks" and a "competitive bidding process." Id. at 17725, para. 156. The Commission largely maintained the existing legacy universal support mechanisms for rate-of-return carriers and required that they provide broadband service meeting the Commission's public service obligations upon reasonable request. Id. at 17740, para. 206.

⁵ Connect America Fund et al., WC Docket No. 10-90 et al., Report and Order, 28 FCC Rcd 5301 (WCB 2013) (CAM Platform Order); Connect America Fund et al., WC Docket No. 10-90 et al., Report and Order, 29 FCC Rcd 3964 (WCB 2014) (CAM Inputs Order); see also USF/ICC Transformation Order, 26 FCC Rcd at 17727 ("Specifically, we adopt the following methodology for providing CAF support in price cap areas. First, the Commission will model forward-looking costs to estimate the cost of deploying broadband-capable networks in high-cost areas and identify at a granular level the areas where support will be available.").

⁶ See Connect America Fund et al., WC Docket No. 10-90 et al., Report and Order, Order and Order on Reconsideration, and Further Notice of Proposed Rulemaking, 31 FCC Rcd 3087 (2016) (2016 Rate-of-Return Reform Order).

⁷ See Connect America Fund et al., WC Docket No. 10-90 et al., Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration, 33 FCC Rcd 11893 (2018) (December 2018 Rate-of-Return Reform Order).

adopted mandatory deployment and reporting requirements for all of the modernized high-cost support mechanisms.⁸

6. The Commission also has awarded support using reverse auctions, including the Mobility Fund Phase I (Auction 901, awarding support to deploy 3G and 4G mobile services to unserved areas), Tribal Mobility Fund Phase I (Auction 902, awarding support to deploy 3G and 4G mobile services to unserved Tribal areas), CAF Phase II (Auction 903, awarding support to deploy fixed voice and broadband service in certain unserved and underserved price cap areas), and the Rural Digital Opportunity Fund (Auction 904, providing support for voice and high-speed broadband in unserved areas).

B. The Broadband DATA Act

- 7. Since 2013, the Commission has collected information on broadband deployment across the United States through FCC Form 477. On August 1, 2019, the Commission adopted an order setting parameters for a new collection of fixed broadband deployment data with more granular coverage maps and that would include a process for accepting crowdsourced data to challenge the accuracy of the submitted data. The Commission stated its intention to establish a uniform national dataset of locations where broadband could be deployed and upon which new coverage data could be overlaid. 4
- 8. On March 23, 2020, the Broadband DATA Act was signed into law. ¹⁵ In brief, the Broadband DATA Act requires the Commission to establish a semiannual collection of geographically granular broadband coverage data (which the Commission has titled the Broadband Data Collection or BDC) for use in creating coverage maps, ¹⁶ and processes for challenges to the coverage data ¹⁷ and for

⁸ See Connect America Fund; ETC Annual Reports and Certifications, WC Docket Nos. 10-90, 14-58, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8967 (2014) (Rural Broadband Experiments Order); 2016 Rate-of-Return Reform Order, 31 FCC at 3166, para. 214.

⁹ USF/ICC Transformation Order, 26 FCC Rcd at 17675, para. 28; Mobility Fund Phase I Auction Scheduled for September 27, 2012; Notice and Filing Requirements and Other Procedures for Auction 901, AU Docket No. 12-25, Public Notice, 27 FCC Rcd 4725, 4776-77, paras. 184-188 (WTB/WCB 2012) (Auction 901 Procedures Public Notice);

¹⁰ USF/ICC Transformation Order, 26 FCC Rcd at 17819, para. 481; Tribal Mobility Fund Phase I Auction Scheduled for October 24, 2013; Comment Sought on Competitive Bidding Procedures for Auction 902 and Certain Program Requirements, AU Docket No. 13-53, Public Notice, 28 FCC Rcd 2764 (WTB/WCB 2013).

¹¹ USF/ICC Transformation Order, 26 FCC Rcd at 17727-27, para. 166; Connect America Fund et al., WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 5949 (2016) (CAF Phase II Auction Order and/or FNPRM); Connect America Fund Phase II Auction Scheduled for July 24, 2018; Notice and Filing Requirements and Other Procedures for Auction 903, AU Docket No. 17-182, WC Docket No. 10-90, Public Notice, 33 FCC Rcd 1428 (2018) (Auction 903 Procedures Public Notice).

¹² USF/ICC Transformation Order, 26 FCC Rcd at. 17675, para. 28; Rural Digital Opportunity Fund, WC Docket Nos. 19-126, 10-90, Report and Order, 35 FCC Rcd 686 (2020) (RDOF Order).

¹³ Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program, WC Docket Nos. 19-195 et. al., Report and Order and Second Further Notice of Proposed Rulemaking, 34 FCC Rcd 7505, 7506, 7521, paras. 2, 3, 35 (2019).

¹⁴ *Id.* at 7518-19, para. 30.

¹⁵ Broadband Deployment Accuracy and Technological Availability Act, Pub. L. No. 116-130, 134 Stat. 228 (2020) (codified at 47 U.S.C. §§ 641-646) (Broadband DATA Act). In Division N of the Consolidated Appropriations Act, 2021, Congress appropriated \$65 million for the Commission to carry out its responsibilities related to the Broadband DATA Act. *See* Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, § 906(1), 134 Stat. 1182, 2144 (2020).

¹⁶ 47 U.S.C. § 642(a)(1)(A), (a)(2).

accepting crowdsourced information, 18 and it directs the Commission to create a comprehensive database of broadband serviceable locations—i.e., the Broadband Serviceable Location Fabric (Fabric). 19 Further, it requires the Commission to use these maps "to determine the areas in which terrestrial fixed, fixed wireless, mobile, and satellite broadband internet access service is and is not available," and "when making any new award of funding with respect to the deployment of broadband internet access intended for use by residential and mobile customers."20

- In July 2020, the Commission completed the required rulemaking to align its data collection with the requirements of the Broadband DATA Act.²¹ The Commission also adopted additional measures in January 2021 to ensure that the data will be accurate and reliable by establishing certain reporting obligations and requirements for challenges to service coverage reporting and Fabric data.22
- The Commission released the latest version of the National Broadband Map in May 2023 and will continue to release major updates to the map twice per year.²³ The map is based on locationlevel data from the Fabric and BDC data submitted by facilities-based broadband service providers that reflect where providers make mass-market internet service available.²⁴ The Commission will continue to improve the data underlying the map by incorporating challenges from individuals and other stakeholders to both the broadband availability data and Fabric data.²⁵

C. The Infrastructure Investment and Jobs Act, The Broadband Interagency **Coordination Act, and Related Federal Programs**

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs 11. Act (Infrastructure Act). 26 The Act includes the largest-ever federal broadband investment, totaling approximately \$65 billion, and directs multiple agencies to work towards expanding broadband access. In particular, section 60104(c) of the Infrastructure Act instructs the Commission to report on how it may "improv[e] its effectiveness in achieving the universal service goals for broadband in light of this Act."²⁷

(Continued from previous page) — ¹⁷ *Id.* § 642(b)(5). ¹⁸ *Id.* § 644(b). ¹⁹ *Id.* § 642(b)(1).

²⁰ *Id.* § 642(c)(2)(A)-(B).

²¹ Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program, WC Docket No. 19-195 et al., Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd

^{7460 (2020) (}Digital Data Collection Second Report and Order and Third Further Notice of Proposed Rulemaking) (adopting rules regarding reporting standards for fixed and mobile services consistent with Broadband DATA Act requirements, adopting the Fabric, and establishing processes for verifying the data collected from providers).

²² Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program, WC Docket No. 19-195 et al., Third Report and Order, 36 FCC Rcd 1126 (2021).

²³ Federal Communications Commission, National Broadband Map: It Keeps Getting Better, https://www.fcc.gov/national-broadband-map-it-keeps-getting-better (last visited July 23, 2023); Federal Communications Commission, FCC National Broadband Map, https://broadbandmap.fcc.gov/home (last visited July 23, 2023).

²⁴ Broadband Data Task Force Releases Pre-Production Draft of the National Broadband Map; Announces the Start of the Broadband Availability Challenge Processes, WC Docket Nos. 11-10 et al., Public Notice, DA 22-1210, at 1 (BDTF/WTB/WCB/OEA/CGB Nov. 18, 2022).

²⁵ *Id.* at 2-3.

²⁶ Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021) (Infrastructure Act).

²⁷ Id. § 60104(c).

while section 60104(b) instructs the Commission to commence a proceeding "to evaluate the implications of this Act... on how the Commission should achieve the universal service goals for broadband."²⁸

- 12. In accordance with these statutory directives, the Commission adopted a Notice of Inquiry initiating a proceeding regarding the future of the Universal Service Fund (USF) on December 15, 2021,²⁹ and released the *Report on the Future of the Universal Service Fund (Future of USF Report* or *Report*) on August 15, 2022.³⁰ The *Report* provides recommendations for further actions by the Commission and Congress to build upon the Infrastructure Act's investment in broadband and improve the ability of the Commission to achieve its broadband goals through the Universal Service Fund and other Commission programs.³¹
- 13. Other provisions of the Infrastructure Act likewise aim to expand broadband access for all consumers. Section 60102 of the Infrastructure Act directs the National Telecommunications and Information Administration (NTIA) to establish the Broadband Equity, Access, and Deployment Program (BEAD Program), through which NTIA will allocate \$42.45 billion to states for grants "to bridge the digital divide."32 NTIA will provide minimum allocations of \$100 million for each state and \$100 million to be divided equally among the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.³³ Remaining funds will be allocated using a formula based on total unserved locations in each state.³⁴ The Infrastructure Act instructs states to award funding in a way that gives priority to projects that will provide service to unserved locations (defined as those without access to 25/3 Mbps service), then to underserved locations (defined as those without access to 100/20 Mbps service), and next to community anchor institutions (defined as those without gigabit connections).³⁵ Broadband networks funded by the BEAD Program must provide download speeds of at least 100 Mbps and upload speeds of at least 20 Mbps and "latency that is sufficiently low to allow reasonably foreseeable, real-time, interactive applications."36 Grant recipients must provide service to every customer that desires broadband service in the project area and must offer at least one low-cost service option for eligible subscribers.³⁷
- 14. On May 13, 2022, NTIA released its Notice of Funding Opportunity detailing the process for requesting BEAD Program funding (BEAD Program NOFO).³⁸ NTIA will first provide BEAD funding to states and territories to support planning efforts and coordination with local communities and

²⁸ *Id.* § 60104(b)-(c).

²⁹ See Report on the Future of the Universal Service Fund, WC Docket No. 21-476, Notice of Inquiry, FCC 21-127 (Dec. 15, 2021) (Future of USF Notice).

³⁰ Report on the Future of the Universal Service Fund, WC Docket No. 21-376, Report, FCC 22-67, at 22, para. 8 (Aug. 15, 2022) (Future of USF Report).

³¹ *Id*.

³² Infrastructure Act § 60102(b)(1).

³³ *Id.* § 60102(c)(2)(A)-(B). Puerto Rico and the District of Columbia are included in the Act's definition of State. *Id.* § 60102(a)(2)(M) (citing 47 U.S.C. § 942).

³⁴ Infrastructure Act § 60102(c)(3)(B).

³⁵ *Id.* § 60102(h)(1)(A).

 $^{^{36}}$ Id. § 60102(h)(4)(A)(i). Networks must also be reliable, with outages not exceeding, on average, 48 hours over any 365-day period. Id.

³⁷ *Id.* § 60102(h)(4)(A)(ii), (B), (C).

³⁸ See Department of Commerce, National Telecommunications and Information Administration, Broadband Equity, Access, and Deployment (BEAD) Program Notice of Funding Opportunity (NOFO) (May 13, 2022), https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf (last visited July 23, 2023) (BEAD Program NOFO).

stakeholders.³⁹ Next, states and territories must collaborate with local and regional entities in submitting an initial broadband plan to NTIA. After submitting the initial broadband plan, the state or territory must conduct a "transparent, evidence-based, and expeditious challenge process under which a unit of local government, nonprofit organization, or other broadband service provider can challenge a determination made by the [state or territory] in the initial proposal as to whether a particular location or community anchor institution . . . is eligible for the grant funds, including whether a particular location is unserved or underserved."⁴⁰ When NTIA approves a state's or territory's initial plan, the state or territory will then be able to access additional funds from its BEAD allocation, and final approval of a plan will permit access to the remaining allocated funds.

- 15. The BEAD Program NOFO set a July 18, 2022 deadline for NTIA to receive letters of intent from states and territories, as well as an August 15, 2022 deadline for any supplemental information. The BEAD Program NOFO also specifies a number of a program requirements, including principles that states and territories must observe in their subgrantee selection, prioritization, and scoring processes. In particular, the BEAD Program NOFO prohibits states and territories from "treat[ing] as 'unserved' or 'underserved' any location that is already subject to an enforceable federal, state, or local commitment to deploy qualifying broadband" at the conclusion of the state's or territory's challenge process. States and territories must also ensure that subgrantees comply with obligations spelled out in the BEAD Program NOFO regarding network capabilities (i.e., speed, latency, and uptime), deployment requirements, and service obligations. Finally, the BEAD Program NOFO requires states and territories to ensure that prospective subgrantees have the managerial and financial capacity to meet the commitments of the subgrant and any BEAD Program requirements.
- 16. On June 28, 2023, NTIA issued the BEAD Challenge Process Policy Notice (Policy Notice), providing guidance on several BEAD Program processes, such as the identification of existing broadband funding and the required challenge processes that states must conduct, that aim to avoid broadband funding overlaps.⁴³ The Policy Notice explains how, as part of BEAD Program challenge processes, the states and other eligible entities conducting those challenge processes must accept or reject certain kinds of evidence for challenges to the identification of previous federal, state, or local enforceable commitments, challenges to claimed broadband availability at particular locations, and challenges demonstrating that there is planned service to locations without an enforceable commitment.⁴⁴
- 17. Other federal programs also work to further the goal of universal service. For instance, the U.S. Department of Agriculture (USDA)'s Rural Utilities Service supports broadband through a number of programs, including the Learning, Telemedicine, and Broadband Program, for which the Infrastructure Act provided an additional \$2 billion, and its ReConnect Loan and Grant program. ⁴⁵ The Department of the Treasury also has several programs that fund broadband projects, ⁴⁶ and other NTIA

³⁹ *Id.* at 22-28.

⁴⁰ Infrastructure Act § 60102(h)(2).

⁴¹ BEAD Program NOFO at 1, 8, 17, 23-24.

⁴² *Id.* at 36-37.

⁴³ Department of Commerce, National Telecommunications and Information Administration, BEAD Challenge Process Policy Notice (June 28, 2023),

 $https://ntia.gov/sites/default/files/publications/bead_challenge_process_policy_notice_final.pdf (BEAD Challenge_process_policy_notice_final.pdf (BEAD Challenge_process_policy_poli$

⁴⁴ *Id.* at 15-19.

⁴⁵ See Infrastructure Act, div. J, tit. II.; U.S. Department of Agriculture, ReConnect Loan and Grant Program, https://www.usda.gov/reconnect (last visited July 23, 2023).

⁴⁶ See American Rescue Plan Act of 2021, Pub. L. No. 117–2, § 9901, 135 Stat. 4, 223 (2021) (American Rescue Plan Act); U.S. Department of the Treasury, Coronavirus State and Local Fiscal Recovery Funds for Tribal (continued....)

programs beyond the BEAD Program provide funding for broadband deployment, affordability, adoption, availability, and equitable access.⁴⁷ Pursuant to the Broadband Interagency Coordination Act (BICA),⁴⁸ the Commission, USDA, and NTIA must share information regarding these high-cost universal service efforts. Specifically, the BICA required the FCC, USDA, and NTIA to enter into an agreement within six months to provide for sharing information about existing or planned projects that have received, or will receive, funding through the Commission's high-cost programs and programs administered by NTIA and the USDA.⁴⁹ The BICA also mandates that the interagency agreement requires the agencies to "consider basing the distribution of funds for broadband deployment" under the referenced programs "on standardized data regarding broadband coverage."⁵⁰ On June 25, 2021, the agencies announced that they had entered into the agreement.⁵¹ In an effort to further facilitate broadband deployment funding coordination, on May 9, 2022, the FCC, USDA, and NTIA entered into an interagency agreement with the Department of Treasury.⁵² Representatives of the agencies have been meeting regularly pursuant to the agreements. On February 17, 2023, the Commission released a report on the effectiveness of BICA, detailing the steps that the agencies were taking to ensure the most efficient allocation of federal broadband funding.⁵³

18. To further facilitate coordination amongst the various federal funding programs, section 60105 of the Infrastructure Act requires the Commission "to establish an online mapping tool to provide a locations overview of the overall geographic footprint of each broadband infrastructure deployment project funded by the Federal Government."⁵⁴ The Commission released the National Broadband Funding Map in May 2023. The map contains data received from USDA, NTIA, and the Department of Treasury, as well as the Commission's own data. Any funding data that are submitted to the

⁴⁷ See. e.g., Infrastructure Act, div. J. tit. II.

⁴⁸ Broadband Interagency Coordination Act of 2020, Pub. L. No. 116-260, § 904, 134 Stat. 1182, 3214 (codified at 47 U.S.C. § 1308 *et seq.*).

⁴⁹ 47 U.S.C. § 1308(b)(2).

⁵⁰ *Id.* § 1308(b)(3)(C).

⁵¹ Press Release, FCC, FCC, NTIA and USDA Announce Interagency Agreement to Coordinate Broadband Funding Deployment (June 25, 2021), https://www.fcc.gov/document/fcc-ntia-usda-sign-interagency-pact-broadband-funding-deployment (last visited July 23, 2023) (FCC, NTIA and USDA Interagency Agreement Press Release).

⁵² *Id*.

⁵³ Wireline Competition Bureau, Report on the Effectiveness of the Broadband Interagency Coordination Agreement Pursuant to § 1308 of the Broadband Interagency Coordination Act (2023), https://docs.fcc.gov/public/attachments/DOC-391167A1.pdf; *see also* Press Release, FCC, FCC Reports to Congress on Success of Broadband Interagency Coordination Act (Feb. 17, 2023), https://www.fcc.gov/document/fcc-reports-success-broadband-interagency-coordination-act.

⁵⁴ Infrastructure Act § 60105; 47 U.S.C. § 1704.

⁵⁵ FCC Releases Broadband Funding Map, WC Docket No. 11-10 et al., Public Notice, DA 23-410 (OEA/WCB May 15, 2023) (Broadband Funding Map Public Notice); Federal Communications Commission, Broadband Funding Map, https://fundingmap.fcc.gov/home (last visited July 23, 2023).

⁵⁶ Broadband Funding Map Public Notice at 1.

Commission by other federal agencies in the future will be added to the map as part of regular updates the Commission will make to the map in accordance with the Infrastructure Act.⁵⁷

III. REPORT AND ORDER ADOPTING ENHANCED ALTERNATIVE CONNECT AMERICA COST MODEL

19. In this Report and Order, we adopt the Enhanced A-CAM program to promote the widespread deployment of 100/20 Mbps broadband across areas served by A-CAM recipients and rate-of-return carriers eligible to receive legacy support. We adopt deployment and service obligations to align deployment with the requirements of the Infrastructure Act, encourage the deployment of affordable broadband service, and allow us to monitor compliance with the program rules. Next, we extend by 10 years beyond the remaining five years, for a total of 15 years, the term of support for electing carriers, and set a methodology for determining support amounts for locations without 100/20 Mbps broadband service within a potential budget of no more than \$1.27 billion annually, or no more than \$1.33 billion annually if certain conditions are met, using an updated version of the A-CAM. Finally, we make eligible for Enhanced A-CAM all current A-CAM recipients as well as rate-of-return carriers eligible to receive legacy support, and adopt a voluntary election process for eligible carriers.

A. Background

1. Current A-CAM

- 20. In the 2016 Rate-of-Return Reform Order, the Commission provided rate-of-return carriers a voluntary path from traditional rate-of-return support, based on the carrier's costs, to modelbased high-cost universal service support (A-CAM I), tailored to reflect the specific characteristics of rate-of-return areas.⁵⁸ The A-CAM model was used to establish fixed monthly support amounts over a 10-year term in exchange for broadband deployment to a pre-determined number of eligible locations.⁵⁹ The Commission directed the Bureau to calculate support as model-estimated costs for eligible census blocks in excess of the funding threshold of \$52.50 per location per month up to a cap of \$200.60 Carriers were obligated to deploy broadband at speeds of at least 25/3 Mbps or 10/1 Mbps to a number of locations equal to the number of fully funded locations (i.e., locations in eligible census blocks which the model determined could be served for costs at or below the funding cap), and at least 4/1 Mbps or service on reasonable request to a number of locations equal to the number of capped locations (i.e., locations in eligible census blocks which the model determined could be served for costs above the funding cap). Each carrier's specific mix of 25/3 Mbps or 10/1 Mbps obligations, and 4/1 Mbps or reasonable request obligations, was based on the housing unit density of the eligible areas in the offer. These deployment obligations could be met by serving any eligible location within the carrier's service area in the state, whether fully funded or capped. Carriers that elected A-CAM I were required to elect for all affiliated study areas in the state.⁶¹
- 21. The Commission excluded from A-CAM eligibility carriers that had reported deploying 10/1 Mbps service to more than 90% of eligible locations.⁶² For those carriers eligible to participate in A-CAM I, the Commission concluded that it would not provide support for locations in census blocks

⁵⁷ Infrastructure Act § 60105(e)(1); 47 U.S.C. § 1704(e)(1).

⁵⁸ See 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3094-3117, paras. 17-79. For aspects of the model tailored to the specific characteristics of rate-of-return areas, see id. at 3102-11, paras. 36-59.

⁵⁹ *Id.* The Commission noted that it expected that it would conduct a rulemaking to determine support after the end of the term during year eight of the term, which is 2024. *Id.* at 3097, para. 22.

⁶⁰ *Id.* at 3102, para. 37. The \$52.50 funding threshold is based on the Bureau's prior estimate of the reasonable amount of monthly end-user revenues. *See CAM Inputs Order*, 29 FCC Rcd at 4035-41, paras. 170-82.

^{61 2016} Rate-of-Return Reform Order, 31 FCC Rcd at 3113, para. 65.

⁶² *Id.* at 3113, para. 66.

served by an unsubsidized competitor offering at least 10/1 Mbps, and locations in census blocks where the incumbent already deployed fiber to the premises (FTTP) or was providing 10/1 Mbps or better broadband using cable technologies.⁶³

- 22. To award support, the Wireline Competition Bureau (Bureau or WCB) announced A-CAM I offer amounts and deployment obligations predicated on a monthly funding cap of \$200 per location. ⁶⁴ Faced with substantial carrier interest in the offer and demand beyond the Commission-approved budget, however, the Commission later allocated an additional \$50 million annually to the A-CAM I budget and adopted other measures to ensure that the model-based support stayed within the revised budget, including a reduced funding cap below \$200 per location for most carriers. ⁶⁵ In the *March 2018 Rate-of-Return Reform Order and NPRM*, the Commission authorized additional support for another offer to A-CAM I carriers, pursuant to which the funding cap was increased to \$146.10 per location for carriers that elected it. ⁶⁶
- 23. In the *December 2018 Rate-of-Return Reform Order*, the Commission adopted an additional offer for carriers that had previously elected A-CAM.⁶⁷ Pursuant to this Revised A-CAM I, the funding cap was increased to \$200 per location per month for all electing carriers, and the term of support was extended by two years, through 2028, in exchange for increased 25/3 Mbps deployment obligations.⁶⁸ The Bureau extended offers to eligible carriers in April 2019 and authorized Revised A-CAM I support in May 2019.⁶⁹
- 24. In the *December 2018 Rate-of-Return Reform Order*, the Commission also adopted a new model offer, A-CAM II, for carriers still receiving support pursuant to legacy support mechanisms based on historical costs, including carriers not previously eligible for A-CAM I.⁷⁰ Consistent with Revised A-CAM I, the Commission set the per-location cap for A-CAM II at \$200.⁷¹ For A-CAM II, the Commission revised the model parameters to include as eligible blocks those census blocks where the

⁶³ *Id.* at 3109, para. 56.

⁶⁴ See Wireline Competition Bureau Announces Support Amounts Offered to Rate-of-Return Carriers to Expand Rural Broadband, WC Docket No. 10-90, Public Notice, 31 FCC Rcd 8641, 8642 (WCB 2016) (A-CAM Offer Public Notice).

⁶⁵ See Connect America Fund, WC Docket No. 10-90, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 13775, 13776-80, paras. 5-16 (2016) (A-CAM Revised Offer Order and/or FNPRM). Carriers whose original A-CAM I offer was less than the amount of legacy support they received in 2015 ("glide path carriers") retained a \$200 per location per month funding cap, while other carriers received revised offers with funding caps that varied based on the percentage of locations lacking 10/1 Mbps service, up to \$146.10 per location. Id.

⁶⁶ Connect America Fund et al., WC Docket No. 10-90 et al., Report and Order, Third Order on Reconsideration, and Notice of Proposed Rulemaking, 33 FCC Rcd 2990, 3018-20, paras. 62-67 (2018) (March 2018 Rate-of-Return Reform Order and NPRM). See Wireline Competition Bureau Announces Offers of Revised A-CAM Support Amounts to 217 Authorized A-CAM Companies to Expand Rural Broadband, WC Docket No. 10-90, Public Notice, 33 FCC Rcd 4591, 4591 (WCB 2018). The Commission proposed, at the same time, the Revised A-CAM I offer that increased the funding cap and deployment obligations. March 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 3018-21, paras. 62-68.

⁶⁷ December 2018 Rate-of-Return Reform Order, 33 FCC Rd at 11898-903, paras. 14-30.

⁶⁸ *Id*.

⁶⁹ See Wireline Competition Bureau Authorizes 186 Rate-of-Return Companies to Receive an Additional \$65.7 Million Annually in Alternative Connect Cost Model Support to Expand Rural Broadband, WC Docket No. 10-90, Public Notice, 34 FCC Rcd 2780 (WCB 2019).

⁷⁰ December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11903-15, paras. 31-69.

⁷¹ *Id.* at 11904-05, para. 37.

incumbent or its affiliate already provided FTTP or cable service. The Commission excluded as ineligible census blocks served by unsubsidized competitors only if the unsubsidized competitors provided voice and at least 25/3 Mbps service under the then-most recently available FCC Form 477 data. This is a service under the then-most recently available FCC Form 477 data. Finally, the A-CAM II model parameters included a Tribal Broadband Factor, which set the funding threshold for locations on Tribal lands at \$39.38 while increasing the support cap to \$213.12. A-CAM II was offered for a 10-year term, ending in 2028. Carriers electing A-CAM II were required to deploy at least 25/3 Mbps service to a number of locations equal to the number of fully funded locations, and at least 4/1 Mbps or on reasonable request to a number of locations equal to the number of capped locations. The Commission adopted a single-step election process, under which the Bureau released a public notice announcing the offers of A-CAM II support amounts and deployment obligations, after which each carrier had 45 days to make an irrevocable acceptance of the offer. On August 22, 2019, the Bureau authorized 171 companies to receive A-CAM II support.

25. Currently, 262 companies are authorized to receive A-CAM I, including 243 companies that elected Revised A-CAM I, with a term ending in 2028, and 19 companies that did not elect Revised A-CAM I, whose term ends in 2026. These A-CAM I carriers collectively receive \$607.6 million per year and have an obligation to deploy at least 25/3 Mbps service to 451,059 eligible locations, at least 10/1 Mbps to 170,491 eligible locations, and at least 4/1 Mbps service to 26,868 eligible locations, with an additional 65,555 locations subject to the reasonable request standard. In addition, there are 185 A-CAM II companies, with support terms ending in 2028, that collectively receive \$494.3 million per year. These carriers have an obligation to provide at least 25/3 Mbps service to 364,108 eligible locations, at least 4/1 Mbps to 24,103 eligible locations, and service on reasonable request to another 68,034 locations. For the A-CAM I and A-CAM II areas, there are approximately 1,170,000 eligible locations in the model. The total support currently provided to A-CAM I and A-CAM II companies is \$1.1 billion per year.

⁷² *Id.* at 11907, para. 45.

⁷³ *Id.* at 11907-09, paras. 46-51. The Commission declined to adopt a challenge process with respect to unsubsidized competitor coverage, as it had pursuant to A-CAM I, finding the process to be administratively burdensome and providing limited benefit. *Id.* at 11909-10, paras. 52-54.

⁷⁴ *Id.* at 11910-12, paras. 55-57.

⁷⁵ *Id.* at 11912, paras. 58-59.

 $^{^{76}}$ Id. at 11913-14, paras. 64-65. The mix of 4/1 Mbps and reasonable request obligations was based on the density of housing units in the eligible areas. Id.

⁷⁷ *Id.* at 11915, para. 69.

⁷⁸ Wireline Competition Bureau Authorizes 171 Rate-of-Return Companies to Receive \$491 Million Annually in Alternative Connect America Cost Model II Support to Expand Rural Broadband, WC Docket No. 10-90, Public Notice, 34 FCC Rcd 7271, 7271 (WCB 2019).

⁷⁹ *See* Wireline Competition Bureau, CAF - A-CAM 2.3.2 - Authorization Report 5.1 (2019), https://docs.fcc.gov/public/attachments/DOC-352788A1.xlsx (summarizing authorized A-CAM I support amounts and deployment obligations).

⁸⁰ *Id*.

⁸¹ See Wireline Competition Bureau, CAF - A-CAM 2.5.2 - Authorization Report 6.2 (2022), https://docs.fcc.gov/public/attachments/DOC-359222A1.xlsx (summarizing authorized A-CAM II support amounts and deployment obligations).

⁸² *Id*.

2. ACAM Broadband Coalition Proposal

- 26. On October 30, 2020, the ACAM Broadband Coalition (Coalition) filed a Petition for Rulemaking asking the Commission to initiate a proceeding to consider the Coalition's proposal to extend both A-CAM I and A-CAM II. ⁸³ Pursuant to this original proposal, the terms of A-CAM I and A-CAM II would be extended in exchange for increased obligations to deploy 25/3 Mbps service. ⁸⁴ The Commission initially sought comment on the Petition for Rulemaking on November 4, 2020. ⁸⁵ In response, several commenters supported the Coalition's request that the Commission initiate a rulemaking. ⁸⁶ One commenter objected, but said the Commission "should consider alternatives to the Coalition's recommended approach" if the Commission were to adopt a notice of proposed rulemaking. ⁸⁷ More recently, commenters also discussed the Coalition's proposal in response to the aforementioned *Future of USF Notice*. ⁸⁸
- 27. On December 15, 2021, the Coalition revised its proposal to require deployment of at least 100/20 Mbps service to 90% of locations, as determined by the Fabric, in eligible census blocks, and at least 25/3 Mbps service to the remaining 10%. 89 To fund the increased deployment costs, the Coalition proposed increasing monthly support for participating A-CAM carriers to the higher of 80% of a company's model-estimated costs or \$300 per location. 90 The Coalition provided additional details on its proposal on January 19, 2022. 91 On February 17, 2022, the Coalition further proposed support, in exchange for the same revised deployment obligations, for locations in census blocks that had been excluded from A-CAM I because an unsubsidized competitor reported providing at least 10/1 Mbps service. 92

⁸³ Petition of ACAM Broadband Coalition for Expanding Broadband Service Through the ACAM Program, Petition for Rulemaking, RM-11868 (rec. Oct. 30, 2020) (ACAM Broadband Coalition Petition for Rulemaking).

⁸⁴ *Id.* at 11-12.

⁸⁵ See Consumer & Governmental Affairs Bureau Reference Information Center: Petition for Rulemakings Filed, RM-11868, Public Notice, Report No. 3161 (Nov. 4, 2020).

⁸⁶ See generally A-CAM I Cooperatives Comments, RM-11868 (rec. Dec. 4, 2020); Comments of NTCA-The Rural Broadband Association, RM-11868, WC Docket No. 10-90 (rec. Dec. 4, 2020); Comments of the Nebraska Companies, RM-11868 (rec. Dec. 4, 2020); WTA-- Advocates for Rural Broadband Comments, RM-11868 (rec. Dec. 4, 2020); ACAM Broadband Coalition Reply, RM-11868 (rec. Dec. 18, 2020); Reply Comments of NTCA-The Rural Broadband Association, RM-11868, WC Docket No. 10-90 (rec. Dec. 21, 2020).

⁸⁷ Wireless Internet Service Providers Association Comments, RM-11868, at 1 (rec. Dec. 4, 2020).

⁸⁸ See, e.g., Comments of NCTA – The Internet & Television Association, WC Docket No. 21-476, at 10 (rec. Feb. 18, 2022) (NCTA Comments) (urging the Commission to "decline to consider [the] ACAM Broadband Coalition's proposal . . . until the new federal broadband funding has been fully distributed"); Letter from Victoria S. Goldberg, VP & Associate General Counsel, NCTA, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 21-476 and 10-90 (filed May 5, 2022); Reply Comments of WTA – Advocates for Rural Broadband, WC Docket No. 21-476, at 4 (rec. Mar. 17, 2022) (opposing NCTA's "request for a moratorium on new or additional . . . high-cost support (including consideration of the pending ACAM Broadband Coalition proposals) until the Commission can 'assess the effects of new broadband programs'"). We encourage these commenters to discuss the Coalition's proposal in this proceeding as well so that we may develop a complete, thorough record.

⁸⁹ See Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90, at 1 (filed Dec. 17, 2021) (ACAM Broadband Coalition Dec. 17, 2021 Letter).

⁹⁰ See id. at 2.

⁹¹ See Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90, Attach. A (filed Jan. 19, 2022) (ACAM Broadband Coalition Jan. 19, 2022 Letter).

⁹² See Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90, at 1 (filed Feb. 17, 2022) (ACAM Broadband Coalition Feb. 17, 2022 Letter).

- 28. On May 19, 2022, the Commission adopted a *Notice of Proposed Rulemaking (Enhanced A-CAM NPRM)* seeking comment on how "enhancements to the A-CAM program, as the Coalition has proposed, may be an efficient means of funding deployment in a manner complementary to other federal and state efforts." The Commission explained that cost-effective broadband deployment by A-CAM carriers pursuant to the cost model could allow other agencies and the states to use Infrastructure Act funds to achieve more widespread deployment. In response to the *Enhanced A-CAM NPRM*, 23 parties filed comments, and 12 parties filed reply comments. Among the commenters were the ACAM Broadband Coalition, other groups of A-CAM carriers, interested trade associations, state public utility commissions, and various individual broadband service providers. NTIA also submitted comments in which it advocated for the maximum possible alignment between Enhanced A-CAM and NTIA's BEAD Program. S
- 29. More recently, the ACAM Broadband Coalition has proposed additional alternative deployment obligations and funding scenarios, including scenarios in which at least some carriers would commit to deploying 100/20 Mbps or faster broadband to 100% of study area locations. The Coalition suggested that the Commission could either allow Enhanced A-CAM carriers to commit to deploying 100/20 Mbps or faster broadband to 100% or 98% of study area locations, or the Commission could "mandate one of the two percentage requirements" for all Enhanced A-CAM carriers. Such scenarios, the Coalition explained, could be associated with total support amounts of up to \$24.5 billion over the entire Enhanced A-CAM term ending in either 2036 or 2039.
- 30. In its comments in response to the *Enhanced A-CAM NPRM*, NTCA suggested a voluntary incentive regulation path for legacy carriers and recalibrating the high-cost annual budget.⁹⁸

⁹³ Connect America Fund: A National Broadband Plan for Our Future High-Cost Universal Service Support et al., WC Docket No. 10-90 et al., Notice of Proposed Rulemaking, FCC 22-35, 2022 WL 1684348 (May 20, 2022) (Enhanced A-CAM NPRM or NPRM).

⁹⁴ See id. at 1, para. 1.

⁹⁵ See Comments of the National Telecommunications and Information Administration, RM-11868, WC Docket No. 09-197 et al., at 2-3 (rec. Aug. 1, 2022) (NTIA Comments) ("To ensure that the Administration's goal of 'Internet for all' (*i.e.*, ubiquitous high-speed broadband coverage) is realized and that taxpayer funds are efficiently utilized, and to fulfill Congress's directive that NTIA and the Commission (among others) coordinate on broadband deployment matters, it is essential to align A-CAM and BEAD Program requirements to the greatest extent possible."). Although NTIA submitted this filing during the *NPRM*'s reply comment period, the filing is presented as comments, rather than reply comments.

⁹⁶ See Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 19-90 et al., at 1 (filed Oct. 27, 2022) (ACAM Broadband Coalition Oct. 27, 2022 Letter); Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 1 (filed Nov. 10, 2022) (ACAM Broadband Coalition Nov. 10, 2022 Letter). See also Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 1 (filed Feb. 10, 2023) (ACAM Broadband Coalition Feb. 10, 2023 Letter) ("We reiterated our commitment to deploying at a minimum speed of 100/20 Mbps to whatever number of eligible locations future Fabric-based maps identify with no change in support levels."); Comments of the Nebraska Rural Independent Companies, WC Docket No. 10-90 et al., at 4-7 (rec. July 18, 2022) (NRIC Comments) (proposing to allow Enhanced A-CAM carriers to commit to serving 100% of study area locations with 100/20 Mbps or faster broadband).

⁹⁷ See ACAM Broadband Coalition Oct. 27, 2022 Letter at 1-2.

⁹⁸ Comments of the NTCA—The Rural Broadband Association, RM-11868, WC Docket No. 10-90 et al., at 33 (rec. July 18, 2022) (NTCA Comments). Several commenters supported NTCA's initial proposal. *See, e.g.*, Reply Comments of Southeastern Rural Broadband Alliance, WC Docket No. 10-90 et al., at 5-10 (rec. Aug. 1, 2022) (Southeastern Rural Broadband Alliance Reply) (encouraging the Commission to adopt companion CAF BLS and HCLS reforms and the creation of an incentive regulation pathway for legacy rate-of-return carriers); Reply Comments of TCA, RM-11868, WC Docket No. 10-90 et al., at 2-5 (rec. Aug. 1, 2022) (supporting 5-step plan put (continued....)

NTCA and Hargray Telephone Company, LLC (Hargray), on behalf of the Southeastern Rural Broadband Alliance, have since modified and built on this proposal. Both NTCA and the Rural Broadband Alliance now support a framework to allow CAF BLS "recipients to voluntarily elect an incentive regulation that would freeze [CAF BLS] support at the adjusted baseline for six years," from 2024 to 2029. Support would then decline by 4% each year over a five year period and remain frozen at this lower level of support until the Commission adopts a new framework. CAF BLS carriers, in exchange, "would commit to serve 100% of the serviceable locations in their study area(s) at 100/20 Mbps." Electing carriers would not be subject to the budget control mechanism.

B. Discussion

- 31. With this Order, we adopt the Enhanced A-CAM support mechanism to facilitate the widespread deployment of broadband at speeds of at least 100/20 Mbps across eligible rate-of-return carriers' service areas by the end of 2028. In exchange for the commitment to complete this deployment, the Commission will extend offers to current A-CAM carriers and current legacy support recipients within a budget totaling no more than \$1.27 billion annually, or no more than \$1.33 billion annually if certain conditions are met, over a 15-year term beginning January 1, 2024.
- 32. We conclude that it is in the public interest to adopt Enhanced A-CAM before BEAD Program grants are made, and thus we require below that carriers make their elections by no later than October 1, 2023 to ensure alignment with the expected BEAD Program timeline as required by the Infrastructure Act.¹⁰⁴ By proceeding now with Enhanced A-CAM, we are able to complement and bolster congressionally appropriated programs, like the BEAD Program. Importantly, we obligate carriers electing Enhanced A-CAM to serve 100% of unserved locations with service levels consistent with the standard established in the Infrastructure Act.¹⁰⁵ This requirement helps establish a federal enforceable commitment and alleviates the need for BEAD and other broadband funding for these areas,¹⁰⁶ allowing

⁹⁹ Letter from Michael Romano, Exec. Vice Pres., NTCA, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 2 (filed Oct. 14, 2022) (NTCA Oct. 14, 2022 Letter); Letter from Trey Judy, Director—Regulatory, Hargray Communications, on behalf of the Southeastern Rural Broadband Alliance, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No 10-90 et al., at 2 (filed Apr. 28, 2023) (Southeastern Rural Broadband Alliance April 28, 2023 Letter); Letter from Michael Romano, Exec. Vice Pres., NTCA, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 2 (filed May 26, 2023) (NTCA May 26, 2023 Letter); Letter from Trey Judy, Director—Regulatory, Hargray Communications, on behalf of the Southeastern Rural Broadband Alliance, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90, at 1-3 (filed May 30, 2023) (Southeastern Rural Broadband Alliance May 30, 2023 Letter).

¹⁰⁰ NTCA May 26, 2023 Letter at 2; Southeastern Rural Broadband Alliance April 28, 2023 Letter at 2.

¹⁰¹ *Id*.

¹⁰² *Id*.

¹⁰³ *Id*.

¹⁰⁴ See infra section III.B.3. See also 47 U.S.C. § 1702(h)(4)(C).

¹⁰⁵ See infra section III.B.1. See also 47 U.S.C. § 1702(h)(4)(A)(i)(I) (requiring subgrantees to provide broadband at speeds of 100/20 Mbps).

¹⁰⁶ See BEAD Program NOFO at 36-37 n.52. See also Reply Comments of WTA – Advocates for Rural Broadband Reply, RM 11868, WC Docket No. 10-90 et al., at 8-9 (rec. Aug. 1, 2022) (WTA Reply) (noting that there is "no possibility of duplication" in areas where a rate-of-return carrier has an enforceable federal commitment that meets the BEAD Program requirements); Reply Comments of the ACAM Broadband Coalition, RM-11868, WC Docket (continued....)

those funds to be used for other means like extending networks further or funding other broadband initiatives. ¹⁰⁷ We also establish a framework to avoid duplicating existing efforts from other government programs funding broadband deployment. ¹⁰⁸ We acknowledge that some commenters urge the Commission to wait until the BEAD Program and other federal funding programs have allocated their funding, or at least have determined how to allocate funding, before deciding how to proceed with supporting the remaining areas without 100/20 Mbps or faster service with universal service support. ¹⁰⁹ However, we disagree that standing by would serve the public interest.

33. Instead, we find that proceeding now to fund these areas with universal service support is an efficient use of federal funds. Enhanced A-CAM builds upon years and billions of dollars of universal service support by leveraging rate-of-return carriers' existing networks to incrementally increase broadband speeds across eligible areas and supporting the ongoing operations of those networks.¹¹⁰ We

(Continued from previous page)

No. 10-90 et al., at 7-8 (rec. Aug. 1, 2022) (ACAM Broadband Coalition Reply). For this reason, we disagree that proceeding now with Enhanced A-CAM would "result in wasteful spending of limited universal service funds."

NCTA Comments at 4-5.

¹⁰⁷ See, e.g., Comments of the ACAM Broadband Coalition, RM-11868, WC Docket No. 10-90 et al., at 4-5 (rec. July 18, 2022) (ACAM Broadband Coalition Comments); Comments of the Iowa A-CAM Carriers, RM-11868, WC Docket No. 10-90 et al., at 6 (rec. July 18, 2022); Comments of ACA Connects on the Notice of Proposed Rulemaking, RM-11868, WC Docket No. 10-90 et al., at 13 (rec. July 18, 2022) (ACA Comments); NTCA Comments at 16; Comments of State and Regional Telecommunications Associations, RM-11868, WC Docket No. 10-90 et al., at 3-4 (rec. July 18, 2022) (State and Regional Telecommunications Associations Comments); (Minnesota Telecom Alliance et al. Reply at 3-4; Comments of GTBA—Georgia's Rural Telephone and Broadband Association, RM-11868, WC Docket No. 10-90 et al., at 6 (rec. July 18, 2022) (GTBA Comments); Southeastern Rural Broadband Alliance Reply at 4; Reply Comments of Home Telecom, RM-11868, WC Docket No. 10-90 et al., at 2 (rec. Aug. 1, 2022) (Home Telecom Reply); WTA Reply at 3.

¹⁰⁸ See infra section III.B.1, B.2.b.

¹⁰⁹ See, e.g., Comments of Windstream Services, LLC, RM-11868, WC Docket No. 10-90 et al., at 2-3 (rec. July 18, 2022) (Windstream Comments); Comments of INCOMPAS, RM-11868, WC Docket No. 10-90 et al., at 3-7 (INCOMPAS Comments); NCTA Comments at 2-6; Reply Comments of WISPA—Broadband Without Boundaries, RM-11868, WC Docket No. 10-90 et al., at 2-3 (rec. Aug. 1, 2022) (WISPA Reply). See also Enhanced A-CAM NPRM at 13, para. 32 (seeking comment on the sequencing of Enhanced A-CAM with the BEAD Program). We note that some commenters in the Future of USF docket generally encouraged the Commission to reassess its high-cost programs before providing any further high-cost funding. See, e.g., INCOMPAS Comments at 5-6 (citing comments from the Future of USF docket). In the below Notice of Inquiry, we seek comment on issues raised in this proceeding. See infra section V. However, for all the reasons discussed herein, we find it serves the public interest to move forward with Enhanced A-CAM at this time while we separately build a record to help the Commission consider how to modify the high-cost program to adjust to the changing broadband landscape.

¹¹⁰ See, e.g., TDS Telecommunications LLC Comments, WC Docket No. 10-90 et al., at 4-5 (rec. July 18, 2022) (TDS Comments) ("The decision thus is between potentially starting over anew in A-CAM carriers' territories to fund overbuilds using BEAD funding, or simply making incremental [universal service] investments to enhance the networks already being deployed using A-CAM funding."); NTCA Comments at 14-15 (noting that Enhanced A-CAM "represents the most direct route—leveraging proven programs, existing networks, and demonstrated displays of community commitment—to achieving the ongoing mission of universal service"); GTBA Comments at 5 ("Sequencing A-CAM reform before BEAD will allow ETCs electing A-CAM to offer 100/20 Mbps to locations by extending existing network assets."); Minnesota Telecom Alliance et al. Reply at 4 ("The Commission, which has already invested billions of [universal service] dollars during the past decades to facilitate the transformation of the formerly voice-centric networks of [rate-of-return carriers] into higher and higher speed broadband networks, should continue to build upon its successful broadband deployment efforts "); WTA Reply at 3, 6-7 ("[T]he Commission has already invested billions of [universal service] dollars since its initial 1997 implementation of Section 254 of the Communications Act, as amended, in the upgrade of [rate-of-return] networks to deploy higher and higher broadband speeds as the local exchange industry evolved from a voice-centric network into a national broadband network"); A-CAM Broadband Coalition Comments at 4 ("Adoption of the ACAM program enhancements would provide for the leveraging of ACAM companies' already (partially)-built networks and money

(continued....)

are not convinced that it would be more efficient for another program to overbuild these areas by funding competitive carriers to deploy new networks, ¹¹¹ particularly when we have already committed years of long-term universal service support to these areas. ¹¹² Although it is possible that a rate-of-return carrier will successfully compete for support through an alternative funding program, ¹¹³ it is also possible that other providers may cherry pick and receive funding for certain portions of a rate-of-return carrier's study area, ¹¹⁴ leading to multiple funding programs supporting different locations within the service area and delays in deployment to the remaining locations while the Commission determines how to fill in any gaps with universal service support. ¹¹⁵ Instead, we conclude that obligating one service provider with an existing supported network to serve 100% of unserved locations across its study area now will provide more certainty that the unserved locations in rate-of-return carriers' study areas will be served with broadband at speeds of 100/20 Mbps in a timely manner.

34. As explained in more detail below, we require carriers authorized for Enhanced A-CAM to serve all Enhanced A-CAM required locations in their study areas. We delegate to the Bureau to determine the exact set of locations that must be served based on the Fabric, the Broadband Data Collection, and further deduplication of enforceable commitments. Although Enhanced A-CAM required locations in each study area will be identified at the time Enhanced A-CAM offers are made, the Bureau may make adjustments, by no later than the end of 2025, to identify: (1) locations in the Fabric when the Bureau sets final obligations; (2) locations that were already served by an unsubsidized competitor at the time the offer was made but this competitive service was not reflected in the Broadband Data Collection; and (3) locations that were subject to an enforceable commitment for the deployment of broadband of 100/20 Mbps or greater at the time the offer was made. In making adjustments to the Enhanced A-CAM required locations, the Bureau will determine which vintage of National Broadband Map data best reflects serviceable locations and broadband coverage at the time of the offer. If there is a substantial decrease

¹¹¹ See, e.g., Windstream Comments at 3 (claiming "the competitive nature of the BEAD Program grant process, and other similar state broadband programs, represents a more cost-effective and timely approach to delivering high-speed service in these areas"); INCOMPAS Comment at 5 n. 8; NCTA Comments at 5-6.

¹¹² See, e.g., TDS Comments at 4-5; WTA Reply at 9-10.

¹¹³ INCOMPAS Comments at 5 n.8 (noting that incumbents "are in an advantageous position with a current network and customers to obtain funding from the competitive deployment programs funded by Congress").

¹¹⁴ Reply Comments of NTCA—The Rural Broadband Association, RM-11868, WC Docket No. 10-90 et al., at 11 (rec. Aug. 1, 2022) (NTCA Reply) (explaining "the processes recommended by those who support enhancement and extension of A-CAM would precisely *facilitate* increased broadband availability in those service areas – and in a manner that ensures delivery of a comparable level of services *across* those areas" while noting other funding programs "could ultimately carve up unserved and underserved geographies in yet-to-be-determined ways, serving some portions while still leaving to-be-determined parts of these areas behind") (emphasis in original); Home Telecom Reply at 3-4 (explaining that if companies that cherry pick "successfully divide these highest-cost rural areas with a separate network, it could jeopardize the broadband deployment throughout areas that are too sparsely populated to support a single carrier, let alone newcomers").

¹¹⁵ NTCA Comments at 16.

¹¹⁶ "Enhanced A-CAM required locations" is defined *infra*, para. 37.

¹¹⁷ See infra n.146.

in the number of locations, Enhanced A-CAM support will be decreased according to the procedures adopted herein. However, if the number of locations that must be served increases, the Enhanced A-CAM carrier may receive additional support if consistent with the available budget, but such increases are not guaranteed. Because Enhanced A-CAM carriers are the incumbent provider in their service areas, we expect that they are in the best position to know the number of locations in their study areas and the availability of competitive broadband alternatives. Therefore, we find that Enhanced A-CAM carriers are well positioned to know the maximum number of locations they may have to serve and based on their knowledge of their study areas determine whether they should accept Enhanced A-CAM funding.

- 35. While we recognize that funding these areas through the universal service program will increase the contribution factor, ¹²⁰ as we explain below, we have adopted a budget that balances our goals of supporting universal access to voice and broadband service, and minimizing the burden on contributors. ¹²¹ We are also not persuaded by commenters' speculation that the Commission should not act now because congressionally mandated funding programs could "obviate the need" for any additional funding in these areas. ¹²² Because we have the ability now to efficiently support deployment across these areas in a manner that is complementary to other funding programs, we do not believe it would serve the public interest to further delay deployment so that we can wait and see if certain locations remain stranded with no or inferior service after funding programs have finished allocating their funds. ¹²³
- 36. Finally, we adopt requirements and safeguards for Enhanced A-CAM that address other concerns expressed by commenters requesting that we wait before implementing Enhanced A-CAM. In response to concerns that areas will not be served as quickly as they might be if they were funded by the BEAD Program, ¹²⁴ we below align the deployment timeline for Enhanced A-CAM recipients with the timeline required by the Infrastructure Act. ¹²⁵ And while it is not possible to know whether a service provider that received BEAD Program funding or funding from another program may have provided "comparable (or better) service at a lower price," ¹²⁶ we also adopt performance requirements that align with the Infrastructure Act, ¹²⁷ and subject Enhanced A-CAM recipients to performance testing to ensure

¹¹⁸ See infra section III.B.2.b.

¹¹⁹ See infra para. 78.

¹²⁰ Windstream Comments at 5-6; INCOMPAS Comments at 4-5.

¹²¹ See infra section III.B.2.a.

¹²² Windstream Comments at 2-3. *See also* NCTA Comments at 3. *But see* ACA Comments at 11-12 ("But, even though the size of these funds is unprecedented, they are unlikely to be sufficient to close the availability gap entirely."); WTA Reply at 4-6 ("[N]o one can be certain at this time whether or not the appropriated federal grant monies will be 'sufficient' in amount or in their manner of use"); ACAM Broadband Coalition Reply at 5-7.

¹²³ See, e.g., NCTA Comments at 3-5; INCOMPAS Comments at 6-7; WISPA Reply at 2-3. But see NTCA Reply at 9 ("[A]cting now . . . would be a prudent and more effective and efficient means of ensuring delivering of higher-quality and more affordable services across wide rural spaces than 'waiting to see if BEAD might show up' in these areas."); WTA Reply at 6 ("[S]hould the federal grant programs ultimately provide no funding for an [rate-of-return] service area or fund a proposal that results in an uncompleted or inferior network, local residents can remain underserved for a much longer period.").

¹²⁴ See, e.g., Windstream Comments at 3 ("Among many other factors, the pandemic underscored the need to act quickly and aggressively, and the proposed Enhanced ACAM program does not embrace this urgency.").

¹²⁵ See infra section III.B.1; 47 U.S.C. § 1702(h)(4)(c); BEAD Program NOFO at 65. See also WTA Reply at 11-12; ACAM Broadband Coalition Reply at 7.

¹²⁶ NCTA Comments at 5.

¹²⁷ 47 U.S.C. § 1702(h)(4)(A)(i)(I).

those performance requirements will be met.¹²⁸ Additionally, we subject Enhanced A-CAM recipients to the reporting requirements and non-compliance measures that we apply to all high-cost support recipients so that we can monitor and incentivize deployment.¹²⁹

1. Enhanced Deployment and Service Obligations

37. Final Deployment Obligations. We adopt deployment obligations requiring every Enhanced A-CAM recipient to deploy, by the end of 2028, 100/20 Mbps or faster broadband service, with latency of 100 milliseconds or less, to all Enhanced A-CAM required locations in their service areas. ¹³⁰ In the context of this Enhanced A-CAM program, Enhanced A-CAM carriers are required to deploy to those locations for which voice and terrestrial broadband services of speeds 100/20 Mbps or faster are not yet available or lack an enforceable commitment ¹³¹ for deployment ("Enhanced A-CAM required locations"). ¹³² These deployment obligations are designed to maximize the Enhanced A-CAM program's compatibility with the Infrastructure Act and BEAD Program, which also require deployment of 100/20 Mbps or faster broadband to all locations within a funded "project" and will exclude areas covered 100% by existing federal, state, or local commitments to deploy broadband at such speeds. ¹³³ By committing support through Enhanced A-CAM to deploy broadband at these speeds to electing carriers' required

¹²⁸ See infra section III.B.1. See also WTA Reply at 9-10. INCOMPAS speculates that congressional broadband programs would "likely" fund "much greater network capacity" than the technologically neutral Enhanced A-CAM program. INCOMPAS Comments at 4. However, we note that states and other eligible entities will have the opportunity to determine whether an Enhanced A-CAM provider commits to offer broadband using a technology that meets the BEAD Program's definition of "reliable broadband service" in determining whether the Enhanced A-CAM recipient has an enforceable federal commitment that would preclude BEAD funding to a location. BEAD Program NOFO at 15, 36-37 n.52 (defining reliable broadband service and the requirements for an enforcement commitment for the deployment of qualifying broadband); BEAD Challenge Process Policy Notice at 11 ("If the service provided in such a [enforceable] commitment meets the BEAD definition and requirements of reliable broadband, it will be considered an enforceable commitment regardless of the type of reliable broadband technology deployed.").

¹²⁹ NCTA Comments at 5-6 (noting that "the BEAD [P]rogram incorporates a number of safeguards to ensure that providers are competent and that consumers receive the high-speed broadband services that have been promised"). *But see infra* section III.B.1, NTCA Comments at 15 ("The [universal service] programs have a demonstrable track record in enabling deployment and sustainability of broadband networks, and they incorporate substantial accountability measures to ensure that consumers receive what is promised, with performance testing, location reporting for deployment, and [ETC] oversight at both the federal and state level."); WTA Reply at 8 ("NCTA has not, and cannot, make any plausible prediction or provide any credible evidence that the future NTIA and state safeguards that are yet to be devised and implemented will be more effective in fighting waste, fraud and abuse than the Commission's proven system and procedures.").

¹³⁰ See Enhanced A-CAM NPRM at 11, paras. 25-33. Unlike in previous iterations of the A-CAM program, Enhanced A-CAM recipients will be obligated to serve all such locations in their service areas, including in census blocks that are below the funding threshold, i.e., not just in "eligible census blocks."

¹³¹ In the context of Enhanced A-CAM, an "enforceable commitment" exists where a carrier commits to deploying broadband service as a condition of any federal or state grants or other funding.

¹³² We note that the BEAD Program distinguishes between locations with broadband service with speeds between 25/3 Mbps and 100/20 Mbps as "underserved," rather than "unserved," and defines "unserved" as those locations with speeds less than 25/3 Mbps. For purposes of Enhanced A-CAM, we define unserved areas in paragraph [[44]], below.

¹³³ See infra. section III.B.3 (discussing carriers' elections of Enhanced A-CAM support and deployment commitments). See also 47 U.S.C. § 1702(h)(4); BEAD Program NOFO at 36-37 n.52. In the context of the BEAD Program, "project" refers to "an undertaking by a subgrantee to construct and deploy infrastructure for the provision of broadband service," which is equivalent to the study area for which an Enhanced A-CAM carrier may elect to participate in the Enhanced A-CAM program. See id. at 14.

locations, we will avoid overlap with the BEAD Program and help more Americans become connected at modern broadband speeds.

- 38. Moreover, since the Commission adopted the original A-CAM program, the nature and use of broadband Internet access services have continued to change. The Infrastructure Act defines an "underserved location" as a location that lacks reliable service with latency characteristics sufficient to support real-time, interactive applications at speeds below 100/20 Mbps.¹³⁴ We believe the same deployment goal would be appropriate to future-proof the next iteration of A-CAM to the maximum extent possible. We thus reject the Coalition's earlier proposal to deploy 100/20 Mbps or faster service to only 90% of eligible locations and 25/3 Mbps or faster service to the remaining 10% of eligible locations.¹³⁵ We also reject suggestions that Enhanced A-CAM recipients be required to deploy broadband with symmetrical download and upload speeds.¹³⁶ Requiring 100 Mbps upload speed is at odds with the congressional determination in the Infrastructure Act.
- 39. Consistent with past A-CAM offers, we will determine compliance with deployment obligations based on meeting the minimum service levels regardless of technology. We do, however, require Enhanced A-CAM recipients to provide voice service to their required locations. The Commission's high-cost program historically supported traditional voice services until 2011, when the Commission reformed the program to support networks capable of providing both voice and broadband services. Consistent with the Commission's universal service goals of connecting Americans to both kinds of services, A-CAM carriers, like other high-cost support recipients, must already provide voice service along with broadband service to their required locations.
- 40. More specifically, we require a carrier electing Enhanced A-CAM to provide 100/20 Mbps or faster broadband and voice service to all Enhanced A-CAM required locations within its study area, ¹⁴⁰ as determined by the National Broadband Map as of the date of the Enhanced A-CAM offer with

¹³⁴ See Infrastructure Act § 60104(c).

¹³⁵ We note, however, that in more recent filings, the Coalition has suggested that requiring deployment to 100/20 Mbps or faster service to all Enhanced A-CAM locations may be appropriate. *See supra* para. 29 (citing ACAM Broadband Coalition Oct. 27, 2022 Letter at 1; ACAM Broadband Coalition Nov. 10, 2022 Letter at 1).

¹³⁶ See Comments of the Nebraska Public Service Commission, RM-11868, WC Docket No. 10-90 et al., at 2-4 (rec. July 13, 2022)..

¹³⁷ See Letter from Louis Peraertz, Vice President of Policy, WISPA – Broadband Without Boundaries, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 2 (filed June 26, 2023) (WISPA June 26, 2023 Letter) (asking that the Commission "maintain[] a technology neutral approach for 100/20 Mbps deployment").

¹³⁸ See USF/ICC Transformation Order, 26 FCC Rcd at 17680-81, paras. 48, 51-52.

¹³⁹ See December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11913-14, para. 64. High-cost support recipients are not bound to one particular technology in offering the required voice service. See RDOF Order, 35 FCC Rcd 686, 708, para. 43 (2020) ("The Commission made clear when it adopted the standalone voice requirement as a condition of receiving Connect America Fund support in 2011 that the definition of the supported service, voice telephony service, is technologically neutral, allowing ETCs to provision voice service over many platforms.").

¹⁴⁰ A support recipient is deemed to be commercially offering voice and/or broadband service to a location if it provides service to the location or could provide it within 10 business days upon request. *Wireline Competition Bureau Provides Guidance to Carriers Receiving Connect America Fund Support Regarding Their Broadband Location Reporting Obligations*, WC Docket No. 10-90, Public Notice, 31 FCC Rcd 12900, 12905 (WCB 2016). As with all of our high-cost support mechanisms with defined broadband deployment obligations, we will not consider a location to be served if a service provider intends to charge the consumer a fee that is attributable to the extension of the network. The goal of these high-cost support mechanisms is to make reliable and affordable broadband available to consumers, and line extension fees may make services supported by these programs inaccessible to consumers. This approach is consistent with the Broadband DATA Act, which defines a "standard broadband installation" in part as "the initiation by a provider of fixed broadband internet access service in an area

adjustments adopted by the Bureau no later than the end of 2025, including extremely high-cost locations and locations that currently receive no support because their estimated cost to serve is below the support threshold. A carrier electing Enhanced A-CAM must also continue serving locations where it already provides 100/20 Mbps or faster broadband service. Conversely, Enhanced A-CAM recipients are not required to provide broadband to locations where, in addition to voice service, there is existing 100/20 Mbps or faster broadband service using wireline or terrestrial fixed wireless technology, offered by an unsubsidized competitor, or where any carrier has an enforceable federal or state commitment to deploy 100/20 Mbps or faster broadband service.¹⁴¹

- 41. In doing so, we decline to adopt the Coalition's proposed "two-pronged analysis" for identifying areas to be excluded due to competitive overlap. Under the Coalition's proposed analysis, the Commission would first make a determination for each Enhanced A-CAM provider and unsubsidized competitor at the state level before making a separate determination at the census block level. The Coalition's proposal would, in our judgment, likely result in funding for many locations that are already served with 100/20 Mbps by an unsubsidized competitor. We exclude such locations to ensure that our limited universal service funds may help bring broadband at today's standards to as many areas as possible, while avoiding spending in areas where there either is existing broadband service of the same quality or for which carriers are already committed to deploy such service in exchange for other federal or state support.
- 42. Consistent with the Broadband DATA Act and the Broadband Interagency Coordination Act, Enhanced A-CAM offers will be made using location data from Fabric v.2, broadband coverage data from the National Broadband Map, and federal broadband funding data from the National Broadband Funding Map. We recognize that there are ongoing efforts to improve the accuracy of each data set, and those maps will continue to be refined over the coming months. To avoid unnecessarily duplicating federal broadband funding, we direct the Bureau to coordinate the areas under consideration for Enhanced A-CAM offers with other federal agencies, e.g., the Rural Utilities Service, NTIA, and the Department of Treasury, 144 and to remove from eligibility locations already subject to enforceable commitments to deploy 100/20 or faster broadband service.

¹⁴⁴ See FCC, NTIA and USDA Interagency Agreement Press Release; FCC, NTIA, USDA and Treasury Interagency Agreement Press Release. While the Commission has entered into interagency agreements with NTIA, USDA, and Treasury, many other federal agencies also have broadband funding programs. See GAO, National Strategy Needed to Guide Federal Efforts to Reduce Digital Divide (May 2022) (finding "more than 100 programs administered by 15 agencies"). We direct the Bureau to expand its coordination to include other such federal agencies, e.g., the Department of Education and the Department of Housing and Urban Development, and the Commission will continue to explore interagency agreements with other relevant federal agencies, if such agreements prove useful.

¹⁴¹ See BEAD Program NOFO at 36-37 & n.52.

¹⁴² See ACAM Broadband Coalition Feb. 10, 2023 Letter at 2.

¹⁴³ The Coalition proposes that the Commission provide an Enhanced A-CAM recipient the full amount of support even where an unsubsidized competitor is providing 100/20 Mbps or faster broadband and voice service if the competitor is not offering such services to over 20 percent of the Enhanced A-CAM recipient's locations in eligible census blocks in a state. If the competitor is offering such broadband and voice services to over 20 percent of the Enhanced A-CAM recipient's locations in eligible census blocks in a state, the Commission would, according to the Coalition's proposal, not provide Enhanced A-CAM support for those census blocks where 100 percent of the locations are reported to have 100/20 Mbps or faster broadband service. *See* ACAM Broadband Coalition Feb. 10, 2023 Letter at 2.

- 43. Complete information on federal commitments will likely not be available in the National Broadband Funding Map at the time Enhanced A-CAM offers are made or elected, and the Map is not expected to include information regarding commitments made using state funds. Accordingly, we direct the Bureau and Office of Economics and Analytics to adjust carriers' lists of required deployment locations as more complete data become available. 145 These adjustments specifically shall reflect locations and broadband deployment that existed at the time Enhanced A-CAM offers were made, but were not reflected in the Fabric or the National Broadband Map, and locations for which an enforceable commitment to deploy had been made prior to Enhanced A-CAM offers but were not included in the National Broadband Funding Map. 146 We direct the Bureau to conduct a process, as necessary, to identify enforceable commitments not reflected in the National Broadband Funding Map. Because these adjustments are consistent with the BEAD Program's requirements, we expect that they will not result in de-confliction issues that may cause unnecessary duplication between Enhanced A-CAM and BEAD. Further, as discussed below, the Bureau should adjust deployment obligations where BEAD awards are made for Tribal locations and the Enhanced A-CAM carrier and the Tribal government mutually agree to forego Enhanced A-CAM deployment obligations. 147 We anticipate that the Bureau will make all adjustments to the required deployment locations no later than December 31, 2025.
- 44. We direct the Bureau to treat as served and therefore exclude in the Enhanced A-CAM offers any locations for which 100/20 Mbps or faster service is provided only by an unsubsidized competitor via terrestrial fixed wireless technology utilizing entirely unlicensed spectrum. Although we acknowledge that this approach is not consistent with NTIA's BEAD Program, ¹⁴⁸ we decline to depart from the Commission's long-standing policy of technological neutrality at this time. ¹⁴⁹ We recognize that there are concerns regarding the accuracy of claimed deployment by fixed wireless providers utilizing entirely unlicensed spectrum. In particular, some parties assert that, although such providers may be able to serve many locations with fixed wireless technology utilizing entirely unlicensed spectrum, they may not be able to simultaneously serve all locations within their coverage footprint. ¹⁵⁰ However, to the extent that any such coverage claims may be deficient, there have been and will continue to be opportunities for

¹⁴⁵ We discuss later whether adjustments to support will occur concurrently with any adjustments to the Enhanced A-CAM locations. *See infra* section III.B.2.b.

¹⁴⁶ We thus expect that the Bureau and the Office of Economics and Analytics will ultimately rely on Fabric v.3 and the National Broadband Map showing broadband serviceable locations as of June 30, 2023 for these adjustments. This is likely to be the most recent Map update prior to the October 1, 2023 deadline for offer acceptance.

¹⁴⁷ See infra Section III.B.3.

¹⁴⁸ See BEAD Program NOFO at 28 ("For the purposes of the BEAD Program, locations served exclusively by satellite, services using entirely unlicensed spectrum, or a technology not specified by the Commission for the purposes of the Broadband DATA Maps, do not meet the criteria for Reliable Broadband Service and so will be considered 'unserved."").

¹⁴⁹ See Federal State Joint Board on Universal Service, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8799-8803, paras. 43-51 (1997) (adopting universal service principles identified in section 254(b) of the Act and the additional principle of competitive neutrality, which includes technological neutrality) (*Universal Service First Report and Order*) (subsequent history omitted). See also WISPA June 26, 2023 Letter at 2 (arguing that the Commission should not use "NTIA's definition of 'qualifying broadband' to any new rules the Commission may adopt for the A-CAM program").

¹⁵⁰ See, e.g., Letter from Michael Romano, Executive Vice President, NTCA-The Rural Broadband Association, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 2 (filed June 16, 2023) (NTCA June 16, 2023 Letter) (asserting that, for unlicensed fixed wireless providers, there is "a lack of consistent and widespread reporting of capability to deliver 100/20 Mbps on a reliable basis to every location in a given area"); Letter from Michael Romano, Executive Vice President, NTCA-The Rural Broadband Association, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 1 (filed July 3, 2023) ("Regardless of technology, if certain platforms and services have not shown widespread capability to perform consistently at a certain level of performance in rural areas, such claims of coverage should not be accepted on their face.").

carriers electing Enhanced A-CAM to challenge such claims through the BDC processes.¹⁵¹ In fact, Enhanced A-CAM carriers will have ample time to challenge any deficient claims made with respect to the National Broadband Map associated with Fabric v.3, after the release of this Order and to be incorporated in the Bureau's adjustment Enhanced A-CAM carriers' obligations and support.

- 45. We adopt a deployment timeline that aligns with the Infrastructure Act's requirements. The Infrastructure Act requires that carriers in the BEAD Program complete deployment of 100/20 Mbps or faster broadband to all locations within four years, and, as NTIA notes, aligning the Enhanced A-CAM and BEAD Program deployment timelines will "help[] eliminate gaming by providers seeking to delay deployments." We expect that BEAD Program deployment will not begin until after completion of the processes laid out by NTIA. If we were to adopt deployment milestones that provided significantly more time for Enhanced A-CAM carriers to deploy broadband than for carriers under the BEAD Program, our adoption of Enhanced A-CAM could actually prevent rural consumers in high-cost areas from being served with broadband as quickly as the BEAD Program requires. We reiterate that, in adopting this program, we intend to maximize the effect of federal dollars to bring broadband to high-cost areas, consistent with our universal service goals. We thus reject the Coalition's proposal to require complete deployment within eight years 154 and adopt a deployment timeline for Enhanced A-CAM ending in 2028.
- 46. Still, we recognize that there may be unforeseen delays causing BEAD Program broadband deployment to not be entirely complete until 2030 in certain states and that these delays may affect Enhanced A-CAM carriers as well. Although we decline at this time to adopt a final deployment milestone permitting Enhanced A-CAM carriers to complete deployment by 2030, to ensure that the Enhanced A-CAM and BEAD Program deployment timelines remain aligned and to account for possible unforeseen circumstances, ¹⁵⁵ we direct the Bureau to consider, in 2027, whether a one-year extension for Enhanced A-CAM carriers' final deployment milestones would be appropriate in light of any such BEAD Program deployment delays.
- 47. *Interim Deployment Milestones*. We adopt interim deployment milestones requiring Enhanced A-CAM recipients to make continuous progress with deployment until their final milestones at

¹⁵¹ We also decline to require unsubsidized competitors identified within the areas of Enhanced A-CAM offers to provide an officer's certification or other evidence confirming broadband availability to the Commission. *See* NTCA June 16, 2023 Letter at 2-3 (proposing that the Commission implement a process, separate from the BDC, to confirm an unsubsidized competitor's broadband availability). We find that imposing that kind of separate reporting requirement on unsubsidized competitors would be duplicative of BDC processes and create unnecessarily administrative complexity.

¹⁵² See NTIA Comments at 7-8 n.13; 47 U.S.C. § 1702(h)(4)(A)(i)(I), (C). We note that the BEAD Program NOFO requires entities to complete deployment within four years after they first receive funding. BEAD Program NOFO at 18. Enhanced A-CAM carriers will receive their first funding in January 2024 and have four years from that date to complete deployment.

¹⁵³ BEAD Program NOFO at 8-10.

¹⁵⁴ See ACAM Broadband Coalition Comments at 19. We accordingly reject the Coalition's proposal for interim deployment milestones spread out over an eight-year deployment period.

¹⁵⁵ See Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 2 (filed June 26, 2023) (ACAM Broadband Coalition June 26, 2023 Letter) (asking that the Commission require deployment to 100% of Enhanced A-CAM locations by the end of 2030 and suggesting interim deployment milestones conforming to that schedule); Letter from Michael Romano, Executive Vice President, NTCA-The Rural Broadband Association, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 2 (filed June 28, 2023) (asking that "the Commission aim for comparable network deployment schedules in its own programs – while also incorporating flexibility with respect to specific timeframes given the still evolving nature of BEAD initiatives and the work now just getting underway in states to implement the program"). We accordingly also reject the Coalition's proposal for interim deployment milestones spread out over a period ending in 2030. See ACAM Broadband Coalition June 26, 2023 Letter at 2.

the end of the fourth year of Enhanced A-CAM support. At the end of a carrier's second year of Enhanced A-CAM support, the carrier must deploy 100/20 Mbps or faster broadband service to at least 50% of required new locations, and the carrier must deploy such service to an additional 25% of required new locations at the end of each subsequent year, until the carrier deploys to 100% of required new locations at the end of the fourth year of Enhanced A-CAM support.

48. The following table summarizes Enhanced A-CAM carriers' deployment milestones:

Enhanced A-CAN	Interim and Final l	Deployment Milestones
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Milestone Date	Deployment Milestone Requirement
December 31, 2025	N/A
December 31, 2026	50% of required locations
December 31, 2027	75% of required locations
December 31, 2028	100% of required locations

NTIA has not established specific interim deployment milestones for the BEAD Program—instead, allowing states and territories to establish such milestones; the interim deployment milestones we adopt allow the Commission to monitor progress with the goal of achieving buildout to all required locations by 2028, consistent with the Infrastructure Act's four-year, final deployment milestone. ¹⁵⁶ As noted above, if there are any changes to the BEAD Program's four-year timeline at a later date, the Bureau will consider whether such common circumstances require modifying the interim and final deployment milestones for Enhanced A-CAM as well.

49. Finally, as the Commission tentatively concluded in the *Enhanced A-CAM NPRM*,¹⁵⁷ Enhanced A-CAM carriers' interim and final deployment milestones will supersede the existing deployment milestones required by the A-CAM I and A-CAM II programs. Subjecting Enhanced A-CAM carriers to a single set of deployment milestones will reduce administrative complexity for both the Commission and for carriers, while holding Enhanced A-CAM carriers to a new, higher standard for broadband deployment. However, to ensure that A-CAM I and A-CAM II carriers have continued in good faith to deploy broadband pursuant to the terms of their existing A-CAM commitments, carriers electing Enhanced A-CAM must still report in USAC's High Cost Universal Broadband (HUBB) portal any progress made this year (2023) towards their existing A-CAM I and A-CAM II deployment milestones.¹⁵⁸ Carriers that elect Enhanced A-CAM, whether currently receiving A-CAM I, A-CAM II, or legacy support, that do not meet their existing deployment milestone due by December 31, 2023, will be subject to the compliance regime set forth in section 54.320(d)(1) of the Commission's rules.¹⁵⁹ As

¹⁵⁶ 47 U.S.C. § 1702(h)(4)(C). We note that, under section 54.320(d)(2), a carrier has an additional 12 months to come into compliance for the final milestone. *See* 47 CFR § 54.320(d)(2).

¹⁵⁷ See Enhanced A-CAM NPRM at 14, para. 34.

¹⁵⁸ See 47 CFR § 54.316(a). Deployment occurring in 2023 must be reported in the HUBB by March 1, 2024. Enhanced A-CAM carriers will then be required to report in the HUBB any progress made in 2024 and subsequent years towards their Enhanced A-CAM deployment milestones. We note that the Commission "require[s] filers whose data in the HUBB conflict with their availability data to submit conforming or corrective information after determining which information is in error." *Digital Data Collection Second Report and Order and Third Further Notice of Proposed Rulemaking*, 35 FCC Rcd at 7485, para. 57. We also direct the Bureau to establish a process for cross-checking location data Enhanced A-CAM carriers report to the HUBB with location data from the Fabric and the National Broadband Map. *See id.* at 7484-85, paras. 56-57 (discussing processes for verifying broadband availability data submitted by providers).

¹⁵⁹ 47 CFR § 54.320(d)(1) (describing the procedures associated with interim buildout milestone compliance gaps).

discussed below, any support withholding or recovery will be based on support at the time the carrier is notified of non-compliance. 160

- 50. Deployment Compliance Gaps. Enhanced A-CAM recipients will also be subject to the same support withholding and recovery provisions currently applicable to A-CAM carriers and other high-cost support recipients. ¹⁶¹ Pursuant to our rules, if a high-cost support recipient does not satisfy its final deployment obligation within twelve months of the final milestone deadline, USAC will recover "the percentage of support that is equal to 1.89 times the average amount of support per location received in the state for that carrier over the term of support for the relevant number of locations plus 10 percent of the eligible telecommunications carrier's total relevant high-cost support over the support term for that state." ¹⁶² For high-cost support recipients that fail to meet their interim deployment milestones, carriers with a compliance gap of five percent or more are subject to quarterly reporting and potentially support withholding/recovery based on the level of non-compliance. The non-compliance procedures apply until the carrier failing to meet its interim deployment milestone reports a compliance gap of less than five percent. ¹⁶³ These generally applicable provisions will likewise apply to Enhanced A-CAM recipients.
- 51. Performance Measures Requirements. Similarly, Enhanced A-CAM recipients will be subject to the same performance testing requirements as other high-cost support recipients. It is a priority of the Commission to ensure that high-cost support recipients deploy to required locations on time and at the level of service required. Accordingly, the Commission requires that high-cost support recipients annually test and report the speed and latency of a random sample of locations. Carriers that fail to meet the required performance standards are subject to additional reporting and may have a percentage of universal service support withheld based on the level of non-compliance, but those carriers that later come into compliance may have their support restored. Enhanced A-CAM recipients will therefore be subject to performance testing. We delegate to the Bureau the authority to implement and clarify further details, including the specific schedule, regarding the performance measures testing regime for Enhanced A-CAM.
- 52. Federal Funding Coordination Requirements. As a condition of receiving Enhanced A-CAM support, we require carriers to make efforts to avoid duplicative federal broadband funding. First, we require Enhanced A-CAM recipients to participate, in good faith, in any relevant BEAD Program challenge processes or other processes conducted by states or other BEAD Program eligible entities to determine eligibility of locations for the BEAD Program, ¹⁶⁶ to otherwise coordinate with states, Tribes,

¹⁶⁰ See infra section III.B.3.

¹⁶¹ See 47 CFR § 54.320(d)(1), (2).

¹⁶² Id. § 54.320(d)(2). As we discuss later in this Order, we do not extend to Enhanced A-CAM the flexibility for A-CAM carriers to deploy only to 95% of their required locations by the end of their final milestone without a reduction in support. See infra para. 77; 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3101, para. 33. We find that prior concerns about certain locations' serviceability at the time are now mitigated by our use of the Fabric, which provides more accurate information on broadband serviceability than was previously available. Moreover, allowing an electing carrier not to deploy service at up to 5% of its required locations could prevent other federal or state programs from funding broadband for those locations, while consumers at those locations would still lack broadband access at the end of the carrier's support term.

¹⁶³ See 47 CFR § 54.320(d)(1).

¹⁶⁴ See, e.g., Press Release, Federal Communications Commission, FCC Creates Rural Broadband Accountability Plan (Jan. 28, 2022), https://www.fcc.gov/document/fcc-creates-rural-broadband-accountability-plan.

¹⁶⁵ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 10133-38, paras. 65-75; Connect America Fund, WC Docket No. 10-90, Order, 33 FCC Rcd 6509, 6530-33, paras. 56-67 (WCB 2018) (First Performance Measures Order).

¹⁶⁶ The BEAD Program requires that eligible entities conduct an "expeditious challenge process under which a unit of local government, nonprofit organization, or broadband service provider can challenge a determination . . . as to whether a particular location or community anchor institution within the jurisdiction . . . is eligible for grant funds.

and other eligible entities to help avoid duplicative federal broadband funding, and to certify their compliance with this obligation annually. This requirement will also extend to any other federal broadband funding program and related processes. By engaging in these processes, carriers will help ensure that more Americans in high-cost areas will have access to broadband, consistent with the Infrastructure Act's goals, as well as the Commission's goals for Enhanced A-CAM.

- 53. Second, we require, as a condition of receiving Enhanced A-CAM support, that carriers not receive or use BEAD Program funding or other future federal grant funding, unless otherwise specified herein, that supports broadband deployment to those locations for which they are receiving Enhanced A-CAM support, and we require Enhanced A-CAM recipients to certify their compliance with this obligation annually. We impose this requirement as an additional measure to ensure that Enhanced A-CAM recipients use support as intended, consistent with the Commission's goals for the program. Under this requirement, Enhanced A-CAM recipients may seek BEAD funding for locations that are not eligible for Enhanced A-CAM because they are served with at least 100/20 Mbps by an unsubsidized competitor (and not also served by the Enhanced A-CAM carrier), but which are eligible for BEAD because service is not considered "reliable broadband" pursuant to BEAD. Similarly, Enhanced A-CAM recipients may seek other federal funding for locations that are not eligible for Enhanced A-CAM.
- 54. Third, as we further discuss later in this Order, ¹⁶⁹ we require carriers to identify, when electing Enhanced A-CAM, the broadband technologies (e.g., FTTP) with which they intend to fulfill their Enhanced A-CAM deployment obligations. This information may assist states and other BEAD Program eligible entities in identifying which areas remain eligible for BEAD Program funding. This information may also be relevant to other federal broadband funding programs.
- 55. Affordability Requirement. We require Enhanced A-CAM recipients to participate in the Affordable Connectivity Program (ACP) as a condition of receiving Enhanced A-CAM support. We continue to emphasize that "[p]romoting access to affordable, high-speed broadband is a priority for the Commission," and the ACP plays an important role in helping low-income consumers obtain affordable Internet services. Beyond the Commission, the Infrastructure Act requires subgrantees of NTIA's BEAD Program to offer at least one "low-cost broadband service option." 172
- 56. Commenters broadly supported requiring Enhanced A-CAM carriers to address affordability.¹⁷³ The ACAM Broadband Coalition, for example, advocated for "making enrollment in ACP a condition of participation" while asking that the Commission "refrain . . . from adopting specific

¹⁶⁷ We codify this requirement at 47 CFR § 54.313(f)(6)(i). See Appendix A.

¹⁶⁸ We codify this requirement at 47 CFR § 54.313(f)(6)(i). See Appendix A.

¹⁶⁹ See infra section III.B.3.

¹⁷⁰ We further note that Enhanced A-CAM recipients, like all eligible telecommunications carriers (ETCs), will also be required to participate in the Lifeline program. *See* 47 CFR § 54.405(a); *infra* para. 59.

¹⁷¹ See Enhanced A-CAM NPRM at 15, para. 38.

¹⁷² See Infrastructure Act § 60102(h)(4)(B); BEAD Program NOFO at 66-67.

¹⁷³ See ACAM Broadband Coalition Comments at 40; NTCA Comments at 30-32 (stating that "tying enhanced A-CAM support to participation in the ACP program could be a reasonable initial step . . . that could narrow the 'rural affordability gap'"); Comments of the People of the State of California and the California Public Utilities Commission, RM-11868, WC Docket No. 10-90 et al., at 8-13 (rec. July 18, 2022) (California PUC Comments).

product characteristics for the affordable option under ACP," consistent with NTIA's decision to "grant[] states the flexibility to set the parameters that best serve the needs of residents within their jurisdictions" as part of the BEAD Program. Similarly, the California Public Utilities Commission (California PUC) argued that the Commission should "require all carriers participating in Enhanced A-CAM to offer broadband plans that are affordable to low-income households either by participating in the ACP or by creating their own low-cost plans." The California PUC explained that programs supporting broadband infrastructure in unserved areas improve broadband availability but do not necessarily ensure that broadband is affordable for consumers in those areas, even though affordability may be a greater concern in rural and high-cost areas. 176

- 57. We agree that it is appropriate to require Enhanced A-CAM carriers to participate in the ACP, ¹⁷⁷ and further encourage participating carriers to offer an affordable broadband option. Accordingly, as part of the Enhanced A-CAM offer and as a condition for receiving Enhanced A-CAM support, carriers must certify annually their participation in ACP or a substantially similar successor program. If a carrier accepts the Enhanced A-CAM offer and subsequently elects not to participate or ceases to participate in ACP or a substantially similar successor program, the carrier will be considered in default of its obligations. ¹⁷⁸ We also require that the carrier annually describe and certify its compliance with this affordability requirement in the FCC Form 481. ¹⁷⁹ We further direct the Bureau to take further action to implement this requirement, as necessary.
- 58. We decline, however, to make any changes to the ACP itself, including by adopting an "enhanced" ACP benefit of up-to-\$75 per month for households served by high-cost support recipients, as suggested by NTCA.¹⁸⁰ The Infrastructure Act's direction to the Commission to create an enhanced ACP benefit for service provided in certain high-cost areas by providers experiencing particularized economic hardship is under consideration by the Commission,¹⁸¹ and we believe that proceeding is the more appropriate vehicle to resolve those issues in accordance with the statute's directive. We also find that the record regarding whether the Commission should provide an increased ACP benefit for households served by support from the high-cost program remains undeveloped in this proceeding and is best addressed in a proceeding focused on that issue in the ACP.¹⁸²
- 59. Additional Obligations. Finally, we note that Enhanced A-CAM recipients will be subject to other obligations generally required of high-cost support recipients. Under the *USF/ICC Transformation Order* and subsequent orders, ETCs subject to broadband public interest obligations must provide broadband at rates that are reasonably comparable to offerings of comparable broadband services

¹⁷⁴ ACAM Broadband Coalition Comments at 40.

¹⁷⁵ California PUC Comments at 8.

¹⁷⁶ See id. at 9.

¹⁷⁷ See 47 CFR § 54.1801(a) ("Eligible telecommunications carriers. A broadband provider that is designated as an eligible telecommunications carrier may participate in the Affordable Connectivity Program as a participating provider."); 47 CFR § 54.1800(g).

¹⁷⁸ Any changes the Commission adopts regarding the ACP may also be applicable to Enhanced A-CAM recipients' participation in the program. *See also* 47 CFR § 54.320(c).

¹⁷⁹ See id.

¹⁸⁰ See NTCA Comments at 30-32; NTCA Reply at 20-21.

¹⁸¹ See 47 U.S.C. § 1752(a)(7); WCB Seeks Comment on the Implementation of the Affordable Connectivity Program, WC Docket No. 21-450, Public Notice, DA 21-1453 (WCB Nov. 18, 2021); Affordable Connectivity Program, WC Docket No. 21-450, Report and Order and Further Notice of Proposed Rulemaking, 37 FCC Rcd 484, 605-14, paras. 270-93 (2022).

¹⁸² See NTCA Comments at 30-32; NTCA Reply at 20-21.

in urban areas, ¹⁸³ with usage allowances reasonably comparable to those available through comparable offerings in urban areas. ¹⁸⁴ Likewise, Enhanced A-CAM recipients will be required to file annual reports pursuant to section 54.313, ¹⁸⁵ will be subject to the existing audit and record retention requirements applicable to all ETCs pursuant to section 54.320, ¹⁸⁶ and will be required to make available Lifeline service to qualifying low-income consumers. ¹⁸⁷

2. Support Amounts

a. Budget

- 60. We adopt a budget for the Enhanced A-CAM offers totaling no more than \$1.27 billion annually, or no more than \$1.33 billion annually if certain conditions are met, over a 15-year term beginning January 1, 2024. This figure includes the existing A-CAM budget, (\$1.1 billion per year over five years, 2024-2028), plus an additional 10-year extension, for a total 15-year support term (2024-2038). The total budget amount will be distributed at a constant annual support amount of up to \$1.27 billion per year. We also delegate to the Bureau the authority to increase the overall budget by \$1 billion, up to no more than \$1.33 billion annually, if it determines that this additional support will allow substantial increases in deployment or if such support is needed to increase support to Enhanced A-CAM carriers because of updates to the National Broadband Map.
- 61. In setting the budget for Enhanced A-CAM, we are mindful of the Commission's longstanding goals adopted in the *USF/ICC Transformation Order* to "ensure universal availability of modern networks capable of providing voice and broadband," and to "minimize the universal service burden on consumers and businesses." Our goal is to provide support that is sufficient but not excessive so as not to impose an unnecessary burden on consumers and businesses who ultimately pay to support the Universal Service Fund. We want to provide enough support to substantially increase the deployment of high-speed broadband to currently unserved locations in rural areas, and to maintain the provision of such service where it is already deployed. At the same time, as stewards of the Universal Service Fund, we are mindful of the effect increases in overall support have on the contribution factor. We believe the budget we have adopted appropriately balances these objectives.
- 62. The deployment obligations set above are ambitious and will require additional support to achieve. The requirement to provide 100/20 Mbps to 100% of required locations is a substantial increase to both the level of service and the scope of coverage. Further, the number of unserved locations has

¹⁸³ See USF/ICC Transformation Order, 26 FCC Rcd at 17695, para. 86.

¹⁸⁴ See id. at 17699, para. 99. In the 2016 Rate-of-Return Reform Order adopting the first A-CAM offer, the Commission adopted Section 54.308(a) in which it required that carriers provide a usage allowance "of 150 GB per month, subject to the requirement that usage allowances remain consistent with median usage in the United States over the course of the ten-year term." 47 CFR § 54.308(a). However, this was in error, as the text of that Order as well as other orders adopted by the Commission all specify that usage must remain consistent with the mean usage, rather than the median usage. See 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3099, para. 27; see also Connect America Fund et al., WC Docket No. 16-271, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139, 10147, para. 23 (2016). We therefore correct Section 54.308(a) of our rules to reflect that usage must be consistent with the mean, not median, usage in the United States.

¹⁸⁵ 47 CFR § 54.313. See USF/ICC Transformation Order, 26 FCC Rcd at 17852, para. 580.

¹⁸⁶ 47 CFR § 54.320. See USF/ICC Transformation Order, 26 FCC Rcd at 17864, para. 621.

¹⁸⁷ 47 CFR § 54.405(a). See supra n.169.

¹⁸⁸ This budget applies to offers to current A-CAM I and A-CAM II recipients only. As noted below, we extend Enhanced A-CAM offers to current legacy support recipients, providing a transition to Enhanced A-CAM that ensures their offers and elections will not increase the total amount of high-cost support and the contribution factor. *See infra* section III.B.3.

¹⁸⁹ USF/ICC Transformation Order, 26 FCC Rcd 17663, 17680, para. 48 (footnote omitted).

increased because of the evolving standard for unsubsidized competitors to 100/20 Mbps or faster, from 10/1 Mbps for A-CAM I and 25/3 Mbps for A-CAM II. In addition, locations that might previously have been identified as served by the Commission's Form 477 data are now recognized as unserved by the more granular information in the Commission's National Broadband Map. Finally, where carriers have deployed 100/20 Mbps locations in reliance on the A-CAM I and A-CAM II support commitments through the end of the current terms, we assume some level of continuing support will be required.

- 63. We find that the Enhanced A-CAM budget appropriately balances these concerns. We estimate that Enhanced A-CAM offers may support deployment to approximately 1 million Enhanced A-CAM required locations, as well as continuing support for locations to which A-CAM carriers have already deployed 100/20 Mbps service, while the effect on the contribution factor will be relatively small. If every A-CAM recipient elects the Enhanced A-CAM offer, the revised budget would add \$166 million per year, or \$41.5 million per quarter, to the current quarterly universal service demand of \$1,947.08 million, an increase of approximately 2%. Based on the current contribution base, this would increase the contribution factor by .7 percentage point. We believe the benefits of supporting this standard of deployment to millions of locations outweighs this limited increase to the contribution factor.
- 64. Finally, we delegate to the Bureau the ability to increase the budget up to an additional \$1 billion over the term of support, if it finds that doing so will improve significantly the amount of deployment that would be expected to occur through Enhanced A-CAM. For example, the Bureau may increase the funding cap set forth below to permit an extra \$1 billion in the offer amounts, if it estimates that doing so would result in more acceptances of Enhanced A-CAM offers and, accordingly, more commitments to deploy 100/20 Mbps or faster service to locations currently without that level of service. Changes within the funding parameters discussed below, including those for currently served locations, may also be considered, if they would result in higher acceptance rates and more commitments to deploy to unserved locations. Alternatively, the \$1 billion or a portion thereof may be reserved to provide additional support if warranted if updates to the National Broadband Map result in increased deployment obligations. An increase of \$1 billion to the total 15-year budget would increase the annual demand for universal service by approximately \$66.7 million, which would result in an additional .3 percentage point increase to the contribution factor, using the third quarter 2023 forecasted contribution base and funding requirements. ¹⁹¹
- 65. We decline to adopt an annual inflation adjustment to the Enhanced A-CAM support amounts, as proposed by the ACAM Broadband Coalition. Adjusting support annually to account for inflation would require the Commission to reduce the initial annual Enhanced A-CAM support amounts to accommodate future inflation-driven increases or such adjustments could result in support in excess of the budget adopted here. Even small inflation adjustments would, over the term of support, cause Enhanced A-CAM to exceed the budget significantly. Inflation adjustments would undermine the benefits of budgetary certainty provided by fixed, model-based support, including the ability to control the future impact of the mechanism on the contribution factor.
- 66. We recognize that maintaining this budget will require parameters and funding limitations to calculate the offers, including funding caps as past A-CAM offers have used. It is possible that some current A-CAM I and A-CAM II carriers will not elect the Enhanced A-CAM offers as a result, finding the support amounts to be insufficient in comparison to the obligations. If a current A-CAM I or

¹⁹⁰ The Commission set the quarterly contribution factor for the third quarter of 2023 at 29.2 percent. *See Proposed Third Quarter 2023 Universal Service Contribution Factor*, CC Docket No. 96-45, Public Notice, DA 23-507 (OMD June 14, 2023). The quarterly contribution base used to calculate the third quarter 2023 contribution factor was \$8,534.206. *Id.*

¹⁹¹ See id.

¹⁹² Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket Nos. 10-90 *et al.* (filed June 14, 2023).

A-CAM II carrier declines the offer of Enhanced A-CAM support, the carrier will continue to receive A-CAM support until 2026 or 2028, consistent with its current authorizations. The Commission will consider what support, if any, is required in a future proceeding, consistent with the Notice of Inquiry below.193

h. **Support Calculation**

- 67. Below, we set forth the process for calculating Enhanced A-CAM offers. First, we use an updated version of A-CAM to estimate the cost for each location served by eligible A-CAM and legacy rate-of-return carriers. Second, we set the parameters for calculating support for currently unserved locations.
- Model Cost Estimates. For the Enhanced A-CAM offers, we will use cost estimates from an updated version of A-CAM that incorporates the location data from the Fabric v.2 to calculate the average cost per location in each census block served by an A-CAM or CAF BLS recipient. 194 The Broadband DATA Act requires that, after the creation of the Broadband Serviceable Location Fabric and associated maps, the Commission use those maps "when making any new award of funding with respect to the deployment of broadband internet access." 195 While we do not believe that the Broadband DATA Act prescribes any particular method for estimating the cost of serving locations, cost estimates from the current version of A-CAM would be nearly impossible to reconcile with location and broadband coverage data from the Fabric and the National Broadband Map. Because prior versions of A-CAM used 2010 census block boundaries, while the Fabric uses 2020 census block boundaries, there are significant differences in census block location counts, including many census blocks that do not have modelestimated costs but have Fabric locations. Rerunning the model with Fabric locations will provide more accurate estimates of the cost of serving unserved and underserved locations in a census block and minimize the amount of reconciliation that will be required in the calculation of offers. 196
- Support for Required Locations. In calculating support for Enhanced A-CAM required locations, we retain the basic principles of, but make critical changes to, the methodology we used to calculate support amounts in prior A-CAM offers. Generally, A-CAM I and A-CAM II carriers receive support based on the model-estimated monthly cost of serving locations in eligible census blocks above a funding threshold of \$52.50 per month, subject to a per-location cap on support of \$200 per month for most locations. 197 As described below, the Enhanced A-CAM offers will use the National Broadband

¹⁹³ See infra section V.

¹⁹⁴ For technical documentation purposes, the most recent past version of the model, used for A-CAM II, is A-CAM 2.5.2 and the version updated with Fabric v.2 locations is A-CAM 2.6.0. Although Fabric v.3 is now available, it was not available in time to develop A-CAM 2.6.0 and associated broadband coverage data will not be available in time to determine eligibility of locations. Thus, it was more efficient and necessary to use Fabric v.2 to ensure the availability of model results in a timely manner. A-CAM 2.6.0 incorporates geographic, study area, and network demand updates to the A-CAM platform. Demographic data sources and road data sources were updated to be consistent with US Census 2020 data and US Census TIGER 2020. Study area boundaries were updated based on a study area boundary shape file (based on submissions as of April 23, 2023). FCC staff also compiled updated rateof-return designation, holding company name, holding company number for use in A-CAM 2.6.0. As mentioned, network demand is based on FCC Fabric v. 2 (December 31, 2022). There are no cost input changes.

¹⁹⁵ 47 U.S.C. § 642(c)(2)(B).

¹⁹⁶ Although we considered conducting a more robust examination of model inputs and other elements of the model, we conclude that such an examination cannot be completed in the time necessary to provide offers and for carriers to make elections, to prevent these areas from potentially receiving duplicative funding through the BEAD Program. A thorough reexamination of the model and its inputs could require an entirely separate proceeding and would take years to complete.

¹⁹⁷ For a small number of A-CAM I carriers that did not accept Revised A-CAM I support in 2019, support is capped at less than \$200 per location. Enhanced A-CAM NPRM at 17, para. 42 n.112. For A-CAM II carriers, eligible (continued....)

Map to determine eligible locations, rather than census block eligibility, ¹⁹⁸ use a revised funding threshold of \$63.69 for non-Tribal locations, and utilize a combination of per-location caps and percentages of uncapped support to limit funding above the threshold.

- 70. For purposes of determining Enhanced A-CAM offers, we update the funding threshold for non-Tribal locations to \$63.69. The funding threshold is the Commission's estimate of the amount of revenue per location, per month, that a carrier can reasonably obtain from end-users. The current funding threshold of \$52.50 was established in 2014, as the Commission was developing the original Connect America Cost Model, and was determined by multiplying an estimated Average Revenue Per User (ARPU) of \$75 by an estimated take rate of 70%. ¹⁹⁹ With nine years having passed, we believe the estimated ARPU used there is stale, and should be updated to reflect the revenue a carrier may reasonably expect to recover from its customers now. We believe the rate benchmark for 25/3 Mbps in the most recent Urban Rate Survey reflects a reasonable estimate of end-user rates for a modern broadband network. ²⁰⁰ Multiplying that rate benchmark of \$90.98 by the 70% take rate yields a funding threshold of \$63.69. Raising the funding threshold will have a direct impact on the distribution of Enhanced A-CAM support, causing support to be allocated to relatively higher cost locations than would have occurred if the prior funding threshold of \$52.50 had been used. We note that changing the funding threshold in this manner does not require carriers to change their end-user rates, which are not set by the Commission. ²⁰¹
- 71. Consistent with the Coalition's proposal, support amounts for required locations in Enhanced A-CAM offers will be based on the greater of two alternative methodologies: (1) the model-estimated cost of serving the locations above the funding threshold up to a funding cap, or; (2) an alternative percentage of the difference between the model-estimated cost of serving the locations and the funding threshold (i.e., the uncapped support amount). In prior A-CAM offers, only the first methodology was used. For example, for A-CAM II, for non-Tribal locations, carriers received support equal to the amount the model-estimated costs for serving a particular location that exceeded \$52.50 per month, up to \$200 per month. The Coalition proposed increasing the funding cap to \$300. The Coalition also proposed applying the second methodology, equaling 80% of the uncapped support amount, when it provided more support. We find that including an alternative funding percentage will

¹⁹⁸ Census block eligibility was determined using the FCC's Form 477 data, which collected broadband deployment at the census block level.

¹⁹⁹ Connect America Fund; High-Cost Universal Service Support, WC Docket Nos. 10-90, 05-337, Report and Order, 29 FCC Rcd 3964, 4036, 4039, paras. 172, 177 (2014).

²⁰⁰ See Wireline Competition Bureau and Office of Economics and Analytics Announce Results of 2023 Urban Rate Survey for Fixed Voice and Broadband Services, Posting of Survey Data and Explanatory Notes, and Required Minimum Usage Allowance for Eligible Telecommunications Carriers, WC Docket No. 10-90, Public Notice, DA 22-1338 at 3 (WCB & OEA Dec. 16, 2022) (2023 Urban Rate Survey). We considered using instead the urban rate survey benchmark for 100/20 Mbps service (\$105.03), which would reflect the level of service to which Enhanced A-CAM-electing carriers would be committing to deploy. Carriers will not be required to deploy 100/20 Mbps to all of their locations until the end of 2028, however, and even after deployment has occurred, some customers may choose to subscribe to lower levels of service. For both reasons, we cannot reasonably assume that a carrier would be able to recover revenue equal to the 100/20 Mbps benchmark over the term of support. We conclude the 25/3 Mbps urban rate survey benchmark more accurately reflects a reasonable amount of end-user revenue.

²⁰¹ In the NPRM below, we seek comment on raising the consumer broadband-only loop rate, which represents part of the end-user rates that a rate-of-return carrier (including an A-CAM carrier) may charge its end-users.

²⁰² See Enhanced A-CAM NPRM at 4-5, paras. 6-11.

²⁰³ See ACAM Broadband Coalition Dec. 17, 2021 Letter at 2.

²⁰⁴ See id.

have the effect of providing additional support to locations with estimated costs that significantly exceed the funding cap. We believe increasing the support to the very high-cost locations is appropriate, given the requirement for each electing carrier to serve 100% of its required locations with 100/20 Mbps service. As such, each carrier's support will be determined at the state level, which will include all its study areas in a state if it has more than one study area.²⁰⁵

- We do not specify at this time the funding cap or alternative funding percentage to be applied, and instead delegate to the Bureau the authority to set, in an Order prior to or concurrently with the Enhanced A-CAM offers, both the funding cap and an alternative funding percentage within guidelines set below. This delegation is necessary because we cannot determine funding caps or funding percentages that would produce support amounts within the budget we adopt above until we have the updated model results. We therefore direct the Bureau to aim for a funding cap for non-Tribal areas that is no higher than \$300 per location per month, ²⁰⁶ with an alternative funding percentage between 40% and 80%. While the Coalition's proposal of a \$300 per location per month funding cap and an 80% alternative funding percentage may not fit within the budget we establish above, these funding guidelines set the Coalition's proposal as the upper boundary of support for Enhanced A-CAM required locations. The lower boundary on the alternative funding percentage ensures that an extra measure of support is provided to carriers that have a significant number of locations that are much higher than the funding cap. In setting the funding cap and the alternative funding percentage, the Bureau should balance the need to ensure adequate funding for as many locations as possible, while also taking into account the cost of serving extremely high-cost locations, and also fitting within the budget support for locations that are currently served, as discussed below.
- 73. Support for Locations Served with 100/20 Mbps by the Incumbent Local Exchange Carrier (ILEC). We limit support for locations that are currently served with 100/20 Mbps by the ILEC. In light of the budget that we adopt above, we find that targeting new support primarily to unserved locations would achieve the Commission's goal of widespread 100/20 Mbps deployment better than providing additional Enhanced A-CAM support to locations that already are capable of that level of service. In concluding that a full measure of support is not necessary for ILEC-served locations, we find that a carrier's deployment of 100/20 Mbps service with existing A-CAM support demonstrates that existing A-CAM support was sufficient to promote deployment, and that it is not necessary to further incentivize deployment for carriers that elect to participate in the Enhanced A-CAM program.
- 74. We recognize that consumers at locations served with 100/20 Mbps or faster service by the ILEC only and not by an unsubsidized competitor will remain dependent on the Enhanced A-CAM carrier to maintain at least their current level of service. Those carriers will therefore continue to experience ongoing operational and depreciation costs associated with these already-constructed locations. We therefore conclude that such locations should receive at least 50% of their current support A-CAM support amount for the duration of the Enhanced A-CAM term. Part terms of the first te

²⁰⁵ In cases where a study area crosses a state boundary, we will calculate support at the study area level.

²⁰⁶ If feasible within the budget adopted herein, we direct the Bureau to set a non-Tribal funding cap not higher than \$350 per location per month.

²⁰⁷ All carriers eligible for Enhanced A-CAM are the ILEC in the study areas.

²⁰⁸ Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90 et al. (filed June 14, 2023) (ACAM Broadband Coalition June 14, 2023 Letter); ACAM Broadband Coalition June 26, 2023 Letter; Letter from Genevieve Morelli, ACAM Broadband Coalition, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90 *et al.* (filed July 3, 2023) (ACAM Broadband Coalition July 3, 2023 Letter). In the attached Notice of Inquiry, we seek comment on how the Commission ought to support the ongoing provision of service in areas where 100/20 Mbps or faster service has been fully deployed to all locations. *See infra* section V.

²⁰⁹ We direct the Bureau to identify the appropriate ILEC-only served locations and estimate the support amounts that they would have received. While we expect that the National Broadband Map and the HUBB will be

consideration of the available budget adopted herein, additional support for operating expenses and depreciation may be reasonable. Therefore, we delegate to the Bureau the authority to determine whether support for these locations should be increased above the 50% rate, within the overall budget set by the Commission, up to 75% of the support that they would have received under A-CAM I or A-CAM II. While this range is somewhat less than \$200 cap for served locations proposed by the A-CAM Broadband Coalition, ²¹⁰ given the capital recovery that has already occurred for these locations, we conclude a slight reduction from the prior A-CAM I or A-CAM II support levels is justified. Furthermore, because a primary purpose of this ongoing support is to ensure the maintenance (or improvement) of service to locations that would otherwise be unserved, we further extend the support for ILEC-only served locations to locations that were ineligible for prior A-CAM offers but which are not served with 100/20 Mbps or faster service by a competitor. ²¹¹ In making this determination, the Bureau will take into consideration whether there is sufficient funding available to provide additional funds for already-constructed locations, once the Bureau has set a reasonable cap and alternative funding percentage for unserved locations.

While we decline to adopt the A-CAM Broadband Coalition's proposal to provide additional support for Enhanced A-CAM for locations served with 100/20 Mbps by unsubsidized competitors, ²¹² we find that limited support is warranted to address costs incurred by Enhanced A-CAM recipients as a result of their expanded network obligations. Unlike with prior A-CAM offers, the Enhanced A-CAM program requires providers to deploy service to all eligible Enhanced A-CAM locations in their study areas. This expanded obligation to build such a network comes with certain costs associated, which additional support will help to defray. As a proxy to calculate support toward such costs, we adopt limited support for locations served by the ILEC with service of at least 100/20 Mbps or greater and either (1) are served by an unsubsidized competitor with 100/20 Mbps or greater or (2) will be served by another provider subject to an enforceable commitment for deployment pursuant to another federal or state program at the time the Enhanced A-CAM offer is extended. Dedicating additional funding to provide service to locations that are or will be served, without support from high-cost universal service mechanisms or other federal programs, would not be a judicious use of the budget we adopt above. However, in order to provide support to offset costs associated with their expanded networks, we limit the Enhanced A-CAM offer to the total amount of support that those locations would have received pursuant to the A-CAM through the end of the existing A-CAM term, or 33% per month of their current

²¹⁰ See ACAM Broadband Coalition June 14, 2023 Letter; ACAM Broadband Coalition June 26, 2023 Letter; ACAM Broadband Coalition July 3, 2023 Letter.

²¹¹ We note that this addresses concerns raised by carriers regarding perceived inequities in the treatment of A-CAM I carriers as compared to A-CAM II carriers. ACAM Broadband Coalition July 3, 2023 Letter; Letter from John Kuykendall, Regulatory Advisor to Pineland Telephone Cooperative *et al.*, JSI, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90 et al. (filed June 29, 2023); Letter from Derrick B. Owens, Senior Vice President, WTA, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 (filed June 30, 2023). Because A-CAM carriers could not report ineligible locations in the HUBB, carriers with many such locations will likely receive greater support based on the estimate utilizing locations shown as served by the National Broadband Map, rather than the estimates using HUBB locations.

²¹² See ACAM Broadband Coalition June 14, 2023 Letter.

A-CAM rate but these payments will continue for an additional 10 years beyond the original A-CAM term. This support will be paid over the Enhanced A-CAM term in order to minimize the burden on payers into the USF. 214

- 76. Tribal Broadband Factor. We next adopt a Tribal Broadband Factor for Enhanced A-CAM, as we did for A-CAM II, to address the unique challenges of deploying high-speed broadband in rural Tribal communities.²¹⁵ The Commission found then that the assumptions underlying the \$52.50 funding threshold, which is based on nationwide assumptions about take rates and potential average revenues per subscriber, may be unrealistic in rural, Tribal areas, given the concentration of low-income individuals and few business subscribers.²¹⁶ We agree with the National Tribal Telecommunications Association that the Tribal Broadband Factor continues to be necessary and should be included in Enhanced A-CAM offers.²¹⁷ We will use a funding threshold reduced by 25 percent in Tribal areas, as we did for A-CAM II. Because we raise the funding threshold to \$63.69, above, the funding threshold for Tribal locations will therefore be set at \$47.76. We also instruct the Bureau to use a funding cap for Tribal lands that is \$15.93 higher than the funding cap for non-Tribal lands to effectuate the Tribal Broadband Factor. We also will use the same definition of "Tribal lands" that we adopted for A-CAM II.²¹⁸ We expect that Enhanced A-CAM providers serving Tribal areas will immediately engage the relevant Tribal governments regarding deployment to Tribal locations and continue to participate in Tribal engagement throughout the support term, as required under our rules.²¹⁹
- 77. Support Adjustments due to Updated Deployment Obligations. Above, we direct the Bureau to establish a process for updating the deployment obligations for carriers electing Enhanced A-CAM due to improvements in information related to locations, broadband coverage, and federal and state funding.²²⁰ Further, as discussed below, there may be instances in which Enhanced A-CAM carriers and Tribal governments mutually agree to forego the Enhanced A-CAM deployment obligations for Tribal

²¹³ We recognize that A-CAM I and A-CAM II providers made existing 100/20 Mbps deployment, in most cases, in reliance on the receipt of A-CAM support through the end of the current terms. Because five years (2024-2028) remain on the A-CAM I and A-CAM II terms for most carriers, and the Enhanced A-CAM offer extends support for an additional 10 years, ILEC-only served locations will receive 33% per month of their current A-CAM rate but these payments will continue for an additional 10 years beyond the original A-CAM term. This 33% support will be determined in the same manner as the support for ILEC-served locations explained above. *See* n. [].

²¹⁴ If the ILEC-served locations were supported at their current A-CAM I or A-CAM II rates only through the end of the current term, then the Commission could not also offer levelized support for the unserved locations through the terms without an increase to support during the remaining A-CAM I and A-CAM II terms. Both segments must be levelized over the entire Enhanced A-CAM term.

²¹⁵ December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11910-11, paras. 55-56.

²¹⁶ *Id.* at 11910, para, 55.

²¹⁷ Comments of the National Tribal Telecommunications Association, RM-11868, WC Docket No. 10-90 et al., at 5-6 (rec. July 18, 2022) (NTTA Comments). *See also* Comments of WTA – Advocates of Rural Broadband, RM-11868, WC Docket No. 10-90 et al., at 14 (rec. July 18, 2022) (WTA Comments).

²¹⁸ December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11911, para. 55 n.122. The A-CAM II program used a definition that had previously been used in other high-cost and low-income programs. *Id.* (defining Tribal Lands to "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 Settlements 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, Act July 9, 1921, 42 Stat. 108, *et seq.*, as amended.")

²¹⁹ See infra section III.B.3. 47 CFR § 54.313(a)(5) (annual high-cost recipient ETC Tribal engagement obligation).

²²⁰ See supra section III.B.1.

locations that are awarded BEAD funds.²²¹ In most cases, we expect the change will be de minimis and therefore will not require an amendment to the amount of Enhanced A-CAM authorized by the Commission. Consistent with prior A-CAM offers, we set the de minimis threshold at 5% of the obligation, so that if the number of locations to which a carrier is obligated to deploy service are at least 95% of the obligated locations reflected in the authorization, no further adjustment to support will be required.²²² To be clear, we do not provide the same 5% flexibility that we previously provided to A-CAM carriers, which afforded carriers the unilateral flexibility to meet only 95% of their deployment obligations. For Enhanced A-CAM, the only basis for a reduction in obligations would be improved information associated with locations, broadband coverage, or enforceable commitments to deploy 100/20 Mbps as of the date the Enhanced A-CAM offer is made, or a mutual agreement with a Tribal government to forgo deployment obligations to Tribal locations.²²³ We direct the Bureau to provide, in the Order setting forth the funding caps and alternative funding percentages, a methodology to gradually reduce support where the number of locations to which a carrier is obligated to deploy is less than 95% but greater than 85% of the obligated locations in the authorization. The methodology should balance the need to avoid wasteful spending on locations to which it is no longer necessary to obligate deployment with the need to avoid creating inappropriate disincentives for carriers to accurately report location data in a timely fashion. If the number of locations to which the Enhanced A-CAM carrier is required to deploy is less than 85% of the obligated locations in the authorization, the carrier's support will be recalculated consistent with the support parameters set forth above. This re-authorization will prevent a windfall to carriers electing Enhanced A-CAM in cases where they are likely to be aware that material errors or deficiencies in their favor in the Fabric, the National Broadband Map, or the National Broadband Funding Map.

78. In the alternative case, in which deployment obligations are increased as the data improves because additional broadband serviceable locations are identified, additional funding will be provided only to the extent that it would not cause the Enhanced A-CAM program to exceed the budget set forth above. 224 Allowing unlimited post-authorization increases to support could cause Enhanced A-CAM to exceed the budget, but it is likely that at least some of the budgeted funds will not be allocated, either because not all eligible carriers will elect Enhanced A-CAM or because of reductions in support due to decreased deployment obligations in accordance with the procedures we set above. 225 In addition, it is within the Bureau's delegated authority to reserve some or all of the extra \$1 billion provided in the budget, above, to address increased deployment obligations. 226 While this creates an asymmetrical risk for carriers electing offers—their support will decrease if their deployment obligations are later reduced, but their support may not increase if their deployment obligations are later increased and there are insufficient funds available under the budget—we find that the carriers are well-placed to assess this risk when they accept the offer. We emphasize that the adjustments to deployment obligations and, if appropriate, a reduction in support will only be made based on circumstances that in fact existed at the

²²¹ See infra section III.B.3.

²²² See 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3101, para. 33.

²²³ As discussed above, the Bureau will make a final determination regarding the requirement to serve specific locations prior to the end of 2025, using the data that best reflects location and broadband deployment at the time of the offer. Enforceable commitments will be determined consistent with interagency coordination efforts. *See supra* section III.B.1.

²²⁴ If, following adjustments to deployment obligations, the recalculated support for all Enhanced A-CAM carriers (except those transitioning from legacy support) exceeds the budget, the available budget will be allocated pro rata among carriers with increased deployment obligations, based on the difference between their originally authorized Enhanced A-CAM support and the recalculated amount.

²²⁵ See supra section III.B.1.

²²⁶ See supra section III.B.2.a.

time of the offer. We believe that the carriers typically understand where in their service areas there are, in fact, broadband serviceable locations, deployment by unsubsidized competitors, and enforceable commitments to deploy broadband. They should not accept the Enhanced A-CAM offer if they believe the amount of support offered is insufficient, nor should they expect a windfall if they recognize the support offered is excessive, based on facts known to them but not reflected in the publicly available data used to calculate offers.

- 79. Transitional Support for Legacy Carriers. The Commission has a "longstanding objective of transitioning away from legacy rate-of-return support mechanisms" based on embedded costs to programs based on forward-looking costs designed to incentivize operational efficiencies by providers. For this reason, in addition to current A-CAM I and A-CAM II carriers, we extend Enhanced A-CAM offers to carriers eligible to receive legacy support. To encourage participation, we will provide electing legacy carriers with a fixed support transition, or "glide path," from legacy support to their Enhanced A-CAM support amounts. The path will depend on whether or not the legacy carrier's 2022 support, based on CAF BLS and HCLS, exceeds the annual amount of the Enhanced A-CAM offer.
- A-CAM offer, we adapt a glide path from proposals by NTCA and the Southeastern Rural Broadband Alliance for a voluntary pathway to incentive regulation. Specifically, legacy carriers eligible for and electing Enhanced A-CAM will receive frozen support equal to their year 2022 support claims for six years, beginning January 1, 2024. Over the next five years, beginning January 1, 2030, their support will step down to 80% of their 2022 support amount, in 4% increments. Finally, beginning January 1, 2035, electing carriers will then transition to model-based Enhanced A-CAM support, following the three-tiered transition schedule set forth in section 54.311 of the Commission's rules. Legacy carriers

²²⁷ See Enhanced A-CAM NPRM at 21, para. 54; USF/ICC Transformation Order, 26 FCC Rcd at 17686 n. 72; see also 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3096, para. 20 ("We also are taking additional steps to fulfill the Commission's longstanding objective of providing support based on forward-looking efficient costs.").

²²⁸ See Enhanced A-CAM NPRM at 20, para. 52 (seeking comment regarding whether eligibility for Enhanced A-CAM should be extended to include rate-of-return carriers that currently receive legacy support).

²²⁹ We separately, as an interim measure, recalibrate the high-cost budget for those carriers remaining on legacy regulation based on current demand to mitigate the effects of the Commission's budget control mechanism going forward as the Commission considers updates to the budget in the Notice of Proposed Rulemaking concurrently adopted herein. *See infra* sections III, IV.

²³⁰ See NTCA Comments at 33; NTCA Oct. 14, 2022 Letter at 2; Letter from Trey Judy, Director—Regulatory, Hargray Communications, on behalf of the Southeastern Rural Broadband Alliance, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No 10-90 et al., at 2 (filed Apr. 28, 2023) (Southeastern Rural Broadband Alliance April 28, 2023 Letter); (NTCA May 26, 2023 Letter at 2; Letter from Trey Judy, Director—Regulatory, Hargray Communications, on behalf of the Southeastern Rural Broadband Alliance, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90, at 1-3 (rec. May 30, 2023) (Southeastern Rural Broadband Alliance May 30, 2023 Letter). Several parties have expressed support for an incentive regulation path. See, e.g., Southeastern Rural Broadband Alliance Reply at 5-10 (encouraging the Commission to adopt companion CAF BLS and HCLS reforms and the creation of an incentive regulation pathway for legacy rate-of-return carriers); TCA Reply at 2-5 (supporting 5-step plan put forward by NTCA); Minnesota Telecom Alliance et al. Reply at 3, 7 (supporting NTCA's proposal); Letter from Diana Eisner, VP, Policy and Advocacy, USTelecom – The Broadband Assoc., to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 1-2 (filed June 9, 2023).

²³¹ 2022 is the most recent year for which complete data will be available when the Enhanced A-CAM offers are released. We note the budget control mechanism was waived for the entirety of 2022. *See Connect America Fund*, WC Docket No. 10-90, Order, FCC 22-32, at 1, para. 1 (2022) (2022 Waiver Order); Connect America Fund, WC Docket No. 10-90, Order, 36 FCC Rcd 9766, 9766, para. 1 (2021) (2021 Waiver Order).

²³² 47 CFR § 54.311.

electing Enhanced A-CAM would be required to deploy 100/20 Mbps or faster broadband service and voice service to 100% of the serviceable locations in their study areas, subject to the same interim milestones and deployment obligations as other Enhanced A-CAM participants.

- 81. As the Commission has previously found, "a tiered transition is preferable because it recognizes the magnitude of the difference in support for particular carriers." Further, "[b]y specifying in advance how this transition will occur, carriers will have all the information necessary to evaluate the possibility of electing model support." Pursuant to section 54.311(e) of the Commission's rules, which addresses a carrier's transition from receiving higher amounts to lower amounts of support, the transition payments are based on the percentage difference between model support and legacy support: if the difference between legacy and model-based support is 10% or less, the carrier will have a one-year transition; if greater than 10% but not more than 25%, then the transition period will be four years; and if the difference is greater than 25%, then the transition will occur over the full-term of the plan, with no extra transition support only in the final year of the term. For the purpose of calculating transitional support pursuant to this final stage, we adopt a base year support amount equal to 80% of 2022 claims. We recognize this final transition schedule may extend past the end of the support term we adopt for Enhanced A-CAM.
- 82. For an electing legacy carrier whose 2022 claims are less than its Enhanced A-CAM support offer, we provide a transition to the carrier's full Enhanced A-CAM support, after the initial freeze, over a five-year period.²³⁷ Under this transition, support will be stepped up in five annual increments until the Enhanced A-CAM support level is reached by the electing carrier in 2034.²³⁸ This approach minimizes the impact to the Fund caused by demand increases on the legacy high-cost budget resulting from the transition payments in years 2030-2034. That is, electing carriers that are transitioning downward will incur 4% reductions in 2022 baseline support annually during years 2030-2034, which will work to offset the demand increases caused by electing carriers transitioning upwards.
- 83. We find having an extended transition glide path to Enhanced A-CAM for legacy carriers is warranted. Moving legacy return carriers to model-based support furthers the Commission's core reform principles of: (1) "Control[ling] the size of USF as it transitions to support broadband, including by reducing waste and inefficiency;" (2) "Requir[ing] accountability from companies receiving support to ensure that public investments are used wisely to deliver intended results;" and (3) "Transition[ing] to incentive-based policies that encourage technologies and services that maximize the value of scarce

²³⁶ Section 54.311(e) of the Commission's rules contemplates a three-tiered transition over a term as long as 10 years if the difference between base and model-based support is greater than 25 percent. *Id.* Accordingly, if the tiered transition commences in 2035, the transition to Enhanced A-CAM support levels for some electing carriers would extend until year 2045, well past the end of the support term of Enhanced A-CAM. In those cases, the carriers' support would begin to approach the amount of the Enhanced A-CAM offer, but would not reach that level before the end of the term of support. We do not intend for such carriers to have a longer term of support than we adopt for Enhanced A-CAM generally.

²³³ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3115, para. 72; see also December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11912-13, para. 60 (extending same three-tiered transition process to ACAM II).

²³⁴ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3116, para. 76.

²³⁵ 47 CFR § 54.311(e).

²³⁷ The three-tiered transition process provided for in section 54.311(e) of the Commission's rules would not apply in this instance as that rule provision is applicable when carriers are transitioning to lower levels of support. 47 CFR § 54.311(e).

²³⁸ In other words, after receiving frozen support from 2024 to 2029, each carrier will receive its baseline support plus 20% of the difference between the baseline and Enhanced A-CAM in 2030, its baseline plus 40% of the difference in 2031, its baseline plus 60% of the difference in 2032, its baseline plus 80% of the difference in 2033, and its full Enhanced A-CAM support in 2034.

program resources and the benefits to all consumers."²³⁹ The Commission has also emphasized the need "to phase in reform with measured but certain transitions, so companies affected by reform have time to adapt to changing circumstances."²⁴⁰

- 84. The Commission is embarking on its third offering of model-based A-CAM support. Many legacy carriers have already committed to A-CAM I and A-CAM II offerings, and the Commission provided a glide path with each offering to ease and encourage carriers to accept a predictable, fixed support amount in exchange for broadband deployment obligations.²⁴¹ A number of legacy carriers, however, continue to find the business case for moving to model-based support uneconomical. Accordingly, for these remaining legacy carriers, we find a more generous glide path is needed to encourage the transition as compared to earlier A-CAM offerings.
- The proposal suggested by NTCA and the Southeastern Rural Broadband Alliance 85. envisions an incentive regulation option that would serve as an alternative to Enhanced A-CAM for legacy carriers. We reject this proposal to offer a separate incentive regulation option, but we find the proposal can also serve as an important building block to further encourage the transition of legacy carriers to Enhanced A-CAM support. This approach also provides several administrative efficiencies. For example, the Commission by using a frozen, fixed support path to Enhanced A-CAM can thus leverage earlier A-CAM efforts to address ancillary issues such as matters related to tariffing and rate regulation. Adopting the new incentive regulation plan as proposed by NTCA and the Southeastern Rural Broadband Alliance, at this time, would in contrast require the Commission to address such issues anew for which there is limited advance time before carriers will need to complete the election process this fall. Further, by building on the proposal for an Enhanced A-CAM transition path, instead of having a completely new incentive-based option, we eliminate the need to administer an additional support program and can better ensure the alignment of support terms and timelines. That said, NTCA and the Southeastern Rural Broadband Alliance can propose additional incentive-based options for legacy carriers in the associated NPRM proceeding if they find additional options are necessary.
- 86. We predict the overall impact of these glide paths on the high-cost support budget will result in a decrease in support demand as the Commission endeavors to constrain demand to decrease the USF contribution factor. As the Commission has acknowledged, "American consumers and businesses ultimately pay for USF, and that if it grows too large this contribution burden may undermine the benefits of the program by discouraging adoption of communications services." By capping support at the 2022 level for electing carriers for six years, we prevent future demand increases on the legacy high-cost support budget. While those electing carriers whose Enhanced A-CAM offer exceeds their 2022 support levels will receive an increase in support, increasing over years 7-11 to the Enhanced A-CAM offer of support. We estimate that such increases will be more than offset by those carriers phasing down and then transitioning from higher legacy support levels to the level of their Enhanced A-CAM support offer.
- 87. We decline to apply different deployment obligations to legacy carriers electing Enhanced A-CAM than will be applied Enhanced A-CAM carriers generally. The Southeastern Rural Broadband Alliance, as part of its incentive regulation path option, proposed to exclude serviceable locations in an area where "a provider submits cost data indicating the extreme cost to provide 100/20 Mbps service (e.g., when capital expenditures are estimated to be greater than \$25,000 per location).²⁴³ And that for such locations, "there could be a process by which companies could provide service via

²³⁹ USF/ICC Transformation Order, 26 FCC Rcd at 17670, para. 11.

²⁴⁰ *Id.* at 17671, para. 12.

²⁴¹ See December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11912-13, paras. 60-63; 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3115-16, paras. 72-75.

²⁴² USF/ICC Transformation Order, 26 FCC Rcd at 17670, para. 11.

²⁴³ Southeastern Rural Broadband Alliance May 30, 2023 Letter at 2 n.9.

alternative technologies."²⁴⁴ While we are sympathetic of the effort required to offer service to the hardest-to-reach areas of the country, we decline to adopt such an exclusion for the Enhanced A-CAM glide path. The Commission is committed to extending 100/20 Mbps or faster broadband and voice service to all Americans, including those living in high-cost areas. Further, to ensure locations funded with high-cost support do not become eligible for BEAD, and thus receive duplicative funding, we must create a path to an enforceable commitment to serve all locations.²⁴⁵ If we permit an exception allowing electing legacy carriers to escape the obligation to serve not-yet-identified locations subject to some future process, states applying the BEAD eligibility rules will not be able to determine whether an enforceable commitment has been made and may therefore be required to determine that there is no enforceable commitment for any locations. We therefore cannot permit such an exclusion. Further, states, unlike this Commission, will have the ability to conclude that locations are extremely high-cost and therefore find a carrier's commitment to serve using a technology other than reliable broadband would still satisfy BEAD's requirements.²⁴⁶

3. Carrier Eligibility, Elections, and Other Enhanced A-CAM Processes

- 88. *Eligibility*. We adopt our proposal to permit each current A-CAM I or A-CAM II participant to elect, on a state-by-state basis, whether to participate in the Enhanced A-CAM program.²⁴⁷ We will also extend eligibility (on a state-by-state basis) to rate-of-return carriers that are eligible to receive legacy support.²⁴⁸ Rate-of-return carriers that choose not to accept Enhanced A-CAM support offers will continue to receive support under the terms of their existing A-CAM authorizations or legacy rate-of-return plans.²⁴⁹
- 89. Consistent with our decision to provide capped support to locations where an A-CAM I or A-CAM II participant has already deployed broadband at speeds at 100/20 Mbps or greater, we will permit all A-CAM I and A-CAM-II participants to elect to participate in the Enhanced A-CAM program even if a service provider has already deployed broadband at speeds of 100/20 Mbps or faster throughout its service area.²⁵⁰ We are persuaded that it would be an effective use of Enhanced A-CAM funds to support the ongoing provision of 100/20 Mbps or faster service for the support term of Enhanced A-CAM and to provide service providers with the resources they need to repay loans and offer affordable rates.²⁵¹

²⁴⁴ *Id*.

²⁴⁵ See BEAD Program NOFO at 36-37 n.52

²⁴⁶ See id. at 36-37.

²⁴⁷ Enhanced A-CAM NPRM at 20-21, paras. 52-53.

²⁴⁸ *Id.* at 21, para. 54. Legacy support refers to mechanisms based on historical costs, and includes CAF BLS and HCLS.

²⁴⁹ *Id.* at 20, para. 52. *See also* Comments of Home Telecom, RM-11868, WC Docket No. 10-90 et al., at 7 (rec. July 18, 2022) (stating that "the Commission should ensure that companies that elected to participate in previous support options can continue to abide by these prior decisions"); ACAM Broadband Coalition Comments at 42 (supporting the Commission's proposal).

²⁵⁰ Enhanced A-CAM NPRM at 20-21, para. 53.

²⁵¹ See, e.g., GTBA Comments at 4 (explaining "there will be a need to offer support . . . to offset necessary operational expenses needed to keep the rural network working"); NTTA Comments at 2-3 (emphasizing the importance of supporting "ongoing operations, maintenance, and upgrades"); WTA Comments at 6 (stating that excluding providers that have already widely deployed 100/20 Mbps or faster speeds "will deprive" such carriers of "the Enhanced ACAM support they need to repay their loans, recover their investments, sustain their networks and service quality, and keep their broadband service rates affordable"); Minnesota Telecom Alliance et al. Reply at 6 (explaining that precluding carriers with widespread deployment from participating in Enhanced A-CAM "will deprive the affected [carriers] of the Enhanced ACAM support they need to repay their loans, recover their investments, sustain their networks and service quality, and keep their broadband service rates affordable").

We expect our decision to cap monthly support for these locations at an amount lower than that awarded to unserved locations will help balance our objectives of using support efficiently and ensuring that consumers remain served at these high speeds.

- 90. Moreover, consistent with the Commission's longstanding objective of transitioning away from legacy rate-of-return support mechanisms and providing high-cost support based on a carrier's forward-looking, efficient costs, we will permit rate-of return carriers eligible to receive legacy support to elect to participate in the Enhanced A-CAM program instead. Commenters generally supported extending an offer to all rate-of-return carriers that are eligible to receive legacy support to maximize options for carriers and to maximize participation in the Enhanced A-CAM program. However, we balance this objective with the Commission's longstanding goal of minimizing the overall burden of universal service contributions on American consumers and businesses. Specifically, above we take measures to lessen the impact on the budget by freezing Enhanced A-CAM support for legacy carriers for six years at 2022 levels if their Enhanced A-CAM offer is more than their total 2022 legacy support (i.e., CAF BLS and HCLS) in the relevant state, and then gradually increasing their support to Enhanced A-CAM levels.
- 91. We note that legacy rate-of-return carriers authorized to receive Enhanced A-CAM support will have requirements related to tariffs. Enhanced A-CAM recipients must exit the NECA Common Line pool, although they have the option of continuing to use NECA to tariff their Common Line and CBOL charges. ²⁵⁶ Such carriers must coordinate with NECA on making any required tariff filings in order to ease the administrative burden associated with implementation of any changes. Once USAC confirms that an authorized carrier has notified NECA of its intention to exit the Common Line pool, USAC may disburse A-CAM support. Pursuant to the *Rate-of-Return BDS Order*, Enhanced A-CAM recipients that have not already done so will also be eligible to move their business data services offerings to incentive regulation. ²⁵⁷

²⁵² Enhanced A-CAM NPRM at 21, para. 54; December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11903, para. 31; 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3090-91, paras. 4-5. See also ACAM Broadband Coalition Comments at 6; WTA Comments at 8.

²⁵³ See, e.g., GBTA Comments at 8 ("The foundational principles of equity and fairness strongly favor the availability of the Enhanced A-CAM mechanism for all rural ETCs."); Home Comments at 2-3, 7 (encouraging "the Commission to ensure each area is treated fairly and that as funding mechanisms evolve, all carriers can equally choose from the options the Commission makes available"); Minnesota Telecom Alliance et al. Reply at 6 (urging the Commission "to maximize participation in Enhanced ACAM by expanding eligibility as broadly as feasible"); WTA Comments at 4-8 (explaining that "broad eligibility will enable the Commission to employ an established and effective model-based approach to encourage and enable [rate-of-return carriers] to further upgrade, extend and maintain their broadband networks and services to meet pressing current customer bandwidth needs"); Reply Comments of Hamilton County Telephone Co-Op, RM-11868, WC Docket No. 10-90 et al., at 5-6 (rec. Aug. 1, 2022) ("This policy will promote equity and fairness and encourage ETCs to participate in the Enhanced A-CAM offer."). See also ACAM Broadband Coalition Comments at 42; State and Regional Telecommunications Associations Comments at 7; Comments of Red River Rural Telephone Association and Polar Communications Mutual Aid Corp., RM-11868, WC Docket No. 10-90 et al., at 3-4 (rec. July 18, 2022). Future support for non-A-CAM rate-of-return carriers that serve Alaska will be part of a separate rulemaking. See Alaska Telecom Petition for Expedited Rulemaking, WC Docket Nos. 10-90, 16-271 (rec. Jan. 4, 2023).

²⁵⁴ USF/ICC Transformation Order, 26 FCC Rcd at 17682-83, para. 57; Enhanced A-CAM NPRM at 20, para. 52 (seeking comment on whether extending the offer to legacy rate-of-return carriers would otherwise be consistent with the Commission's goals and whether there were other eligibility considerations that should be applied).

²⁵⁵ See supra section III.B.2.b.

²⁵⁶ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3159-60, paras. 194-96.

²⁵⁷ Regulation of Business Data Services for Rate-of-Return Local Exchange Carriers, et al., WC Docket No. 17-144 et al., Report and Order, Second Further Notice of Proposed Rulemaking and Further Notice of Proposed (continued....)

- 92. We will permit otherwise eligible existing A-CAM and legacy rate-of-return carriers that are currently not in compliance with the deployment obligations associated with their current support programs to participate in the Enhanced A-CAM program. However, to protect the public's funds, we will take certain steps to reduce the Enhanced A-CAM support they receive until they come into compliance with their existing obligations.²⁵⁸ These steps will ensure that carriers cannot avoid compliance with existing obligations by accepting new obligations.
- 93. Specifically, an existing A-CAM support recipient that has missed its December 31, 2022 service milestone and that is currently having its support withheld pursuant to one of the section 54.320(d)(1) non-compliance tiers, will continue to remain subject to the support withholding associated with that non-compliance tier once its Enhanced A-CAM support term begins.²⁵⁹ The existing A-CAM support recipient will continue to receive its existing level of support that it received pursuant to its previous A-CAM program, excluding the support withholding associated with the applicable non-compliance tier, until it comes into compliance. At the time that the support recipient reports that it is eligible for Tier 1 status for the December 31, 2022 service milestone pursuant to its original obligation (i.e., at the previous A-CAM program performance requirements and for the number of locations required by the December 31, 2022 service milestone), the support recipient will have its support fully restored to the level of support it is eligible to receive pursuant to the Enhanced A-CAM program, and USAC will repay any funds that were recovered or withheld.²⁶⁰
- 94. An existing A-CAM support recipient that misses the December 31, 2023 service milestone for its previous A-CAM program will receive its ongoing Enhanced A-CAM support once its Enhanced A-CAM support term begins, but if its compliance gap with the December 31, 2023 service milestone makes it eligible for a section 54.320(d)(1) non-compliance tier that requires support withholding, we will withhold a percentage of the support recipient's ongoing Enhanced A-CAM support as required by the relevant non-compliance tier. ²⁶¹ At the time that the support recipient reports that it is eligible for Tier 1 status for the December 31, 2023 service milestone pursuant to its original obligation (i.e., at the previous A-CAM program performance requirements and for the number of locations required by the December 31, 2023 service milestone), it will have its support fully restored and USAC will repay any funds that were recovered or withheld. ²⁶²
- 95. If we determine that a legacy rate-of-return carrier receiving Enhanced A-CAM support has not met its legacy obligation to offer 25/3 Mbps to a required number of locations in its service area as required by December 31, 2023, 263 we will treat the 25/3 Mbps deployment obligation as a continuing obligation and subject the rate-of-return carrier to the section 54.320(d)(1) non-compliance tiers depending on the size of its compliance gap. 264 Accordingly, we will withhold a portion of the rate-of-

²⁵⁸ See Enhanced A-CAM NPRM at 14, para. 35 (seeking comment on the applicability of 47 CFR § 54.320(d)(1) to the Enhanced A-CAM program).

²⁵⁹ See 47 CFR § 54.320(d)(1). Depending on the size of the non-compliance gap, WCB will withhold a minimum of 15% and up to 100% of a support recipient's support. *Id*.

²⁶⁰ See id. § 54.320(d)(1)(v).

²⁶¹ See id. § 54.320(d)(1).

²⁶² See id. § 54.320(d)(1)(v). Although the non-compliance tiers apply to interim service milestones for other programs, here we will apply the non-compliance tiers to the legacy rate-of-return carrier's final deployment milestone given our decision to treat the 25/3 Mbps deployment obligation as an ongoing obligation.

²⁶³ December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11927, para. 112.

²⁶⁴ See 47 CFR § 54.320(d)(1).

return carrier's ongoing Enhanced A-CAM support as required by the applicable non-compliance tier.²⁶⁵ If it is verified that the rate-of-return carrier has come into compliance within the one-year cure period, the carrier will have its support fully restored and USAC will repay any funds that were recovered or withheld.²⁶⁶ If the rate-of-return carrier does not come into compliance within the one-year cure period, we will recover support associated with the original five-year support term pursuant to section 54.320(d)(2) for the locations to which it did not commercially offer 25/3 Mbps service.²⁶⁷ However, that carrier will be permitted to remain in the Enhanced A-CAM program and will continue to receive any remaining Enhanced A-CAM support. Like all high-cost recipients, Enhanced A-CAM participants will also remain subject to the Commission's other sanctions for non-compliance with the terms and conditions of high-cost funding, including but not limited to the Commission's existing enforcement procedures and penalties, reductions in support amounts, potential revocation of ETC designations, and suspension or debarment.²⁶⁸

96. We decline to expand eligibility to include competitive service providers as part of this Enhanced A-CAM offer. ²⁶⁹ We are not persuaded that it would be an efficient use of funds at this time. ²⁷⁰ While the Commission has increasingly relied on competitive processes for delivery of high-cost funding, areas funded by A-CAM carriers present distinct challenges to competitive entry. ²⁷¹ In areas served by price cap carriers, the Commission provided a limited term of model-based support to incumbents with the goal of moving towards allocating support on a competitive basis in the relevant areas. ²⁷² In contrast, the Commission adopted A-CAM as a longer-term support program with the goal of providing certainty and stability to permit the incumbent service providers to invest for the future. ²⁷³ While we acknowledge our approach precludes other service providers from participating that may also be qualified to offer service in these areas, ²⁷⁴ it would be inefficient now to fund competitive carriers in A-CAM areas where incumbent service providers have existing long-term funding commitments. Moreover, the record lacks suggestions for how to efficiently implement a competitive process. Instead, we conclude that it is better to address this issue on a longer term basis in the context of our proceeding regarding the future of high-cost support. In the NOI below, we seek to build a record on how to reform our high-cost programs in the

²⁶⁵ See id.

²⁶⁶ See id. § 54.320(d)(2).

²⁶⁷ *Id.* § 54.320(d)(2). USAC will then recover the percentage of support that is equal to 1.89 times the average amount of support per location received in the support area for that carrier over the original five year term of support for the relevant number of locations plus 10 percent of the eligible telecommunications carrier's total relevant high-cost support over the support term for that support area. *Id.*

²⁶⁸ *Id.* § 54.320(c).

²⁶⁹ See. e.g., INCOMPAS Comments at 7; NCTA Comments at 6-7.

²⁷⁰ Contra INCOMPAS Comments at 7 (claiming that "such an approach may help alleviate the impact on the [universal service] contribution factor"); NCTA Comments at 6 (claiming "any proposal limiting universal service support to only a small subset of providers based solely on their status as incumbents would be an inefficient means of funding deployment").

²⁷¹ USF/ICC Transformation Order, 26 FCC Rcd at 17674, para. 26 (explaining that "smaller rate-of-return carriers operate in many of the country's most difficult and expensive areas to serve").

²⁷² *Id.* at 17727-28, para. 163 (explaining that at the end of the incumbents' support term, "the Commission expects to be distributing all" support "in price cap areas pursuant to market-based mechanism, such as competitive bidding.").

²⁷³ 2016 Rate of Return Reform Order, 31 FCC Rcd at 3089, para. 1.

²⁷⁴ NCTA Comments at 6-7 (suggesting that a competitive process "would give all qualified broadband providers an equal opportunity to compete for high-cost support").

face of the changing broadband landscape and specifically ask about alternatives to using a cost model, including using competitive processes.²⁷⁵

- 97. At the same time, we recognize the benefits of competitive processes to allocate government funding for broadband deployment.²⁷⁶ Thus, if the incumbent declines the Enhanced A-CAM offer, we expect the unserved locations will become eligible for support through a competitive process (the BEAD Program).²⁷⁷
- 98. *Elections*. We delegate to the Bureau the authority to implement the process for carriers to elect to receive Enhanced A-CAM support, consistent with the same procedures the Commission adopted for carriers electing to receive A-CAM II support.²⁷⁸ Commenters supported adopting the same procedures.²⁷⁹ Like with A-CAM II, elections will be voluntary, irrevocable, and made on a state-by-state basis.²⁸⁰
- 99. We require that carriers make their elections by no later than October 1, 2023.²⁸¹ We believe this timing should ensure that elections are made in time for states and grantees to be made aware of which areas will be subject to an enforceable commitment for the deployment of qualifying broadband, and thus ineligible for BEAD funding.²⁸² If any of the dependent deadlines or timeframes are extended, we grant the Bureau the flexibility to similarly extend the deadline for elections as long as the elections take place in time for the acceptances to qualify as an enforceable commitment for the deployment of qualifying broadband as defined by the BEAD Program NOFO.²⁸³
- 100. We also require carriers that accept an Enhanced A-CAM offer to identify in their election letters the technologies they plan to use to meet their Enhanced A-CAM deployment

²⁷⁵ See infra section V.

²⁷⁶ INCOMPAS Comments at 7; NCTA Comments at 6-7.

²⁷⁷ BEAD Program NOFO at 36-37 & n.52 (explaining that any location that is already subject to an enforceable commitment for the deployment of qualifying broadband cannot be treated as unserved or underserved).

²⁷⁸ Enhanced A-CAM NPRM at 21, para. 55; 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11915, para. 69 (directing "the Bureau to release a public notice announcing the new model-based support amounts and corresponding deployment obligations and providing carriers with 45 days to confirm that they will accept the revised offer"); Wireline Competition Bureau Announces Alternative Connect America Cost Model II Support Amounts Offered to Rate-of-Return Carriers to Expand Rural Broadband, WC Docket No. 10-90, Public Notice, 34 FCC Rcd 2868 (WCB 2019).

²⁷⁹ See, e.g., ACAM Broadband Coalition Comments at 42; NTCA Comments at 27 ("Nothing from past experience suggests the need to tinker with that process.").

²⁸⁰ Carriers considering this voluntary path will need to evaluate on a state-level basis whether the support received for multiple study areas, on balance, is sufficient to meet the state-level number of locations that must be served.

²⁸¹ The election process delegated to the Bureau includes the authority to set a deadline for acceptance of Enhanced A-CAM offers on or before October 1, 2023 and shorten the timelines for acceptances used in prior A-CAM offers.

²⁸² BEAD Program NOFO at 9, 36-37 n.52 (requiring that grantees submit an initial proposal no later than 180 days after receiving a notice of available BEAD funding and requiring grantees to conduct a challenge process after submitting the initial proposal and prior to allocating funds to subgrantees, and defining an enforceable commitment for the deployment of qualifying broadband). NTIA announced BEAD allocations "to all 50 states, the District of Columbia, and five territories" on June 26, 2023. Press Release, US Department of Commerce, National Telecommunications and Information Administration, Biden-Harris Administration Announces State Allocations for \$42.45 Billion High-Speed Internet Grant Program as Part of Investing in America Agenda (June 26, 2023), https://www.ntia.doc.gov/press-release/2023/biden-harris-administration-announces-state-allocations-4245-billion-high-speed.

²⁸³ BEAD Program NOFO at 36-37 n.52.

obligations.²⁸⁴ The Enhanced A-CAM deployment obligations are technologically neutral.²⁸⁵ We expect that A-CAM participants will disclose in good faith the technologies they intend to use to facilitate coordination with other funding programs. We find that requiring such disclosures will further our goal to maximize the deployment of high-quality broadband service by helping states and other eligible entities set allocations for the BEAD Program and further the efficient use of federal broadband funding, including additional programs funded by other federal agencies. We direct the Bureau to make the acceptances public to inform, among other processes, the BEAD Program challenges conducted by states or other eligible entities and prevent any duplication of support to a location where it is determined that the Enhanced A-CAM service provider plans to deploy a technology that would satisfy the requirements for being deemed an enforceable commitment for the deployment of qualifying broadband to a location.²⁸⁶ Because acceptances will be made public, a carrier accepting an Enhanced A-CAM offer should not include any confidential trade secrets or commercial information in its acceptance.

- 101. Participation Threshold. We also adopt a minimum carrier participation threshold for implementing the Enhanced A-CAM program. Specifically, we conclude that it may not serve the public interest to proceed if existing A-CAM participants collectively choose to accept Enhanced A-CAM offers that in total cover less than 50% of the unserved locations that are eligible for support across all the offers to current A-CAM recipients. We will exclude from this formula any locations covered by offers received by legacy rate-of-return carriers eligible to receive legacy support. While we encourage legacy rate-of-return carriers to elect Enhanced A-CAM and expect that many will do so, we will not forecast a reasonable participation rate for those carriers. If the 50% participation threshold is not reached, we will not proceed with the Enhanced A-CAM program.
- 102. We believe that a minimum level of participation in Enhanced A-CAM will prevent the proliferation of high-cost mechanisms, each with its own rules and administrative requirements, and each self-selected by carriers to maximize universal service support. NTCA opposes the imposition of a participation threshold because it claims the Enhanced A-CAM program will most efficiently and effectively serve these areas. However, our goal for the Enhanced A-CAM program is to maximize the efficient use of universal service funds—both by leveraging existing A-CAM-supported networks to support the widespread deployment of 100/20 Mbps or faster broadband throughout rate-of-return carriers' service areas, and by preventing the duplication of funds across support programs in these areas. If fewer than half of the unserved locations included in offers to current A-CAM recipients are supported through Enhanced A-CAM, it seems unlikely that this goal will be met. We also are not

²⁸⁴ The Commission similarly required entities participating in the Connect America Fund Phase II auction and the Rural Digital Opportunity Fund to identify the technologies they intended to use to meet the support mechanisms' deployment obligations in both their short-form and long-form applications. 47 CFR §§ 54.315(a)(4), (b)(2)(iv), 54.804(a)(4), (b)(2)(iv).

²⁸⁵ See WISPA June 26, 2023 Letter at 2.

²⁸⁶ See, e.g., BEAD Program NOFO at 15-17, 28, 36 n.52, 37 (defining a reliable broadband service, for purposes of identifying a location as unserved or underserved and whether a carrier has an enforceable commitment for the deployment of qualifying broadband to a location, as "broadband service that the Broadband DATA Maps show is accessible to a location via: (i) fiber-optic technology;11 (ii) Cable Modem/ Hybrid fiber-coaxial technology; (iii) digital subscriber line (DSL) technology; or (iv) terrestrial fixed wireless technology utilizing entirely licensed spectrum or using a hybrid of licensed and unlicensed spectrum").

²⁸⁷ Enhanced A-CAM NPRM at 21-22, para. 56.

²⁸⁸ NTCA Comments at 27.

²⁸⁹ Enhanced A-CAM NPRM at 11, para. 23.

²⁹⁰ Contra NTCA Comments at 27 ("[T]he more efficient, effective, and direct method would be to enhance and modernize an existing and successful mechanism to address service demands and consumer needs in as many rural areas as possible – and moving forward on updating the A-CAM without regard to the number of carriers that elect it is the best way to do that"). No commenters provided a specific proposal for how we should set a threshold.

persuaded that we should decline to adopt a participation threshold simply because some commenters assume that "a very substantial number" of carriers will accept offers.²⁹¹ Instead, we find that adopting a minimum participation threshold is a prudent approach that will enable us to safeguard the public funds by reassessing the program in the event that elections are too low to achieve our goals.

- Tribal Government Engagement. The Commission has long recognized the deep digital divide that persists between Tribal lands and the rest of the country and emphasized that engagement between Tribal governments and communications providers, either currently providing service or contemplating the provision of service on Tribal lands, is vitally important to the successful deployment and provision of service.²⁹² All recipients of high-cost support that serve Tribal lands must, pursuant to section 54.313(a)(5) of the Commission's rules, demonstrate that it has engaged with Tribal governments on a range of issues, including compliance with local rights of way, land use permitting facilities siting, and environmental and cultural preservation review processes, as well as Tribal business and licensing requirements, that are necessary for a carrier to obtain before fulfilling its deployment and service obligations.²⁹³ Through these obligatory Tribal engagements, and as demonstrated through successfully satisfying deployment obligations through previous high-cost programs, carriers receiving high-cost support through previous universal service programs should have received consent from the local Tribal government to satisfy the requisite permissions to deploy to certain locations. Further, because carriers that accept an Enhanced A-CAM offer already have an annual obligation to demonstrate they meaningfully engaged with the Tribal governments in their supported areas as existing high-cost support recipients, we expect that they will be able to leverage any preexisting coordination and collaboration to immediately engage the relevant Tribal governments with respect to the steps necessary to complete the deployment required by Enhanced A-CAM.²⁹⁴ As such, and to continue the necessary consultation between carriers and the Tribal governments that oversee the lands which may contain eligible Enhanced A-CAM locations, Enhanced A-CAM carriers will also remain subject to the ongoing annual Tribal engagement obligations. Any carrier accepting an Enhanced A-CAM offer should be prepared to serve all locations in its study area, including those on Tribal lands.²⁹⁵
- 104. In addition to an annual obligation to demonstrate they meaningfully engaged with the Tribal governments in their supported areas, we require carriers receiving Enhanced A-CAM support to initiate engagement with any relevant Tribal governments within 90 days of the Bureau extending an Enhanced A-CAM offer.²⁹⁶ In engaging with Tribal governments, Enhanced A-CAM carriers must be aware that the BEAD Program will not recognize the acceptance of an Enhanced A-CAM offer as an

²⁹¹ See, e.g., Minnesota Telecom Alliance et al. Reply at 6-7; WTA Comments at 8.

²⁹² USF/ICC Transformation Order, 26 FCC Rcd at 17868-69, paras. 636-37. See also NTTA Comments at 7 ("[T]ribal governments should have significant input into how federal [universal service support] is utilized on Tribal lands to increase broadband deployment and sustain the affordable provision of broadband internet access service.").

²⁹³ 47 CFR § 54.313(a)(5).

²⁹⁴ See USF/ICC Transformation Order, 26 FCC Rcd at 17868-69, paras. 636-37. See also Office of Native Affairs and Policy, Wireless Telecommunications Bureau, and Wireline Competition Bureau Issue Further Guidance on Tribal Government Engagement Obligation Provisions of the Connect America Fund, WC Docket No. 10-90 et al., Public Notice, 27 FCC Rcd 8176 (ONAP/WTB/WCB 2012); Consumer and Governmental Affairs Bureau Seeks Comment on Effectiveness of its Tribal Engagement Guidance and to Refresh the Record on Related Petitions for Consideration, WC Docket No. 10-90, Public Notice, 34 FCC Rcd 9508 (CGB 2019).

²⁹⁵ We note that locations in Tribal areas may already be subject to an enforceable commitment for broadband through other federal and state broadband funding programs.

²⁹⁶ In making their July 1, 2024, filings pursuant to section 54.313, Enhanced A-CAM recipients should demonstrate that they engaged in Tribal consultations in 2023 specifically associated with deployment pursuant to Enhanced A-CAM.

enforceable commitment for the deployment of qualifying broadband, "unless it includes a legally binding agreement, which includes a Tribal Government Resolution, between the Tribal Government of the Tribal Lands encompassing that location, or its authorized agent, and a service provider offering qualifying broadband service to that location."²⁹⁷ We expect carriers that intend to accept Enhanced A-CAM offers will act in good faith to provide the relevant Tribe(s) with an opportunity to consent to the Enhanced A-CAM carrier's deployment of broadband in the Tribal area.²⁹⁸ To further the objectives of encouraging deployment on Tribal lands by facilitating communications between service providers and the Tribal governments, and avoiding duplicative support across federal programs, we expect that carriers that intend to accept Enhanced A-CAM offers will take reasonable steps necessary to obtain Tribal consent meeting the BEAD Program requirements in time for states and other eligible entities to conduct their challenge processes to identify locations that are eligible for BEAD Program funding.²⁹⁹ If the state concludes that there is no Tribal Government Resolution or legally binding agreement expressing consent as required by the BEAD Program NOFO, the Tribal locations eligible for Enhanced A-CAM support may, according to the BEAD NOFO, nonetheless become eligible for BEAD support.³⁰⁰

105. To balance our goals of avoiding duplicative spending across federal programs against the important and necessary engagement with Tribal governments over the deployment and provision of services over Tribal lands, if a state awards BEAD funds to another service provider to serve locations subject to an Enhanced A-CAM authorization, we permit the Enhanced A-CAM carrier and the Tribal government to notify the Bureau that they mutually agree to forego the A-CAM deployment obligation, and the Bureau is directed to adjust the Enhanced A-CAM recipient's support and deployment obligations. The BEAD awards, unlike the other bases for adjustments to deployment obligations and support we adopt above, would necessarily occur after the Enhanced A-CAM offers are made. We find, however, that carriers considering their Enhanced A-CAM offers will have adequate notice that Tribal locations may be de-authorized at a later date. We find that performing these adjustments is necessary to avoid duplication of funding across federal programs.

106. Adjusting the High-Cost Budget for Carriers Remaining on Legacy Support. As we have in previous A-CAM elections, we re-set the legacy support budget for CAF BLS and HCLS to reflect the exit from the budget control mechanism of newly electing A-CAM carriers.³⁰² To effectuate this reset, we set the legacy budget for 2024-25 at a level equal to 2023-24 legacy support claims less any frozen

²⁹⁷ BEAD Program NOFO at 37 n.52. The Tribal government may include a Tribal Council or some other governing body, or the Tribal government's authorized agent. For the BEAD program, if the locations are on a Tribal consortium's Tribal land, the service provider cannot be authorized to receive support for Tribal locations unless and until each relevant Tribal government adopts a resolution of consent. To ensure proper consent is obtained in Alaska and in alignment with the BEAD Program, carriers accepting Enhanced A-CAM support on Tribal lands in Alaska must follow the requirements described in the BEAD Program NOFO for obtaining consent from Tribes located in Alaska. *See* BEAD Program NOFO at 48 n.70. This includes "gain[ing] consent (by Tribal resolution) of 51 percent or more of the federally recognized [T]ribal governments in the Alaska Native Region in which the infrastructure will be deployed," except for deployments within the Metlakatla Reservation which "will require only the consent (via Tribal resolution) of the Metlakatla Reservation's Tribal Government." *Id*.

²⁹⁸ Since these efforts would constitute Tribal engagement, carriers will report on them in their FCC Form 481 due July 1, 2024.

²⁹⁹ BEAD Program NOFO at 9, 37 n.52. See also BEAD Challenge Process Policy Notice.

³⁰⁰ See, e.g., BEAD Program NOFO at 37 n.52.

³⁰¹ We expect that such notice will take the form of a letter filed in this docket. We direct the Bureau to specify the form, substance, and timing of such letters. We also clarify that any such adjustment will not be considered a default of the carrier's deployment obligations under the Enhanced A-CAM program.

³⁰² See December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11916-22, paras. 72-92; 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3119-20, para. 86.

support received by carriers transitioning from legacy support to Enhanced A-CAM.³⁰³ The Commission will consider additional budget updates for legacy carriers proposed by NTCA and the Southeastern Rural Broadband Alliance in the NPRM concurrently adopted herein as such proposals would benefit from additional comment by interested parties.³⁰⁴

- 107. Recalibrating the budget now provides the added benefit of mitigating the uncertainty to the remaining legacy carriers caused by application of the Commission's budget control mechanism as the Commission considers additional budget updates. Support demand has outpaced the Commission's predictive judgments made in the *December 2018 Rate-of-Return Reform Order*. The growth in projected support by carriers is due, in part, to an increased conversion of voice lines to broadband-only lines, which receive a higher support amount, and an increase in the number of new customers subscribing to broadband-only lines. This has ultimately resulted in projected estimated support demand substantially exceeding the annual high-cost budget in recent years and thus triggering the Commission's budget control mechanism. Absent recalibration, carriers would be under annual threat of increasing budget constraints going forward and the uncertainty of obtaining waiver relief while the Commission considers important and necessary budget updates.
- 108. *HCLS Cap*. As we have done previously with respect to A-CAM elections, we direct NECA to rebase the cap on HCLS to reflect the election of model-based support by HCLS-eligible rate-of-return carriers. In the first annual HCLS filing following the election of model-based support, NECA shall calculate the amount of HCLS that those carriers would have received in the absence of their election, subtract that amount from the HCLS cap, then recalculate HCLS for the remaining carriers using the rebased amount.

³⁰³ This is consistent with the request for recalibration of the overall annual budget as suggested by NTCA and the Southeastern Rural Broadband Alliance. *See* NTCA May 26, 2023 Letter at 2; Southeastern Rural Broadband Alliance May 30, 2023 Letter at 1-2.

³⁰⁴ See Letter from Michael Romano, Exec. Vice Pres., NTCA, to Marlene H. Dortch, Secretary, FCC, RM-11868, WC Docket No. 10-90 et al., at 2 (filed Apr. 3, 2023) (NTCA Apr. 3, 2023 Letter).

³⁰⁵ The budget, based on 2018 unconstrained claims, including an inflationary factor to increase the budget annually, assumed that 4 percent of non-broadband only lines would be converted to broadband only over the 2019-2023 period. *See December 2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 12017, Appx. D. However, as NTCA generally estimates "rural providers" . . . standalone broadband connections grew by nearly 20%" over the last two years. NTCA Apr. 3, 2023 Letter at 4.

³⁰⁶ See 47 CFR § 54.901(g) ("[A] consumer broadband-only loop is a line provided by a rate-of-return incumbent local exchange carrier to a customer without regulated local exchange voice service, for use in connection with fixed Broadband Internet access service").

 $^{^{307}}$ See NTCA Apr. 3, 2023 Letter at 2, 4 (discussing increases in broadband subscriptions in recent years among its members and estimating that over the past two years "standalone broadband connections grew by nearly 20% . . . with 7% coming from new customers").

 $^{^{308}}$ The budget for 2023-2024 for the CAF BLS and HCLS support mechanisms is approximately \$1.25 billion with forecasted demand exceeding \$1.53 billion. *See* USAC, 2023-2024 Budget Analysis,.

³⁰⁹ For example, absent the Commission recently waiving the budget control mechanism for the July 2023 to June 2024 tariff year, legacy carriers would have been subject to support reductions of 18.35%, which would have impaired the ability of carriers to deploy and maintain broadband operations in rural areas as they emerge from the pandemic. *See Connect America Fund*, WC Docket No. 10-90, Order, FCC 23-40, at 1, 3, paras. 1, 8 (May 23, 2023). In 2022, the Commission waived the budget control mechanism to remove a potential 14% reduction in high-cost support for carriers. *See Connect America Fund*, WC Docket No. 10-90, Order, FCC 22-32, at 2, 4, paras. 5, 10 (May 10, 2022) (2022 BCM Order).

³¹⁰ See 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3145, para. 154 (rebasing the HCLS cap to reflect the election of model-based support by existing recipients of HCLS).

- 109. Cybersecurity and Supply Chain Risk Requirements. We require Enhanced A-CAM carriers to implement operational cybersecurity and supply chain risk management plans by January 1, 2024—the start of the Enhanced A-CAM support term.³¹¹ We also require carriers to submit such plans to USAC, and certify that they have done so, by January 2, 2024 or within 30 days of approval under the Paperwork Reduction Act, whichever is later. Failure to submit the plans and make the certification shall result in 25% of monthly support being withheld until the carrier comes into compliance.³¹² Our actions emphasize the critical importance of cybersecurity and supply chain risk management in modern broadband networks, consistent with broader initiatives across the federal government,³¹³ while striking an appropriate balance to ensure compliance with this important requirement that avoids disproportionate disruption to carriers' support.
- 110. Adopting this risk management requirement is necessary to ensure that the Enhanced A-CAM program does not deprive rural consumers in high-cost areas of broadband service that is as secure as the service deployed pursuant to other federal funding initiatives, including through the BEAD Program.³¹⁴ The BEAD Program will not fund areas where there is an enforceable commitment by an entity to build broadband.³¹⁵ Therefore, if receipt of Enhanced A-CAM funding were not conditioned upon comparable cybersecurity and supply chain risk management requirements, the receipt of Enhanced A-CAM funding would likely leave those rural consumers served by Enhanced A-CAM carriers without comparable protection.
- 111. Consistent with the BEAD Program, carriers' cybersecurity risk management plans must reflect the latest version of the NIST Framework for Improving Critical Infrastructure Cybersecurity,³¹⁶ and must reflect an established set of cybersecurity best practices, such as the standards and controls set

³¹¹ Enhanced A-CAM NPRM at 22, para. 57 (seeking comment on whether we should require similar cybersecurity and supply chain risk management practices and certifications for Enhanced A-CAM carriers as the BEAD Program or, alternatively, for all carriers receiving high-cost support). Because the record gave sparse treatment to this issue of whether to extend these cybersecurity and supply chain risk management requirements to other high-cost programs, we limit our action today to Enhanced A-CAM carriers. We will address this as appropriate in a future proceeding.

³¹² A 25% withholding of support is equivalent of Tier 3 of non-compliance under 47 CFR § 54.320(d)(1). A carrier may consider its "plans" for addressing cybersecurity and supply chain risks to be separate because they entail different kinds of actions. Nonetheless, carriers may satisfy this requirement by submitting to USAC a single document that contains both their cybersecurity risk management and supply chain risk management plans. This will likely be the case for most, if not all, carriers because implementing the NIST Framework for Improving Critical Infrastructure Cybersecurity, as we require carriers to do, includes an examination and treatment of supply chain risks.

³¹³ See The White House, Executive Order 14028 (2021), https://cwww.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/; NIST, Key Practices in Cyber Supply Chain Risk Management: Observations from Industry (2021), https://csrc.nist.gov/publications/detail/nistir/8276/final;; Infrastructure Act § 60102(g)(1)(B) (mandating compliance with "prudent cybersecurity and supply chain risk management practice").

³¹⁴ See BEAD Program NOFO at 36-37 & n.52 (encouraging the Commission to "replicate" the BEAD Program's cybersecurity and supply chain risk management requirements); see also CTIA Comments at 5 ("If the Commission seeks to align the high-cost program with the BEAD Program, then it should require high-cost recipients to commit to use the NIST CSF to manage cybersecurity and supply chain security risks."). BEAD Program recipients must ensure that (1) the cybersecurity risk management plan reflects the latest version of the NIST Framework for Improving Critical Infrastructure Cybersecurity (currently Version 1.1); and (2) the standards and controls set forth in Executive Order 14028. See BEAD Program NOFO at 70-71.

³¹⁵ BEAD Program NOFO at 36-37 & n.52.

³¹⁶ NIST, Framework for Improving Critical Infrastructure Cybersecurity, v.1.1 (2018), https://nvlpubs.nist.gov/nistpubs/CSWP/NIST.CSWP.04162018.pdf.

forth in the Cybersecurity & Infrastructure Security Agency (CISA) Cybersecurity Cross-sector Performance Goals and Objectives³¹⁷ or the Center for Internet Security Critical Security Controls.³¹⁸ Carriers' supply chain risk management plans must incorporate the key practices discussed in NISTIR 8276, Key Practices in Cyber Supply Chain Risk Management: Observations from Industry,³¹⁹ and related supply chain risk management guidance from NIST 800-161.³²⁰

- 112. If an Enhanced A-CAM carrier makes a substantive modification to its cybersecurity or supply chain risk management plan, we require that carrier to submit its updated plan to USAC within 30 days of making that modification.³²¹ A modification to a cybersecurity or supply chain risk management plan will be considered as substantive if at least one of the following conditions apply:
 - There is a change in the plan's scope, including any addition, removal, or significant alternation to the types of risks covered by the plan (e.g., expanding a plan to cover new areas such as supply chain risks to Internet of Things devices or cloud security could be a substantive change);
 - There is a change in the plan's risk mitigation strategies (e.g., implementing a new encryption protocol or deploying a different firewall architecture);
 - There is a shift in organizational structure (e.g., creating a new information technology department or hiring a Chief Information Security Officer);

³¹⁷ See Cybersecurity and Infrastructure Security Agency, Cross-Sector Cybersecurity Performance Goals and Objectives, https://www.cisa.gov/cpgs (last visited July 23, 2023).

³¹⁸ See Center for Internet Security, Critical Security Controls Version 8, https://www.cisecurity.org/controls (last visited July 23, 2023) (providing security controls grouped by priority and feasibility for different sizes and resources of businesses in Implementation Groups). The Enhanced A-CAM NPRM noted the possibility that a cybersecurity risk management plan could reflect the standards and controls set forth in Executive Order 14028. Enhanced A-CAM NPRM at 22, n.141. We observe that the development of measures and controls pursuant to Executive Order 14028 are still ongoing. Efforts to amend the Federal Acquisition Regulation to standardize common cybersecurity contractual requirements across all Executive agencies for unclassified information systems, to increase the sharing of information about cyber threats and incident information between the Federal government and certain providers, and to require certain contractors to report cyber incidents to the Federal government to facilitate effective cyber incident response and remediation are not yet final. See, e.g., Open FAR Cases as of 6/30/2023, https://www.acq.osd.mil/DPAP/dars/opencases/farcasenum/far.pdf (stating that the Civilian Agency Acquisition Council sent a proposed rule in case number 2021-019, which implements sections 2(i) and 8(b) of Executive Order 14028, to OIRA for review on May 11, 2023 and that a proposed rule in case number 2023-002, implementing section 4(n) of Executive Order 14028, is due August 2, 2023). While we recognize the ongoing work in this regard, for the purposes of the requirements we establish today, we rely instead upon the established standards set forth in the main text above.

³¹⁹ See The White House, Executive Order 14028 (2021), https://csrc.nist.gov/publications/detail/nistir/8276/final (presenting the following as key practices: 1) integrating cyber supply chain risk management across the organization; 2) establishing a formal cybersecurity supply chain risk management program; 3) knowing and managing critical components and suppliers; 4) understanding the organization's supply chain; 5) collaborating closely with key suppliers; 6) including key suppliers in resilience and improvement activities; 7) assessing and monitoring throughout the supplier relationship; and 8) planning for the full life cycle).

³²⁰ NIST, Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations (2022), https://csrc.nist.gov/publications/detail/sp/800-161/rev-1/final (identifying critical success factors for cyber supply chain risk management).

³²¹ BEAD Program NOFO at 70-71.

- There is a shift in the threat landscape prompting the organization to recognize that emergence of new threats or vulnerabilities that weren't previously accounted for in the plan;
- Updates are made to comply with new cybersecurity regulations, standards, or laws;
- Significant changes are made in the supply chain, including offboarding major suppliers or vendors, or shifts in procurement strategies that may impact the security of the supply chain; or
- A large-scale technological change is made, including the adoption of new systems or technologies, migrating to a new information technology infrastructure, or significantly changing the information technology architecture.

Further, in their FCC Form 481 filings following each subsequent support year, carriers shall certify that they have maintained their plans, whether they have submitted modifications in the prior year, and the date any modifications were submitted.³²² At any point during the support term, if an Enhanced A-CAM carrier does not have in place operational cybersecurity and supply chain risk management plans meeting the Commission's requirements, we direct the Bureau to withhold 25% of the Enhanced A-CAM carrier's support until the Enhanced A-CAM carrier is able to come into compliance.³²³ The requirements we adopt here will improve the cybersecurity of the nation's broadband networks and protect consumers from online risks such as fraud, theft, and ransomware that can be mitigated or eliminated through the implementation of accepted security measures.³²⁴

- 113. We also take steps to mitigate concerns that development and implementation of cybersecurity plans are expensive and time consuming particularly for eligible carriers.³²⁵ We afford carriers flexibility to include standards and controls in their cybersecurity management plans that are reasonably tailored to their business needs. We believe that implementation of these approaches would facilitate the nation's cybersecurity goals.
- 114. Our approach will also likely reduce compliance costs by allowing carriers that have already implemented the NIST Framework for Improving Critical Infrastructure Cybersecurity to comply with this requirement without redoing their plan so long as they implement an established set of cybersecurity best practices. To further mitigate costs for small providers, as suggested by NTCA, we encourage Enhanced A-CAM providers to take advantage of existing federal government resources designed to share supply chain security risk information with trusted communications providers and suppliers and facilitate the creation of cybersecurity and supply-chain risk management plans. 326

³²³ 47 CFR § 54.320(c) ("Eligible telecommunications carriers authorized to receive high-cost support that fail to comply with public interest obligations or any other terms and conditions may be subject to further action").

³²² 47 CFR § 54.313.

³²⁴ See CTIA Comments at 5; NTIA Comments at 7-9; NCTA Comments at 29-30; WTA Comments at 12-13.

³²⁵ See, e.g., WTA Comments at 12-13 ("[C]ybersecurity is becoming a more and more expensive operating cost and will increase further if the Commission imposes additional cybersecurity risk management obligations."); NTCA Reply at 19-20 ("The public resources currently available are not tailored to the Commission's funding programs and may be overwhelming to small businesses, and the consultants who specialize in cyber and supply chain risk management may be out of financial reach."); see also ACAM Broadband Coalition Comments at 41.

³²⁶ See NTCA Reply at 19-20; NTIA Comments at 8; see also See FCC Small Business Cyber Planner 2.0, https://www.isao.org/resource-library/government-programs/fcc-small-business-cyber-planner-2-0/ (last visited July 23, 2023); see also Federal Communications Commission, Cybersecurity for Small Businesses, https://www.fcc.gov/communications-business-opportunities/cybersecurity-small-businesses (last visited July 23, 2023); see also Cybersecurity and Infrastructure Security Agency, CISA Cybersecurity Awareness Program Small Business Resources, https://www.cisa.gov/publication/stopthinkconnect-small-business-resources (last visited July 23, 2023); ISAO Standards, National Institute of Standards and Technology (NIST), Planning Tools & Workbooks, https://www.nist.gov/itl/smallbusinesscyber/planning-guides/planning-tools-workbooks (last visited July 23, 2023).

IV. NOTICE OF PROPOSED RULEMAKING

- align them with the current broadband deployment and support environment. The broadband landscape has changed significantly in recent years. Rural consumers expect to receive higher quality and faster broadband service, which they need for work, school, healthcare, and more. To expedite the deployment of broadband, for example, Congress passed the Infrastructure Act and appropriated funds for the BEAD Program and other federal programs to provide grants to pay for deployment. Many states have also instituted broadband deployment funding programs. In other areas, unsubsidized providers have deployed high-speed broadband alternatives. The Commission, meanwhile, maintains its commitment to promote deployment of broadband at evolving levels of service, while seeking to avoid unnecessary duplication of services that would be provided in the absence of high-cost universal service, whether by unsubsidized competitors or through awards made by other programs. Although reforms for legacy mechanisms are needed now, we also explore in the NOI ways that different support mechanisms can continue to provide meaningful support over the longer term once broadband networks have been ubiquitously deployed.
- 116. To address immediate needs, we seek comment on three key areas. First, we seek comment on a variety of reforms to legacy support mechanisms and appropriate funding, so that rate-of-return carriers are subject to a smaller reduction when the budget control mechanism applies. We then seek comment regarding appropriate deployment obligations for carriers receiving CAF BLS when the current deployment term ends this year. Finally, we seek comment regarding methodologies for preventing duplication of support between legacy high-cost universal service support mechanisms and funding provided by other federal and state agencies for the deployment of broadband.

A. Background

- 117. The Commission's high-cost universal service program provides support to deploy and maintain modern telecommunications networks in rural, insular, and other high-cost areas. Rate-of-return local exchange carriers historically set their rates and received high-cost universal service support based on their revenue requirements, i.e., costs, including an authorized rate of return on their investments. Rate-of-return carriers that did not elect A-CAM support or Alaska Plan support, and that are not affiliates of price cap carriers, receive cost-based support pursuant to two "legacy" support mechanisms, high-cost loop support (HCLS) and CAF BLS. Under these mechanisms, the legacy rate-of-return carriers perform cost studies consistent with the Commission's rules contained in part 32 (Uniform System of Accounts), part 64 (allocation of regulated and non-regulated costs), part 36 (Jurisdictional Separations), and part 69 (Access Charges), and receive support based on revenue requirements derived from those cost studies.
- 118. HCLS provides support for voice lines, including voice lines bundled with broadband service, in study areas with an average common line cost per loop in excess of a specified threshold.³³⁰ Because the operation of HCLS shifts cost recovery for the amount of support provided from the intrastate jurisdiction to the interstate jurisdiction, HCLS effectively subsidizes local voice service rates.³³¹ HCLS is subject to a funding cap, indexed to line growth or loss and inflation.³³²

³²⁷ See 47 U.S.C. § 254.

³²⁸ See 47 CFR §§ 54.901-903 (CAF BLS), 54.1301-1310 (HCLS). Some carriers may receive additional HCLS pursuant to the Safety Valve Support mechanism. See 47 CFR § 54.305(I(e).

³²⁹ 47 CFR Parts 32, 36, 64 and 69.

³³⁰ See 47 CFR §§ 54.1301-1310.

³³¹ See id. § 54.1301(a).

- 119. CAF BLS subsidizes carriers with high local loop costs in the interstate jurisdiction for both voice and consumer broadband-only loops (CBOLs).³³³ Initially, CAF BLS (then called Interstate Common Line Support, or ICLS) supported high local loop (i.e., voice) costs by providing rate-of-return carriers with the difference between their interstate common line revenue requirement (i.e., the portion of the local loop costs assigned to the interstate jurisdiction) and their interstate common line end-user revenues, which are limited due to the cap on subscriber line charges (SLCs).³³⁴ In 2016, the Commission expanded ICLS to support CBOLs by including the difference between each carrier's CBOL revenue requirement and an imputed amount of CBOL revenue in the support calculation.³³⁵
- In addition to HCLS and CAF BLS, rate-of-return carriers are eligible to receive Connect America Fund Intercarrier Compensation (CAF ICC) support.³³⁶ The Commission adopted CAF ICC in 2011 as part of a transitional recovery mechanism to facilitate carriers' gradual transition away from intercarrier compensation revenues, by ensuring that end user rate increases were incremental but also limiting support consistent with the Commission's goal of keeping the federal universal service program on a budget.³³⁷ While the Commission established a 2020 sunset date for CAF ICC for price cap carriers, there is no sunset date for rate-of-return carriers. 338 The transitional recovery mechanism allows rate-ofreturn carriers to recover intercarrier compensation revenues reduced due to the intercarrier compensation reforms, up to an amount defined for each year of the transition, which is referred to as "Eligible Recovery."339 A rate-of-return carrier may collect its Eligible Recovery each year from its end users through an Access Recovery Charge (ARC), subject to a number of different per line caps. 340 If the projected ARC revenues do not recover the entire Eligible Recovery amount, the carrier may elect to collect the remainder in CAF ICC support.³⁴¹ The Commission adopted several protections to ensure that end user rates did not become unaffordable, including a \$.50 annual limit on increases to the monthly ARC rate, a \$3.00 maximum monthly ARC for rate-of-return carriers, and a Residential Rate Ceiling that limited regulated residential end-user rates (including state rates, the SLC, and the ARC) to \$30 a

(Continued from previous page)

³³² See id. § 54.1302(a).

³³³ See id. § 54.901.

³³⁴ See id. §§ 54.901, 69.104.

^{335 2016} Rate-of-Return Reform Order, 31 FCC Rcd at 3119-24, paras. 86-94, 3154-57, paras. 181-87.

³³⁶ See 47 CFR § 51.917.

³³⁷ USF/ICC Transformation Order, 26 FCC Rcd at 17956, para. 847.

³³⁸ *Id.* In the Further Notice of Proposed Rulemaking attached to that Order, the Commission sought comment regarding sunset provisions for CAF ICC received by rate-of-return carriers. *Id.* at 18120, para. 1328.

³³⁹ USF/ICC Transformation Order, 26 FCC Rcd at 17956-57, paras. 847, 850. The calculation of a rate-of-return carrier's Eligible Recovery begins with its Base Period Revenue. See 47 CFR § 51.917(b)(7). A rate-of-return carrier's Base Period Revenue is the sum of certain intrastate switched access revenues and net reciprocal compensation revenues received by March 31, 2012, for services provided during Fiscal Year (FY) 2011, and the projected revenue requirement for interstate switched access services that the carrier provided during the 2011-2012 tariff period. See 47 CFR § 51.917(b)(7). The Base Period Revenue for rate-of-return is reduced by five percent in each year of the transition. See 47 CFR § 51.917(b)(3). A rate-of-return LEC's Eligible Recovery is equal to the adjusted Base Period Revenue for the year in question less, for each relevant year of the transition, the sum of (1) projected terminating intrastate switched access revenue; (2) projected interstate switched access revenue; and (3) projected net reciprocal compensation revenue. See 47 CFR § 51.917(d).

³⁴⁰ USF/ICC Transformation Order, 26 FCC Rcd at 17958, para. 852; 47 CFR § 51.917(e); 47 CFR § 51.917(d). Consistent with the principle of bill-and-keep, the Commission concluded that carriers should first look to recovery from their own end users, while adopting safeguards to protect end users from unreasonable or excessive rate increases. USF/ICC Transformation Order, 17957, para. 849.

³⁴¹ USF/ICC Transformation Order, 26 FCC Rcd at 17994-95, para. 918; 47 CFR § 51.917(f).

month.³⁴² The Commission adopted CAF ICC to provide support to incumbent carriers to the extent that their Eligible Recovery exceeded their permitted ARCs.³⁴³

In the USF/ICC Transformation Order, the Commission adopted a \$2 billion annual budget for the high-cost program for rate-of-return carriers, as part of an overall budget for all high-cost mechanisms of \$4.5 billion.³⁴⁴ The Commission found that establishing a budget would "best ensure that [the Commission has] in place 'specific, predictable, and sufficient' funding mechanism to achieve [its] universal service objectives."345 The Commission in 2016 adopted a "self-effectuating mechanism for controlling total support distributed pursuant to HCLS and CAF BLS to stay within the budget for rate-ofreturn carriers."346 The Commission further defined the annual budget for CAF BLS and HCLS at \$2 billion less any CAF ICC received by rate-of-return carriers (excluding rate-of-return affiliates of price cap carriers) and any model-based support for carriers electing A-CAM. 347 The budget control mechanism set a process for reducing HCLS and CAF BLS to target amounts necessary to meet the budget.348 In the 2018 Rate-of-Return Reform Order, the Commission re-set the budget for CAF BLS and HCLS based on the 2018 unconstrained claims on support, plus an additional 7% to accommodate the increased support associated with conversion of lines to broadband-only service (consumer broadband only or CBOL) conversions, and indexed that amount to inflation, removing CAF ICC and A-CAM support from the annual calculation.³⁴⁹ The Commission further modified the budget control mechanism to simplify the process for reducing the targeted amount for HCLS and CAF BLS.³⁵⁰ To apply the budget control mechanism, USAC publishes an analysis of the budget annually on May 1.351 The analysis applies the budget control to set the rate by which HCLS and CAF BLS must be reduced to meet the target budget amount. Further, the analysis attributes CAF BLS to various elements (true-ups for prior periods, current period support for common line costs, current period support for CBOL costs). 352 Carriers may recover the reductions to CAF BLS through increased CBOL rates. 353 Since the Commission last set the budget amount, the Commission on several occasions has waived or otherwise modified the budget control mechanism to negate the mechanism's impact. 354

³⁴² USF/ICC Transformation Order, 26 FCC Rcd at 17958-61, para. 852. For price cap carriers, the ARC was capped at \$2.50.

³⁴³ *Id.* at 17961, para. 853.

³⁴⁴ *Id.* at 17674, 17710-12, 17768, paras. 26, 121-26, 286.

³⁴⁵ *Id.* at 17710, para. 123.

³⁴⁶ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3143, para. 146.

³⁴⁷ *Id.* at 3143-44, para. 149.

³⁴⁸ *Id.* at 3144-46, paras. 150-53.

³⁴⁹ December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11916-24, paras. 72-100.

³⁵⁰ *Id.* at 11929-30, paras. 118-24.

³⁵¹ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3157, para. 187. See also USAC, Budget Control Mechanism, https://www.usac.org/high-cost/resources/rules-orders/budget-control-mechanism/ (last visited July 23, 2023).

³⁵² See 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3145, para. 155.

³⁵³ See 47 CFR § 69.132(c).

³⁵⁴ See Connect America Fund, WC Docket No. 10-90, Order, FCC 23-40 (May 23, 2023) (waiving budget control for July 2023 to June 2024 to avoid 18.4% reduction in support) (2023 Budget Control Waiver Order); Connect America Fund, WC Docket No. 10-90, Order, FCC 22-32 (May 10, 2022) (waiving budget control to avoid 14% reduction in July 2022); 2021 Waiver Order, 36 FCC Rcd 9766 (waiving budget control mechanism to avoid a 8.6% reduction in July 2021).

122. In the 2016 Rate-of-Return Reform Order, the Commission first adopted defined deployment obligations for carriers receiving CAF BLS, except those that had already deployed 10/1 Mbps or faster service to 80% or more of the locations in their study areas, to deploy 10/1 Mbps or faster service to a specified number of previously unserved locations over a five-year term.³⁵⁵ These obligations were determined by dividing a defined percentage of each carrier's forecasted five-year CAF BLS, to be dedicated to serving unserved locations, by a cost-per-location amount.³⁵⁶ Later, in the December 2018 Rate-of-Return Reform Order, the Commission significantly revised the deployment obligations, making them applicable to all CAF BLS carriers, increasing the speed obligation to at least 25/3 Mbps, and restarting the five-year term for deployment.³⁵⁷

B. Discussion

123. We seek comment on needed reforms to legacy support mechanisms, including the budget control mechanism, deployment obligations, and the effect of funding awards for broadband deployment from other federal and state agencies. Considering these issues in a holistic manner will provide the best opportunity for the Commission to achieve its universal service goals. Accordingly, we seek comment on modifications to the budget control mechanism and measures to better target funding to mechanisms that support modern broadband. In doing so, we note that the Commission has, through the Enhanced A-CAM offer above, provided a pathway for legacy carriers to make an enforceable commitment to provide 100/20 Mbps or faster service to all locations in their service areas, and re-set the budget for legacy support to reflect the exit of electing carriers from the pool to which the budget control mechanism applies.³⁵⁸ We seek comment regarding additional reforms to guide support for carriers that remain subject to legacy mechanisms during this next phase of broadband deployment.

1. Updates to CAF BLS and Other Legacy Support Mechanisms and to the Budget

- 124. We first seek comment on adjustments to the budget, and measures that would mitigate the impact of the budget control mechanism when applied. In considering such measures, we seek to balance the requirement to provide support that is sufficient to achieve the Commission's universal service goals, but also provides appropriate incentives for prudent and efficient expenditures. As the Commission has previously recognized, the cost of universal service is ultimately borne by American consumers and businesses. Support that is greater than necessary therefore violates the Commission's obligation to be a good steward of the universal service fund.
- 125. For rate-of-return carriers that receive legacy support, the Commission has attempted to achieve the necessary balance in part through the budget control mechanism, which operates to reduce CAF BLS and HCLS to the budgeted amount. The Commission, however, has repeatedly acted to waive the budget control mechanism, even after the 2018 reforms, to avoid potentially calamitous consequences. Specifically, the Commission waived the budget control mechanism for the 2021-22, 2022-23, and 2023-24 July 1 to June 30 tariff years, in which, to meet the budget, legacy support was forecasted to be reduced by 8.6%, 14%, and 18.4% respectively. While carriers have the ability to make up most

^{355 2016} Rate-of-Return Reform Order, 31 FCC Rcd at 3145-3154, paras. 156-80 & Appx. E.

³⁵⁶ *Id.* at 3149-50, paras. 167-68. Carriers were given an option to elect a methodology for determining the cost-per-location – either an estimate based on the weighted average cost per loop for carriers within a similar group, as sorted by density or based on A-CAM cost estimates. *Id.* at 3150-52, paras. 169-71.

³⁵⁷ December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11924-27, paras. 101-12.

³⁵⁸ An electing carrier would be obligated to provide at least 100/20 Mbps service to all locations in its study area without such service.

³⁵⁹ See USF/ICC Transformation Order, 26 FCC Rcd at 17682-83, para. 57.

³⁶⁰ See id.

reductions to CAF BLS through higher CBOL rates, the progressively larger support reductions would have resulted in unduly excessive CBOL rates.³⁶¹ For example, in the *2023 Budget Control Waiver Order*, the Commission estimated that applying the budget control would require carriers to impute CBOL revenues equivalent to an average monthly CBOL rate of \$73.³⁶² We seek comment below on mitigating the effect of the budget control mechanism through increases to the budget, but also reducing demand for legacy support through other reforms and offsetting increases to the budget through reductions to CAF ICC, which is outside the budget.

- 126. Budget Control Mechanism. We seek comment on the budget for legacy support and methods for reducing support when appropriate in light of the reforms adopted for the Enhanced A-CAM program. Above, as part of the adjustments we make to remove support received by carriers electing Enhanced A-CAM from the legacy budget, we re-set the budget to the level of 2023-24 demand. This reset is consistent with NTCA's proposal to "recalibrate" the budget.
- We seek comment regarding whether other adjustments should be made to the budget control mechanism to better account for ongoing trends. NTCA has further proposed that future savings associated with the election of fixed support by legacy support recipients should accrue to the budget applied to the remaining, non-electing legacy support recipients.³⁶⁵ Under NTCA's proposal, transitional support for Enhanced A-CAM electing carriers begins to phase down after six years and the savings associated with the phasedown would be applied to the legacy support budget. We seek comment on NTCA's proposal for future budget increases.³⁶⁶ Should the budget control mechanism reflect ongoing trends to CBOL conversions? In 2018, the Commission noted that the conversion of voice lines to CBOLs was a driver of increasing support because, for most carriers, CBOLs provided a higher per-line support amount than voice lines. Further, the number of CBOLs continues to grow rapidly: in their 2023-24 forecasts for CAF BLS, carriers forecasted that CBOLs would increase by 18% over 2022-23, even as voice and voice-broadband bundled lines declined by 9%.³⁶⁸ Because CBOLs provide higher perline support than voice lines, the increasing number of CBOL lines remains a significant driver of increases to uncapped CAF BLS. Should the Commission adjust the budget control mechanism to address the high rates of CBOL adoption? Are there other trends the Commission should consider if it modifies the budget control mechanism? How can the budget control mechanism accommodate these trends while also maintaining the budget control mechanism's fundamental purpose of constraining growth in legacy support? Below, we seek comment regarding deployment obligations for locations that

³⁶¹ Under section 69.132(c), legacy support recipients set their monthly CBOL rate at one-twelfth of the annual projected CBOL revenue requirement, "net of the projected [CAF BLS] attributable to consumer broadband-only loops." 47 CFR § 69.132(c). The 2016 Rate-of-Return Reform Order instructs USAC to attribute all CAF BLS reductions first to the projected CBOL category, rather than CAF BLS for prior period true-ups or projected CAF BLS for the common line category. 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3145, para. 155.

³⁶² 2023 Budget Control Waiver Order at 3, para. 8.

³⁶³ See supra section III.B.3.

³⁶⁴ NTCA October 14, 2022 Letter, at 3; NTCA May 26, 2023 Letter.

³⁶⁵ NTCA May 26, 2023 Letter.

³⁶⁶ Our re-set of the legacy budget, above, partially effectuates NTCA's proposal by setting the budget at 2023-24 legacy support levels, but basing the Enhanced A-CAM transition for electing carriers on 2022 claims. The difference between electing carriers' 2023-24 legacy support, uncapped due to the Commission's recent waiver of the budget control mechanism, and their 2022 claims creates additional room, under the budget, for non-electing carriers.

³⁶⁷ 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11921, paras. 90-91.

³⁶⁸ Staff Analysis of Form 508 data. Total lines, including both CBOLs and voice lines, increased by 2%. *Id.*

remain unserved after the BEAD Program process.³⁶⁹ If the Commission concludes that additional deployment obligations should be required, how, if at all, should the Commission assess the impact on the budget control mechanism? Broadband funding from programs established by the Infrastructure Act and other federal programs may have a significant impact on the need for legacy support. Should the Commission revisit the budget or the budget control mechanism after the completion of the BEAD Program process, or after a certain period of deployment commitments have been realized?

- Commission should undertake reforms that would reduce the amount of pre-budget control support. Reducing the amount of CAF BLS and HCLS before the application of the budget control would have a similar effect on total support as applying the budget control, but may result in a more stable and predictable reduction factor when the budget control is applied. For example, we seek comment regarding whether the Commission should increase the amount of end-user revenue imputed to CBOL lines in the CAF BLS calculation. While the CAF BLS calculations initially assume CBOL revenues of \$42 per line per month, the Commission's rules have always anticipated that the application of the budget control mechanism would result in increased CBOL rates. This would mathematically decrease the demand for CAF BLS as reflected in the budget control analysis. This would result in a lower budget reduction factor, even if the budget were held constant.
- 129. Should the Commission increase the CBOL revenue imputation to reflect inflation? For instance, the Commission set the imputed CBOL rate at \$42 in 2016.³⁷¹ If the rate had grown with inflation (as measured by the same rate used to index the budget amount) since that time, it would now be more than \$48.21. Similarly, the Commission partially justified the \$42 per line per month revenue imputation based on the 10/1 Mbps urban rate benchmark, which has increased 17.3% since 2016.³⁷² If the CBOL revenue imputation had grown similarly, it would be \$49.28 per line per month. Many CBOLs provide 25/3 Mbps or faster service. Should we impute the urban rate benchmark for 25/3 Mbps for some fraction of CBOL rates, and similarly the urban rate benchmark for higher speeds? If so, how should the CBOL rate be weighted to reflect the proportions of CBOLs providing different speeds?
- 130. What would be the impact of raising the CBOL revenue imputation on end-user broadband rates? The Commission recognized in 2016 that, because the CBOL encompassed only the local line portion of providing broadband, end-user rates would likely be higher than just the CBOL rate.³⁷³ That said, many carriers do not charge the maximum allowable CBOL rate. We seek comment on the effect raising the CBOL imputation would have on affordability and reasonable comparability of rates. Are there other concerns that the Commission should consider or address with respect to raising the CBOL imputation? Section 69.132(d) of the Commission's rules caps the monthly CBOL charge for A-

³⁶⁹ See infra section IV.B.2.

³⁷⁰ Section 54.901(a)(2)(i) imputes annual CBOL revenues equal to the lesser of \$42 per line per month or the carrier's CBOL revenue requirement. 47 CFR § 54.901(a)(2)(i). Section 69.132(c) sets the allowable CBOL rate at the CBOL revenue requirement, less any projected CAF BLS attributable to CBOLs. 47 CFR § 69.132(c). As a result, when the projected CAF BLS attributable to CBOLs is reduced by the budget control mechanism, the allowable rate is increased. Moreover, when CAF BLS is re-calculated based on actual cost and revenue data for true-up purposes, section 54.901(a)(2)(ii) imputes annual revenue equal to the higher allowable CBOL rate pursuant to section 69.132 per line per month, if it is greater than the amount determined pursuant to paragraph (i), even if the carrier does not charge that rate. 47 CFR § 54.901(a)(2)(ii).

³⁷¹ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3122-23, para. 92.

³⁷² *Id.* (citing 2015 Urban Rate Survey for 10/1 Mbps of \$77.81); 2023 Urban Rate Survey at 3 (10/1 Mbps urban rate benchmark of \$91.30).

³⁷³ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3123-24, para. 92.

CAM and Alaska Plan support recipients at \$42.³⁷⁴ If the Commission increases the CBOL revenue imputation for CAF BLS, should the Commission also raise the cap on CBOLs for A-CAM and Alaska Plan carriers? Are there considerations the Commission should take in account for related to the imputation of CBOLs for carriers serving Tribal lands? For example, we note that the Commission included a Tribal Broadband Factor for the Enhanced A-CAM mechanism we adopt today, as we did for A-CAM II and RDOF.³⁷⁵ Would it be in the public interest to include a similar factor for imputed CBOL revenue?

- 131. *HCLS*. Currently both CAF BLS and HCLS are subject to the budget control mechanism, but only CAF BLS is associated with broadband deployment obligations. Because HCLS is indexed to growth or loss of voice lines (as well as inflation), it is declining as voice lines are converted to CBOLs.³⁷⁶ Even with those declines, however, HCLS is likely to continue for many years as a financial benefit. Should the Commission take steps to reduce HCLS and target a larger share of the legacy support to CAF BLS, with its associated broadband deployment obligations? We seek comment on how HCLS should be phased down, if it concluded it would be appropriate to do so. One possibility would be for the HCLS indexed cap to decline in 10 regular annual increments until it reaches \$0. Would a period longer or shorter than 10 years be better? Are there alternative methods of phasing down HCLS that the Commission should consider?
- 132. *CAF ICC*. Another avenue for increasing the legacy budget amount without further straining the contribution factor would be to shift support from other mechanisms. We seek comment on whether we should increase the budget for legacy carriers to account for reductions in CAF ICC support. At its inception, the budget control mechanism was set by first subtracting the amount of CAF ICC received by rate-of-return carriers (as well as any A-CAM support) from an overall \$2 billion budget.³⁷⁷ In 2018, when the Commission re-set the budget and indexed it to inflation, however, it delinked CAF ICC from the budget for CAF BLS and HCLS.³⁷⁸ What benefits has unlinking CAF ICC from the budget provided? A-CAM and Alaska Plan carriers also receive CAF ICC. Would it be appropriate to link reductions to CAF ICC for those carriers to an increase in the legacy support budget? Is there another appropriate purpose for which reductions in CAF ICC for A-CAM and Alaska Plan carriers should be allocated?
- 133. We also seek comment regarding whether the Commission should adopt measures to accelerate the phase out of CAF ICC for rate-of-return carriers. Unlike CAF BLS, CAF ICC does not have defined broadband deployment obligations.³⁷⁹ If the reductions to CAF ICC were linked to the budget for legacy universal service support, as discussed above, then an accelerated phase out would

³⁷⁴ 47 CFR § 69.132(d).

³⁷⁵ December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11910-12, paras. 55-57; RDOF Order, 35 FCC Rcd at 694, para. 16. In the December 2018 Rate-of-Return Reform Order, the Commission declined to extend the Tribal Broadband Factor to legacy support, finding that it would not be an effective use of universal service resources: "Hypothetically, a carrier receiving high (but permissible) universal service support could receive enough additional support from this proposed factor that it could meet its revenue requirement without any subscribers and could receive more than an additional dollar of support for each additional dollar it spent." December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11911-12, para. 57.

³⁷⁶ 47 CFR §§ 54.1302(a), 54.1303.

³⁷⁷ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3143-44, para. 149.

³⁷⁸ December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11919, para. 85 ("[W]e see no reason going forward why the support amounts for A-CAM, Alaska Plan, and CAF ICC should affect total legacy support.").

³⁷⁹ While there were no defined broadband deployment obligations imposed on CAF ICC recipients, they were required to "extend broadband upon reasonable request." *USF/ICC Transformation Order*, 26 FCC Rcd at 17995, para. 918; *see also id.* at 17740, para. 206 (discussing reasonable request requirements).

increase the portion of universal service support tied to enforceable deployment of modern broadband networks.

- 134. Further, while the Commission recognized, at the time of adoption, that CAF ICC would phase out over a longer period for rate-of-return carriers than for price cap carriers (who have received no CAF ICC since 2020),³⁸⁰ it did not intend the transition to be interminable. Rate-of-return carriers (including A-CAM I and II recipients and carriers subject to the Alaska Plan) received \$351 million in 2022, which is only 11% less than the \$395 million those carriers received at CAF ICC's peak in 2016.³⁸¹
- 135. In the *USF/ICC Transformation FNPRM*, the Commission sought comment regarding whether CAF ICC for rate-of-return carriers should be subjected to a phase-out on a defined schedule.³⁸² It also sought comment on accelerating the phasedown of support the initial five years by decreasing the Eligible Recovery amount at a faster rate than originally adopted by the Commission, which would also have the effect of accelerating CAF ICC reductions.³⁸³ We seek comment regarding whether either of these methods of accelerating CAF ICC reductions, or another method, would be appropriate.
- Finally, we seek comment on whether adjustments should be made to CAF ICC to reflect the growth of CBOLs. In order to avoid an unintentional increase in CAF ICC due to the migration of voice customers to broadband-only service that would "upset the careful balancing of burdens as between end-user ARC charges and [CAF ICC]," the Commission required rate-of-return carriers to impute an amount equal to the ARC charge they assess on voice lines to their CBOLs.³⁸⁴ While the residential ARC—the portion of the Eligible Recovery amount that a carrier may collect from its residential voice subscribers—is capped at \$3.00 per line per month for affordability reasons, it is also subject to the \$30 per month Residential Rate Ceiling, and some carriers therefore charge less than \$3.00 per line per month.³⁸⁵ Broadband-only customers who do not pay an ARC (or most of the other rates included in the Residential Rate Ceiling) because they do not receive voice service, therefore have imputed to them an ARC which, for affordability reasons, in many cases is less than \$3.00, and can be as low as \$0.386 Given that affordability considerations associated with the ARC do not directly apply to broadband-only customers (who do not pay an ARC because they do not receive voice service), would it be reasonable to impute a higher ARC for CBOLs, independent of the ARC charged for voice customers? Should there be any cap on the ARC imputed to broadband-only customers? In 2018, the Commission sought comment on the relationship between CAF ICC and conversions of voice-broadband lines to CBOLs and asked, among other questions, whether there are circumstances in which some portion of revenues from interconnected voice over Internet protocol (VoIP) service should be imputed against CAF ICC support.³⁸⁷ We ask commenters to refresh the record regarding whether interconnected VoIP revenue should be imputed to reduce CAF ICC support. We note that carriers already have the opportunity to

³⁸⁰ *Id.* at 18120, para. 1328.

³⁸¹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report 2021 at 41,Table 3.2 (2021), https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf (showing 2016 CAF ICC for rate-of-return carriers); Federal-State Joint Board on Universal Service, Universal Service Monitoring Report 2022, Updated 2022 High-Cost Claims (showing 2022 CAF ICC for rate-of-return carriers), https://docs.fcc.gov/public/attachments/DOC-392121A1.xlsx.

³⁸² USF/ICC Transformation FNPRM, 26 FCC Rcd at 18120-21, para. 1328.

³⁸³ *Id.* at 18120-21, paras. 1328-29.

³⁸⁴ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3160-61, para. 203.

³⁸⁵ USF/ICC Transformation Order, 26 FCC Rcd at 17991-94, paras. 913-16; 51.917(e)(6).

³⁸⁶ For example, carriers participating in the NECA tariff charge an ARC less than \$3 in 70% of their exchanges, and \$0 in 45% of their exchanges. National Exchange Carrier Association, Inc. Tariff F.C.C. No. 5, Transmittal No. 1665, Attach., CAF ICC TRP (filed June 16, 2022).

³⁸⁷ 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11949, para. 204.

recover the full cost of serving their broadband-only customers through end-user rates and CAF BLS. Should the Commission impute any portion of such revenue to reduce CAF ICC?

We seek comment regarding whether the Commission should, alternatively, reduce 137. Eligible Recovery or base period revenue amounts to reflect the conversion of voice lines to broadbandonly lines. We note that consumer broadband-only loops were not an established category of service at the time the Commission adopted CAF ICC, and the Commission therefore did not consider the implications of consumers substituting broadband-only service for voice and voice-broadband service. Are carriers able to avoid the switched access service costs the ARC and CAF ICC are intended to recover as their customers convert their voice service to broadband-only lines? For example, among the rate-of-return carriers that reported costs for HCLS purposes in all years from 2007 through 2021, the net plant-in-service for Central Office Switching Equipment (Account 2210) has declined from \$963.4 million in 2011, when CAF ICC was adopted, to \$507.1 million in 2016, when CBOLs were adopted, to \$280.1 million in 2021.³⁸⁸ Is the amount of switched access net plant-in-service declining because demand for switched access service is declining and carriers are not replacing depreciated or retired switching plant as quickly as the plant is being depreciated or retired? Is there switched access plant that should be retired because it is no longer used and useful, which would suggest that switching costs should be even lower than reported? Are carriers able to replace switched access plant with cheaper plant in a modern network?

2. Deployment Obligations for CAF BLS Recipients

138. We next seek comment regarding the deployment obligations for rate-of-return carriers receiving CAF BLS. Above, we adopt a voluntary pathway to model-based support for current CAF BLS recipients, pursuant to which the electing carriers would be required to deploy service of at least 100/20 Mbps to all required locations in their study areas. In addition, programs administered by other federal agencies, as well as state programs, have made or will be awarding funding to broadband providers. Notably, the BEAD Program, created by the Infrastructure Act, is expected to begin awarding grants to carriers to provide 100/20 Mbps or faster in unserved or underserved areas (or an enforceable commitment to deploy 100/20 Mbps or faster service). In considering whether to modify the deployment obligations for CAF BLS recipients, we are mindful that, in order to minimize wasteful duplicative funding of broadband deployment, the deployment obligations should take into account the funding being provided by other government agencies, and the associated deployment obligations. In this section, we seek comment regarding updates to our rules to reflect the expected award of funding pursuant to BEAD and other federal programs for areas within the service territories of legacy rate-of-return support recipients. In this section, we seek comment regarding updates to our rules to reflect the expected award of funding

139. CAF BLS recipients currently have defined obligations to deploy broadband with a minimum speed of 25/3 Mbps to a specified number of locations over a five-year term that runs through

³⁹⁰ See BEAD Program NOFO.

³⁸⁸ See NECA Study Results, 2012 Report; NECA Study Results, 2017 Report; NECA Study Results, 2022 Report, https://www.fcc.gov/universal-service-fund-data-neca-study-results (last visited July 23, 2023).

³⁸⁹ See supra section III.

³⁹¹ We note that the Office of Economics and Analytics, in conjunction with the Bureau, recently released the National Broadband Funding Map, which allows users to "identify, search, and filter federal funding programs by the Internet Service Provider receiving funding, the duration timeline, the number of locations included in the project, and the download and upload speeds." *Broadband Funding Map Public Notice*. This funding map will be an essential tool for identifying other sources of federal funding that otherwise may be duplicated by high-cost universal service funds.

2023.³⁹² Under the Commission's rules, a second five-year term, with obligations determined to deploy additional 25/3 Mbps or faster service, as determined by a pre-set formula, will begin January 1, 2024.³⁹³

- 140. We first ask whether we should continue to require deployment obligations for CAF BLS recipients. If we do require deployment obligations, should we increase the obligations to 100/20 Mbps, consistent with the Infrastructure Act and Enhanced A-CAM? Alternatively, should the Commission retain the existing 25/3 Mbps deployment obligations and methodology? If the Commission adopts an obligation to deploy 100/20 Mbps, how should the Commission determine the number of locations to which the carrier must deploy? Now that the Commission has a comprehensive list of locations and served areas from the Fabric and the Broadband Data Collection, should a carrier's buildout obligation correspond with unserved Fabric locations in its study area? Can the existing methodology be updated to determine the amount of 100/20 Mbps deployment that should be required? Currently, the Commission's rules use various statistics to calculate obligations, such as five-year CAF BLS forecasts, density groupings, and average cost per loop for carriers with 95% deployment. We propose to update those inputs to the formula and seek comment on this proposal. We note that CAF BLS carriers are currently prohibited from deploying wireline technology to provide broadband if doing so would cause their high-cost support to exceed the monthly per-line cap on support.³⁹⁴ How should the Commission reflect that prohibition in setting the deployment obligations?
- 141. Next, we note that many locations served by CAF BLS recipients are likely to be eligible for BEAD and other programs. Should the Commission require deployment obligations for CAF BLS carriers that includes areas where they or competitors are subject to deployment obligations pursuant to awards from agencies? Alternatively, should the Commission limit deployment obligations to locations without enforceable commitments to deploy broadband? Under the alternative, what criteria should the Commission use to identify qualifying enforceable commitments? We seek comment on whether we should re-assess or adjust deployment obligations. For example, if the new term for CAF BLS deployment obligations commences in 2025, but another agency makes a qualifying award with enforceable deployment obligations in 2026, how should the Commission adjust the CAF BLS carrier's obligations to reflect that new qualifying award? Should the CAF BLS deployment obligations be revisited mid-term? Alternatively, should obligations set at the beginning of the term continue, unadjusted, even if that results in some obligations that may be duplicative of deployment that results from funding awarded after the initial determination?
- 142. We seek comment on deferring the commencement of the next five-year term, should we find it necessary, by one year, to January 1, 2025. This would enable the Commission to make an initial determination, prior to the commencement of the term, regarding areas for which new CAF BLS deployment obligations would be appropriate. On the other hand, deferring the commencement of the next term until 2025 may further delay deployment of broadband in areas that currently lack high-quality broadband. Are there other benefits or disadvantages to deferring the commencement of the next term of deployment obligations? Deferring the next term of deployment obligations would not, in itself, affect support for legacy support recipients.

3. Adjustments to Support to Reflect Funding from Other Federal and State Programs

143. We seek comment regarding measures to prevent duplication of support where a service provider other than the legacy rate-of-return carrier is awarded funding for broadband deployment. We note that section 54.319 of the Commission's rules already eliminates CAF BLS in areas served by an unsubsidized competitor. We seek comment regarding whether we should similarly eliminate CAF BLS

³⁹² December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11925-27, paras. 104-12; 47 CFR § 54.308.

³⁹³ See 47 CFR § 54.308(a)(2)(iv).

³⁹⁴ *Id.* § 54.308(a)(2)(iii).

support in areas for which competitors have been awarded funding to provide broadband service.³⁹⁵ Under section 54.319, a rate-of-return carrier loses CAF BLS for any census blocks in which an unsubsidized competitor, or a combination of unsubsidized competitors, provides qualifying service to at least 85 percent of the residential locations.³⁹⁶ Would it be appropriate to simply extend that standard to include locations served by competitors subject to awards made by federal or state agencies? Is competitive service to "at least 85 percent of residential locations in a census block" still the appropriate standard for disallowing legacy support for the incumbent carrier? Is there a different geographic area, including sets of locations below the census block level, that should be considered? Or is the census block the smallest unit for which the removal of support due to competition should be applied?

- 144. We seek comment regarding what criteria should be used to determine a qualifying service. Section 54.319(d) defines qualifying service as "voice and broadband service meeting the public interest obligations in section 54.308(a)(2)." If an award by another agency does not require voice service to be provided, should it nonetheless be treated as qualifying service? Section 54.308(a)(2) prescribes the broadband deployment requirements for CAF BLS recipients, and currently requires 25/3 Mbps service. If the Commission does not modify the speed associated with the deployment obligation, should section 54.319 instead require a competitor's provision of or commitment to provide 100/20 Mbps or faster service as a condition of applying section 54.319?
- We seek comment regarding how to reduce legacy support for areas that are served by an unsubsidized competitor or subject to a qualifying enforceable commitment to deploy broadband. Given the shared nature of the costs incurred by rate-of-return carriers and the long-established methods of recording costs pursuant to Part 32, we do not believe it is feasible to calculate CAF BLS only for specific areas within a study area, while excluding other parts of the study area. Instead, we tentatively conclude that support should be calculated for the entire study area, then "disaggregated" to various areas using some allocation method. We seek comment regarding this tentative conclusion. Under section 54.319, when census blocks have been determined to be served by an unsubsidized competitor, the CAF BLS recipient is permitted to elect a disaggregation methodology from among three methods identified in the 2016 Rate-of-Return Reform Order: (1) based on the relative density of competitive and non-competitive areas; (2) based on the ratio of competitive to non-competitive square miles in a study area; or (3) based on the ratio of calculated A-CAM support for competitive areas to total study area support.³⁹⁹ We seek comment regarding whether these methods are appropriate for continued use in general, and specifically for the purpose of disallowing support where a competitor has an obligation to deploy pursuant to a funding award. Should any of these methodologies be discontinued or revised? Even under this disaggregation process, a rate-of-return carrier might have an incentive to continue incurring deployment expenses to serve the competitive areas because those costs could not be excluded from its cost study and therefore would still be incorporated in the CAF BLS calculation. Indeed, the disaggregation methods assume that the costs of service are distributed across both competitive and non-competitive areas. Are there alternative methods for disaggregating CAF BLS between competitor-served or -obligated areas and non-competitive areas?
- 146. We seek comment regarding the timing of any support reductions associated with qualifying funding to competitors. Section 54.319 sets forth schedules for phased reductions where unsubsidized competitors provide service. 400 Are phased reductions in support also appropriate where a

³⁹⁵ *Id.* § 54.319.

³⁹⁶ *Id.* § 54.319(d).

³⁹⁷ *Id*.

³⁹⁸ *Id.* § 54.308(a)(2).

³⁹⁹ 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3139-42, paras. 138-45.

⁴⁰⁰ 47 CFR § 54.319(f), (g).

competitor has received a qualifying award? When should the reductions, whether a graduated phase-down or flash-cut elimination of support, occur? When a qualifying award is identified by Bureau review? We note that there may be cases where, due to default or other unforeseen issues, the required deployment is never made by the competitor. Would it therefore be better to eliminate support for the rate-of-return carrier only when the required competitive deployment is made?

- We seek comment regarding the process for making the determinations that a qualifying award has been made to a competitor. Pursuant to section 54.319(h), the Bureau is instructed to update its analysis of competitive overlap by unsubsidized competitors every seven years. 401 In the 2016 Rate-of-Return Reform Order, the Commission adopted a challenge process to be conducted for determining which census blocks are competitively served. 402 We seek comment regarding updating this process generally and regarding changes necessary to address areas being served by competitors receiving qualifying awards. We note that the process as adopted relies on deployment data provided on FCC Form 477.403 Deployment data is now collected pursuant to the Broadband Data Collection (and depicted on the National Broadband Map) process, and federal funding data is collected pursuant the National Broadband Funding Map process. Can the challenge process described in the 2016 Rate-of-Return Reform Order be improved or simplified as a result of these recent data initiatives? Because the National Broadband Map and the National Broadband Funding Map will provide location-specific service data, would the Bureau be able to determine whether the 85 percent threshold has been met without first publishing a preliminary list of competitors serving census blocks and collecting certifications from unsubsidized competitors? While we expect the National Broadband Funding Map data to include information regarding some awards, it may not be complete and may not, for example, include all awards made by state agencies. Should the Bureau adopt a process for collecting such data, permitting competitors that received awards and awarding agencies to identify census blocks for which qualifying awards have been made? Alternatively, if reductions to support are triggered only by actual deployment by the competitor receiving a qualifying award, should we rely on the National Broadband Map to determine the areas in which legacy support should be discontinued?
- 148. We seek comment regarding how often a review should be conducted. The current rule requires a review every seven years. 404 Is this an appropriate schedule for review? Alternatively, should the Bureau conduct its review every five years, prior to the development of new deployment obligations for CAF BLS recipients? Or should a review be conducted each time a new versions of the National Broadband Map or the National Broadband Funding Map are released? Is there some other period the Commission should consider?
- 149. Finally, we note that section 54.319 only reduces the amount of CAF BLS received by rate-of-return carriers. 405 Should it be extended to reduce HCLS or CAF ICC?
- 150. Support Where the Rate-of-Return Carrier Receives Grants for Deployment. We next seek comment regarding the treatment of legacy support in areas where the incumbent rate-of-return carrier receives a grant for deployment from another federal or state agency.

⁴⁰¹ *Id.* § 54.319(h). Because the Commission's fixed broadband deployment data was until recently only collected at the census block level, the Commission had difficulties implementing this process without inadvertently eliminating support for unserved locations. *See* FCC, *Fixed Broadband Deployment Data from FCC Form 477*, at https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477 (last visited July 23, 2023). As noted, deployment data is now collected pursuant to the Broadband Data Collection process on a location basis.

⁴⁰² 2016 Rate-of-Return Order, 31 FCC Rcd at 3133-34, paras. 121-24.

⁴⁰³ *Id.* at 3134, para. 123.

⁴⁰⁴ 47 CFR § 54.319(h).

⁴⁰⁵ *Id.* § 54.319(e).

- 151. Under the Commission's rules, rate-of-return carriers treat grants as capital contributions, which must be excluded from their Part 32 property accounts. The grants are therefore excluded from the capital costs on which CAF BLS and HCLS are based, preventing double-recovery of investment paid for with grants. We seek comment regarding whether further safeguards are necessary to ensure compliance with our existing rules. For example, should USAC be required to collect information regarding grants received by legacy support recipient on CAF BLS-related forms, or in annual compliance filings?
- 152. We also seek comment regarding whether further measures should be adopted to address receipt of grants by recipients of legacy support. We note that many operating expenses are allocated among services based on relative amounts of capital (or, "plant-in-service") in various cost categories. Might the exclusion of large amounts of plant associated with grants result in distortions in the allocation of expenses? For example, if a carrier receives a grant to deploy middle mile facilities and excludes that property from its cost study in accordance with Part 32, relatively more operating expenses would be allocated to local loop, and therefore recoverable through CAF BLS and HCLS, than would be recoverable if the carrier had financed the facilities through debt or equity. Conversely, a carrier receiving grants to deploy broadband-capable end-user lines may receive less support because the operating expenses that would otherwise be associated with the common line or CBOLs would be allocated to other cost categories. Is this issue likely to be significant, requiring further attention? If the Commission should address this issue, how would it do so?

4. Digital Equity

153. The Commission, as part of its continuing effort to advance digital equity for all,⁴⁰⁹ including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, invites comment on any equity-related considerations⁴¹⁰ and benefits (if any) that may be associated with the proposals and issues discussed herein. Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission's relevant legal authority.

V. NOTICE OF INQUIRY

154. This Notice of Inquiry (NOI) seeks to build a record to help the Commission explore methods to ensure universally affordable and available fixed broadband services into the future, in light of section 254(c)(1)'s definition of universal service as an "evolving level of . . . service, taking into account

⁴⁰⁶ *Id.* § 32.2000(a)(2).

⁴⁰⁷ See 47 CFR Parts 36, 54, and 69.

⁴⁰⁸ See 47 CFR § 36.310(b).

⁴⁰⁹ Section 1 of the Communications Act of 1934 as amended provides that the FCC "regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex." 47 U.S.C. § 151.

⁴¹⁰ The term "equity" is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *See* Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021).

advances in telecommunications and information technologies and services."411 We seek comment on whether and how the Commission should modify its USF high-cost support program considering the anticipated deployment in most high-cost areas of robust, scalable, next-generation broadband networks offering a minimum of 100/20 Mbps service made possible through Commission programs, programs created by the Infrastructure Act, and other state and federal subsidy programs. In the past, the high-cost support program largely sought to incrementally upgrade deployed broadband network speeds in highcost areas. In areas where robust scalable networks such as fiber are deployed, however, future speed upgrades may be relatively low cost. Our traditional approach, therefore, may no longer be well-suited to a changed broadband landscape. In the Future of USF Report, the Commission stated in such landscape, it "could consider the creation of a process to support operating costs that are not recoverable from revenues earned when prices are set at just, reasonable, and affordable levels and from other sources of income, e.g., governmental grants."412 This NOI explores several options for how this could be accomplished, including through cost modeling, business case analysis, and competitive mechanisms. In addition, given that broadband adoption rates in rural areas still lag considerably behind those in urban areas, we explore whether the high-cost program's focus should be redirected towards a goal of universal broadband adoption and affordability. 413 We seek comment on these approaches and invite comment on other approaches for how best to further the Commission's universal service goals.

A. Background

155. As discussed above, the Infrastructure Act included a federal investment of approximately \$65 billion for broadband deployment and affordability. 414 Of this \$65 billion, \$42.45

⁴¹¹ At this time, we decline to consider whether planned high-cost programs designed to provide additional support for deployment, such as the Rural Digital Opportunity Fund (RDOF) Phase II program, will remain necessary after all deployment commitments under BEAD and/or other Infrastructure Act programs are made. See Future of USF Report at 691, para. 9 (explaining that the RDOF Phase II Auction would target census blocks that are only partially served, as determined "through the Digital Opportunity Data Collection, or suitable alternative data source" and census blocks not awarded support in the RDOF Phase I Auction) (quoting RDOF Order, 35 FCC Rcd at 691, para. 9). Rather than focusing this NOI on the needs of areas that may still lack broadband service meeting minimum speed and latency standards after Infrastructure Act resources are allocated, this NOI explores issues relating to the sustainability of such service in high-cost areas over the longer term. As indicated in the Future of USF Report, however, we will initiate further inquiry or a rulemaking if we determine that USF support is still needed to efficiently bring broadband service to unserved or underserved areas. See Future of USF Report at 28, para. 52.

⁴¹² See Future of USF Report at 22, para. 42.

⁴¹³ See Industry Analysis Division, Office of Economics & Analytics, Internet Access Services: Status as of June 30, 2019 at Figure 49 (2022), https://www.fcc.gov/document/oea-releases-data-internet-access-services-june-30-2019 (last visited July 23, 2023) (Internet Access Services Report); Emily A. Vogels, Some Digital Divides Persist Between Rural, Urban, Suburban America (2021), https://www.pewresearch.org/short-reads/2021/08/19/some-digital-divides-persist-between-rural-urban-and-suburban-america/ (last visited July 23, 2023) (explaining that the results of a Pew Research Center study in 2021 indicates that approximately 72% of consumers in rural areas have a broadband internet connection at home but continue to have adoption rates that lag behind those in suburban areas). But cf. Mike Conlow, Substack, Comparing broadband access to adoption in urban, suburban, and rural America (2023), https://www.benton.org/headlines/comparing-broadband-access-adoption-urban-suburban-and-rural-america (last visited July 23, 2023) (based on new FCC maps that measure broadband access and new American Community Survey data that measure adoption, "the high adoption rate [in rural areas] relative to access, 59% adoption against 64% access, suggests that the currently unserved and unserved are eager for access and will have a high take rate," in comparison to that in urban areas, where the adoption rate relative to access is 73% adoption against 98.5% access).

⁴¹⁴ The Infrastructure Act allocates \$42.45 billion to the Broadband Equity, Access, and Deployment (BEAD) Program, Infrastructure Act §§ 60101-105; \$14.2 billion for an Affordable Connectivity Program, *id.* §§ 60501-506, which replaces the Commission's existing Emergency Broadband Benefit Program; \$2.75 billion for the Digital (continued....)

billion is allocated to the BEAD Program.⁴¹⁵ BEAD funding, which nearly equals the Commission's universal service high-cost support disbursements from 2011 to 2020,⁴¹⁶ is intended to kick-start⁴¹⁷ the deployment of networks capable of offering reliable service at 100/20 Mbps or more at a latency of 100 milliseconds or less to locations that do not already receive such service.⁴¹⁸ In addition to BEAD, there are several other federal and state programs supporting broadband deployment.⁴¹⁹

156. In the Infrastructure Act, Congress directed the Commission to submit to Congress "a report on the options of the Commission for improving its effectiveness in achieving the universal service goals for broadband in light of this Act and the amendments made by this Act, and other legislation that addresses those goals." In the *Future of USF Report*, adopted on August 12, 2022, and with respect to fixed broadband services, we recommended that the Commission "consider the future support needs of networks serving high-cost and other hard to serve areas," and "explore and develop strategies to ensure that consumers have continuing access to advanced telecommunications services in high-cost areas that are reasonably comparable to that offered in urban areas at reasonably comparable prices." The *Future*

⁴¹⁵ Infrastructure Act § 60102(b)(2).

⁴¹⁶ The high-cost program disbursed \$49.9 billion from 2011 to 2021. *See Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, WC Docket Nos. 02-6 et al., Universal Service Monitoring Report, at 23, Table 1.10, Universal Service Disbursements 2001-2022, https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

^{417 &}quot;Kick-start" capital funding refers to upfront funding for the deployment of long-lived capital investments.

⁴¹⁸ See BEAD Program NOFO at 5 (explaining that the BEAD program's principle focus is supporting the deployment of service to unserved and underserved locations).

⁴¹⁹ Federal broadband grants available through the American Rescue Plan Act of 2021 and the Infrastructure Act, among others, will invest billions more in support of broadband development and services. American Rescue Plan Act § 9901(a); Infrastructure Act § 60102(b)(2); Capital Projects Fund, U.S. Dept. of Treasury at https://home.treasury.gov/policyissues/coronavirus/ assistance-for-state-local-and-tribal-governments/capital-projects-fund (last visited July 23, 2023); *Fact Sheet:*

Biden-Harris Administration Announces Over \$25 Billion in American Rescue Plan Funding to Help Ensure Every American Has Access to High Speed, Affordable Internet, June 7, 2022, https://www.whitehouse.gov/briefingroom/statements-releases/2022/06/07/fact-sheet-biden-harris-administration-announces-over-25-billion-in-americanrescue-plan-funding-to-help-ensure-every-american-has-access-to-high-speed-affordable-internet/. For a summary of certain federal programs supporting broadband services, see Broadband USA, Federal Funding, https://broadbandusa.ntia.doc.gov/resources/federal/federal-funding (last visited July 23, 2023). For information about state programs supporting broadband deployment and services, see The Pew Charitable Trusts, Issue Brief: How State Grants Support Broadband Deployment (Dec. 14, 2021, as updated Dec. 23, 2021), https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2021/12/how-state-grants-support-broadbanddeployment (last visited July 23, 2023); The Pew Charitable Trusts, How States are Expanding Broadband Access Report at 22-27 (2020), https://www.pewtrusts.org/-/media/assets/2020/03/broadband_report0320_final.pdf (describing grant programs provided in Colorado, Minnesota Tennessee, Virginia, and Wisconsin supporting broadband deployment and services); see generally A. Read and L. Gong, Which States Have Dedicated Broadband Offices, Task Forces, Agencies, or Funds? (2021), https://www.pewtrusts.org/en/research-andanalysis/articles/2021/06/28/ which-states-have-dedicated-broadband-offices-task-forces-agencies-or-funds (last visited July 23, 2023).

⁴²⁰ Infrastructure Act § 60104(c).

⁴²¹ Future of USF Report at 22, para. 8.

of USF Report also recommended initiating a proceeding to "evaluate the funding needs of existing and future providers that have already deployed high-speed broadband networks and consider the creation of new support processes." Initiating such a proceeding allows us to further assess the "role of universal service in a post-Infrastructure Act national broadband landscape, consistent with the goals," universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States, adopted in the report. 423

- advancement of universal service on several principles, including that "[q]uality services shall be available at just, reasonable, and affordable rates;" that "[a]ccess to advanced telecommunications and information services should be provided in all regions of the Nation," and that there "should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service." Section 254(e) provides that any funding provided to ETCs shall be "explicit and sufficient to achieve the purposes of this section," and limits ETC use of such funds to "the provision, maintenance, and upgrading of facilities and services for which the support is intended." Within this framework, the Commission must devise universal service support mechanisms that carefully weigh the enumerated principles in section 254 and that "strike an appropriate balance between the interests of consumers and industry." Since 2011, the Commission has created mechanisms that are designed to ensure that providers deploying networks receive "no more support than is necessary" and that "rate-of-return carriers have sufficient incentives to be prudent and efficient in their expenditures, and in particular their operating expenses." 127
- 158. The Commission's current model-based and auction-based high-cost programs provide incentives to invest in broadband deployment in high-cost areas by providing fixed annual support that,

⁴²² *Id.* We limit considerations in this NOI to fixed services. We note that the *Future of USF Report* recognized the importance of the new mobile broadband deployment maps "that will provide the most granular and standardized mobile deployment maps ever developed," and recommended that the "Commission proceed with providing additional support for mobile broadband through a competitive process but only after the completion of these maps that will provide a better understanding of mobile coverage." *Id.* at 29, para. 53; *see* Broadband DATA Act, 47 U.S.C. § 642 (requiring the Commission to, inter alia, develop and adopt the technical requirements to implement the mobile challenge, verification, and crowdsourcing processes for mobile broadband service); *Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, Public Notice, DA 22-241 (WTB/OEA/OET Mar. 9, 2022). The *Future of USF Report* also recommended that the Commission "include as part of its long-term plans, an evaluation of the impact of the BEAD Program and other federal and state broadband infrastructure investments discussed in this report on future mobile deployments." *See Future of USF Report* at 29, para. 54. Accordingly, we intend to evaluate the continuing support needs of mobile wireless carriers at a future point in time, once the Commission can more fully assess the availability and types of service offerings in high-cost areas.

⁴²³ *Future of USF Report*, at 6, 13, paras. 12, 27.

⁴²⁴ See 47 U.S.C. § 254(b).

⁴²⁵ *Id.* § 254(e).

⁴²⁶ See AT&T v. FCC, 886 F.3d 1236, 1251 (D.C. Cir. 2018) (citations omitted).

⁴²⁷ See USF/ICC Transformation Order, 26 FCC Rcd at 17741-47, paras. 210-26 (adopting "a framework for ensuring that companies do not receive more support than necessary to serve their communities" consisting of "benchmarks for prudent levels of capital and operating costs"); 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3091, para. 6 ("One of the core principles of reform since 2011 has been to ensure that support is provided in the most efficient manner possible, recognizing that ultimately American consumers and businesses pay for the universal service fund (USF). We continue to move forward with our efforts to ensure that companies do not receive more support than is necessary and that rate of return carriers have sufficient incentive to be prudent and efficient in their expenditures, and in particular operating expenses."); see also Alenco Comm'ns, Inc. v. FCC, 201 F.3d 608, 620-21 (5th Cir. 2000) ("The agency'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.").

when added to expected revenues, is intended to allow for the recovery of costs associated with efficient network operations and replacement of depreciated equipment. To provide certainty and sufficient investment incentives to subsidy recipients, the Commission provides this support over a set term. The Commission conditions the receipt of high-cost support on the recipient's satisfaction of certain deployment and public interest requirements. The Commission's longstanding objective has been to base high-cost support on a carrier's forward-looking, efficient costs.

B. Discussion

159. The Commission's focus since the *USF/ICC Transformation Order* in 2011 has been on supporting the deployment of new, robust networks and their associated operational costs for a limited term. However, providers in high-cost areas that already operate such fully deployed networks might not have a business case for continuing to operate those networks and provide services absent ongoing programmatic support that will augment existing revenues. Similarly, providers that receive support under programs such as BEAD that are designed to kick-start network deployment without providing

⁴²⁸ CAM Platform Order, 28 FCC Rcd at 5307, para. 11 (explaining that the CAM platform will allow the Bureau to estimate the full average monthly cost of operating and maintaining an efficient, modern network, including all capital and operating expenses associated with a modern network); Wireline Competition Bureau Seeks Comment on Model Design and Data Inputs for Phase II of the Connect America Fund, WC Docket Nos. 10-90, 05-337, Public Notice, 27 FCC Rcd 6147, 6157, para. 31 n.36 (WCB 2012) (stating that an "efficient provider" for purposes of modeling forward-looking costs "means one that deploys a network that provides speed and capacity that scale easily and which provides the greatest potential for end-user revenue, including data, voice and video over the longrun"). The CAF-BLS support program is more complex, allowing support recipients to recover certain embedded costs calculated on an annual basis. See generally 47 CFR Part 32.

⁴²⁹ See, e.g., 47 CFR § 54.804(b) (indicating the RDOF support term); *id.* § 54.310(b) (indicating CAF Phase II auction support term); *id.* § 54.311(a)(1),(c) (indicating start and end date of support terms are equal for A-CAM I, Revised A-CAM, and A-CAM II).

⁴³⁰ See, e.g., id. § 54.308(a) (describing A-CAM I and Revised A-CAM recipients' defined deployment obligations and public interest requirements); id. § 54.308(c) (stating that the Alaska Plan recipients' specific broadband deployment and speed obligations shall be governed by the terms of their approved performance plans); id. at § 54.1506 (describing PR/USVI Stage 2 support recipients' deployment obligations); id. § 54.802(c) (describing RDOF support recipients' defined deployment obligations). See First Performance Measures Order, 33 FCC Rcd at 6530-33, paras. 56-67 (requiring carriers subject to public interest service requirements to annually test and report the speed and latency of a random sample of locations).

⁴³¹ December 2018 Rate-of-Return Reform Order, 33 FCC Rcd at 11903, para. 31 ("Expanding the number of carriers receiving model-based support will advance the Commission's longstanding objective to providehigh-cost support based on a carrier's forward-looking, efficient costs and will help spur additional broadband deployment in rural areas."); USF/ICC Transformation Order, 26 FCC Rcd at 17768, para. 286 (indicating that while the Commission would extend parts of the cost-based legacy system as reformed, it was also "giving notice that we intend to transition to more incentive-based regulation in the near future"); id. at 17673, para. 20 (indicating that the CAF, which relies on "incentive-based, market-driven policies," is intended to ultimately replace all existing high-cost support mechanisms); Universal Service First Report and Order, 12 FCC Rcd at 8899, para. 224 (explaining that "the proper measure of cost for determining the level of universal service support is the forward-looking economic cost of constructing and operating the network facilities and functions used to provide the supported services").

⁴³² See USF/ICC Transformation Order, 26 FCC Rcd at 17727, para. 166 ("Specifically, we adopt the following methodology for providing CAF support in price cap areas. First, the Commission will model forward-looking costs to estimate the cost of deploying broadband-capable networks in high-cost areas and identify at a granular level the areas where support will be available.").

⁴³³ Several commenters in the *Future of USF* proceeding asserted providers will need this support but did not provide evidence of such need. *See Future of USF Report* at 23-24, para. 44 & n.168.

support for sustained operations may face similar circumstances. 434 Depending on the scope of this problem, lack of funding could threaten the sustainability of these full-service networks in high-cost areas. Accordingly, with this NOI, we will assess the scope of this problem and explore whether we should adopt a mechanism or process to address, including soliciting information about the best methods for determining the support needed by carriers to efficiently maintain these full-service networks. We seek comment on appropriate methods of measuring and evaluating the future support needs of carriers with full-service networks, particularly where providers have received significant upfront federal and/or state funding.⁴³⁵ We seek comment on whether differences in how providers were previously subsidized should be considered to avoid paying for the same costs twice, and if so, how.

We expect this effort will require, at a minimum, determining which networks should be considered full service and thus, potentially eligible for sustainability support, and which full-service networks should be deemed ineligible because their operations are economically viable independent of such support. Further, to assess economic viability of continued operations, we will need to determine capital costs (including the cost of debt and equity), operating costs, and the estimated revenues from network over time, which in turn requires estimates of penetration rates. In estimating expected costs and revenues, we should consider any current or expected support and may need to consider expected inflation rates. In developing a methodology for determining the need for ongoing support for operating expenses, we must also consider how often to recalculate the need for support and how we can ensure that other past, current, and future support are properly considered. We seek comment on this approach and these considerations against the backdrop of the universal service goals adopted in the Future of USF Report.436

1. **Definition of a "Full-Service Network"**

- Within its high-cost programs, the Commission has measured successful deployment based on meeting and sustaining certain public interest obligations, including specific service speeds and latency. 437 We expect a support program designed to sustain operations would meet consumers' service and pricing needs. We seek comment on what those needs should be. How should we define a fullservice network, meaning a network potentially eligible for sustainability support? Should we factor in network performance standards, if any, that the provider was required to meet pursuant to the terms and conditions of other federal or state funding, and if so, how? Are there other requirements that we should adopt as part of its definition of a full-service network?
- In addition, to what extent must a full-service network deploy service to residential and business locations within an area? Do we need to factor in businesses that would take mass market service versus ones expected to subscribe to an enterprise service? For example, should we require, as a prerequisite to any funding, that the network can turn on service in a set number of days, e.g., 7-10 days, to each broadband serviceable location identified in the Fabric, which serves as the foundation for availability data in the National Broadband Map? Should the Commission factor in the deployment obligations under other federal or state programs, and if so, how? Should the Commission require a

second (Mbps) upload. RDOF Order, 35 FCC Rcd at 702-703, para. 31.

⁴³⁷ For example, RDOF offers funding for service at one Gigabit per second (Gbps) download and 500 Megabit per

⁴³⁴ NTIA explains that while BEAD will subsidize capital expenses, one of the "key cost considerations for providers are their remaining [capital costs] (match amount) and ongoing [operating expenses] once the network is operational." NTIA, Economics of Broadband Networks: an Overview, at 3 (2022), https://broadbandusa.ntia. doc.gov/sites/default/files/202203/Economics%20of%20Broadband%20Networks%20PDF.pdf. In addition, NTIA notes that when reviewing BEAD applications, one consideration should be whether planned revenues are sufficient to ensure economic viability. See id. at 4.

⁴³⁵ See, e.g., Paul de Sa, Broadband Financials: A Practical Primer (May 3, 2022), https://www.benton.org/ headlines/broadband-financials-practical-primer (Broadband Primer).

⁴³⁶ See Future of USF Report at 6, para. 12.

provider claiming to operate a full-service network to show that it can extend service to any new locations within a defined period? What kinds of information would we ask such providers to submit to make these showings?

163. We also seek comment on whether the definition of a full-service network should differ for areas outside the contiguous United States or for Tribal lands, and if so, how? How should we define Tribal lands when considering the definition of a full-service network? What unique characteristics of such areas should we consider? Should we evaluate whether, and if so, to what extent, those factors impact the carrier through individualized reporting, or should we presume that these factors generally exist for all carriers serving these areas? For example, the Commission has permitted carriers to use Alaska Plan support to maintain service to existing locations without upgrade if they can demonstrate that they were not able to deploy additional service or upgrade their facilities (usually due to limited access to middle mile facilities). Should we define a full-service network in Alaska or other remote and isolated areas with reference to existing service in those areas? Should there be some minimum deployment requirement or public interest standards?

2. Developing a Support Methodology

- 164. We seek comment on whether we can or should leverage the Commission's existing cost models, or develop a new model, to estimate the monthly costs necessary to sustain a full-service network. If so, what would be the key assumptions about the design of the network and network engineering? For example, the Connect America Cost Model (CAM) assumes a green-field, Internet protocol (IP)-based fiber-to-the-premises (FTTP) network capable of providing both voice-grade access and broadband services. It estimates the terminal value of the network at the end of a five-year term determined by the book value of the assets. Should the Commission use the same assumptions, standards, and attributes when referring to a full-service efficient network? What would be the appropriate topology of this network? What other assumptions, standards, and attributes should the Commission use? For example, what is the appropriate geographic unit for evaluating costs and revenue, e.g., census blocks or individual locations?
- 165. We also seek comment on how we address costs in areas in which locations are served by multiple carriers, but not all locations are served by all carriers. For example, do we need to disaggregate the costs of serving such areas and if so how should we do so? Are there common costs for all locations for a carrier serving an area that must be taken into account even if the carrier is the sole provider for some but not all of the locations in the area?
- 166. Currently, the Commission models the forward-looking operating costs of an efficient network using a range of data sources organized and aligned with relevant cost drivers, i.e., demand and associated capital investments. The model estimates the annualized total cost (including operating costs) of deploying a network using today's technology to all locations within a specified geographic area

⁴³⁸ See Connect America Fund et al., WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139, 10146, para. 18 (2016).

⁴³⁹ See CAM Platform Order, 28 FCC Rcd at 5308-5316, paras. 16-33.

⁴⁴⁰ See id. at 5309, para. 18.

⁴⁴¹ See id.

⁴⁴² See Connect America Cost Model, Model Methodology, Version 4.2, at 15, https://transition.fcc.gov/wcb/cAM%20v.4.2%20Methodology.pdf (CAM Methodology Summary).

⁴⁴³ CAM estimates the costs at a census block level, measures the costs associated with a complete network (i.e., including both eligible and ineligible census blocks), and then assigns shared costs between the eligible and ineligible census blocks. *See CAM Platform Order*, 28 FCC Rcd at 5317-18, 5318, paras. 37, 40.

⁴⁴⁴ See CAM Inputs Order, 29 FCC Rcd at 4009, para. 99.

less an assumed per-location expected revenue.⁴⁴⁵ When adopting this approach, the Commission specifically rejected a proposed model that would limit support to brownfield development because, while a brownfield model accounts for the cost of initial upgrades to the extent that the existing network is not up to standard, a brownfield model does not account for replacement capital after an initial capital investment is made.⁴⁴⁶ Should the Commission use the same approach here, a modified version of this approach, or a new approach?

- 167. *Inputs*. What inputs should we use to quantify certain operating and capital costs, and what should those costs be, e.g., costs associated with making networks scalable to consumer demands and needs? In developing the CAM, the Commission took steps to account for a range of operating costs by considering, among other things, network operations expenses (both plant specific and plant non-specific, factoring company size and by density), general and administrative costs (including property tax indices by state), selling and marketing costs, and bad debt.⁴⁴⁷ Can this approach be readily adapted to estimate the support necessary to sustain networks that have been full-service? Are there other factors that should be considered when estimating operating costs? Should we adjust the model on a routine basis to account for changes to costs and if so, how often should this be done?
- 168. The CAM uses Annual Charge Factors (ACFs) to capture the cost of capital investments that are used over time, accounting for depreciation, income taxes, and cost of money. 448 The cost of capital is the cost a firm will incur in raising funds in a competitive capital market based on a firm's overall systematic risk, 449 and is generally estimated as a weighted average of the cost of equity and the cost of debt. In order to adopt final values for ACFs, the Commission must make certain assumptions regarding asset depreciation, income taxes, and the cost of money. For example, CAM determines the terminal value of the network based on "book value" calculated as the difference between investment and economic depreciation, which takes into account the economic life of the equipment and infrastructure. 450 To determine a CAM input to capture the cost of money, the Commission used an analytical approach to establish a "zone of reasonableness," and selected an input at the midpoint of that range. 451 What assumptions about each input are relevant here?
- 169. How should a model supporting full-service networks reflect the carrier's composition of capital? Prior models have not recognized carrier-specific mixes of debt and equity financing, instead

⁴⁴⁵ See CAM Platform Order, 28 FCC Rcd at 5320, para. 44.

⁴⁴⁶ See id. at 5313-14, para. 30 & n.56 (rejecting proposed brownfield calculations that excluded certain capital costs and analogizing the exclusion to "paying only for home maintenance and repairs but not a mortgage would not capture the full cost of home ownership").

⁴⁴⁷ CAM Inputs Order, 29 FCC Rcd at 4009-4016, paras. 111-18; CAM Methodology Summary at 26-31.

⁴⁴⁸ *CAM Inputs Order*, 29 FCC Rcd at 4009-12, paras. 99-109. The CAM captures the cost of capital investment used over time by utilizing Annual Charge Factors (ACFs) to determine the capital related to the monthly cost of depreciation, cost of money, and income taxes. *See id.* at 4022, para. 78.

⁴⁴⁹ Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers, WC Docket No. 03-173, Notice of Proposed Rulemaking, 18 FCC Rcd 18945, 18951, para. 13 (2003) (citing Alfred Kahn, The Economics of Regulation, Principles and Institutions, Vol. 1 at 45 (1970)).

⁴⁵⁰ CAM Platform Order, 28 FCC Rcd at 5313, para. 33.

⁴⁵¹ CAM Inputs Order, 29 FCC Rcd at 4011-12, para. 107; Prescribing the Authorized Rate of Return: Analysis of Methods for Establishing Just and Reasonable Rates for Local Exchange Carriers, WC Docket No. 10-90, Staff Report, 28 FCC Rcd 7123 (WCB 2013); Wireline Competition Bureau Seeks Comment on Rate of Return Represcription Staff Report, WC Docket No. 10-90 et al., Public Notice, 28 FCC Rcd 7120, 7121 n.10 (WCB 2013).

reflecting a uniform cost of capital for all carriers subject to a particular model. 452 If we were to adopt a uniform cost of capital, how would we identify that cost and how often should it be reevaluated? Should that evaluation differ, as it does now, between carriers operating in price-cap areas receiving support through the CAM and rate-of-return carriers receiving support through A-CAM? How should we evaluate the impact of other sources of capital (such as federal and state grants)? In determining the cost of capital, does it matter whether different carriers have different debt-equity ratios? If a carrier has chosen a relatively expensive form of financing, should we provide support that validates that choice? Would this approach be consistent with treating carriers equally? Are there circumstances in which using a uniform cost of capital would create problems? Are such circumstances common? Could the waiver process resolve such instances?

- 170. Should capital inputs differ for carriers operating in areas outside the contiguous United States, and if so, how?⁴⁵⁴ For *the CAM*, the Commission incorporated specific factors to generate unique inputs for carriers operating in non-contiguous states and territories (such as the United States Virgin Islands, Puerto Rico, Alaska, and other areas), including those relating to the plant mix, undersea and submarine cable,⁴⁵⁵ terrain methodology,⁴⁵⁶ state-specific inputs,⁴⁵⁷ and company size.⁴⁵⁸ Should these same factors be taken into consideration when developing a model for sustaining full-service networks? Should other factors be taken into consideration?
- 171. Data sources. What objective, up-to-date, and available data sources can we use in the development of this cost model? Alternatively, or in addition to such sources, should we require the submission of accounting and financial information to model costs, revenues, past one-off grants, and similar? Should we require submission of information on specific and approved network plans, to the extent there are any, and associated funding? What other kinds of information should we collect to ensure realistic cost model and revenue estimates? And how often should this information be collected? For example, should it be collected periodically (annually or biennially, etc.) or only as current support arrangements come to their end, or some other way? What are the benefits and costs of different information collection timing choices? What would be the benefits of collecting and consolidating such information to supplement or replace other general industry research? What would be the administrative costs and resources required for completing this process? How could we make use of this information while avoiding the pitfalls of rate-of-return regulation?
- 172. Revenues. How would we model the present value of expected revenues of an efficient full-service network? How should we account for the fact that providers receiving current support must

⁴⁵² CAM Methodology Summary at 29 (stating that the CAM estimates the operational costs and the capital related monthly cost of depreciation, cost of money and income taxes, as developed through the application of levelized annual charge factors applied to the capex that is developed by the model).

⁴⁵³ See CAM Inputs Order, 29 FCC Rcd at 4011-12, para. 107 (setting a uniform cost of money at 8%); 2016 Rate-of-Return Reform Order, 31 FCC Rcd at 3107, para. 51 (setting a uniform cost of money at 9.7% using the same methodology used for the CAM); see id. at 3209-10, paras. 319-20 (adjusting cost of capital for policy considerations unique to rate-of-return carriers).

⁴⁵⁴ When delegating to the Bureau the task of developing a forward-looking cost model, the Commission "direct[ed] the [Bureau] to consider the unique circumstances of [Alaska, Hawaii, Puerto Rico, the U.S. Virgin Islands and Northern Marianas Islands] " *USF/ICC Transformation Order*, 26 FCC Red at 17737, para. 193.

⁴⁵⁵ CAM Inputs Order, 29 FCC Rcd at 4020-23, paras. 129-35.

⁴⁵⁶ *Id.* at 4023-24, paras. 136-39.

⁴⁵⁷ *Id.* at 4024-27, paras. 140-47.

⁴⁵⁸ *Id.* at 4027-28, paras. 148-49.

set prices to mass market customers that are reasonably comparable to urban rates?⁴⁵⁹ For the CAM model, the Commission adopted a funding benchmark that takes into account both assumed expected revenues per subscriber and an assumed subscription rate, ⁴⁶⁰ and the model calculates support for areas where such assumed revenues do not cover costs up to an extremely high cost threshold consistent with the budget.⁴⁶¹ For full-service networks, should we similarly take into consideration the actual take rate (subscribership) of these networks, particularly in and to areas where subscribership is influenced by regional factors such as limited income, mobile populations, and other factors? How would we measure and account for variable investments, and effectiveness, in marketing? Should expected take rates differ when measuring revenue and costs?

- 173. How should we account for revenue received from other federal and state grants that provide support on a one-time basis for deployment or provide continuing support to sustain operations?⁴⁶² Where urban broadband providers are unsubsidized and not subject to meeting a rate benchmarks, urban rates can adjust upwards when costs rise.⁴⁶³ Since rural rates can be set to the urban rate benchmark, could we assume any future rural cost increases could be recovered by accompanying rural price increases? Is there a reason to think that rural costs could rise at rates materially above the rate of increase in urban costs? If so, would the requirement to provide services that are reasonably comparable to urban services in quality and price not allow USF supported providers to fully recover their costs?
- 174. *Updates*. How often should we consider updates to an ongoing support model? Several commenters in the *Future of USF* proceeding asserted that funding should be made available for network improvements responsive to changes in consumer demands. Such changes could require adjustments to the model and/or model inputs. How would the Commission determine when such changes should or must be made? Could this be achieved, consistent with our past practice, by setting service standards and subsidy amounts for a set period, in order to grant providers a degree of certainty while allowing periodic adjustment? What would an appropriate support term be to offer certainty to providers while limiting inefficient payments? Should a support term consider the pace of technological development, changing

⁴⁵⁹ The Commission is required to recognize that "[c]onsumers in all regions of the Nation . . . should have access to telecommunications and information services . . . that are available at rates that are reasonably comparable to rates charged for similar services in urban areas." *USF/ICC Transformation Order*, 26 FCC Rcd at 17708, para. 113. Likewise, recipients of high-cost support that are subject to broadband performance obligations must offer broadband service at rates that are at or below the relevant reasonable comparability benchmark. *See id.* at 17695, para. 86; 47 CFR § 54.313(a)(3); *RDOF Order*, 35 FCC Rcd at 707, para. 42 ("All Rural Digital Opportunity Fund support recipients, like all other high-cost ETCs, will be required to offer standalone voice service and offer voice and broadband services at rates that are reasonably comparable to rates offered in urban areas"). Support recipients must certify that the pricing of the broadband offering they are relying upon to meet their broadband performance obligation is no more than the applicable benchmark as specified in a public notice annually issued by the Wireline Competition Bureau. *Connect America Fund; ETC Annual Reports and Certifications; Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) from Obsolete ILEC Regulatory Obligations that Inhibit Deployment of Next-Generation Networks; WC Docket Nos. 10-90, 14-58, 14-192, Report and Order, 29 FCC Rcd 15645, 15686-87, para. 120 (2014).*

⁴⁶⁰ See CAM Inputs Order, 29 FCC Rcd at 4030-31, para. 157.

⁴⁶¹ See id. at 4035, para. 170.

⁴⁶² See, e.g., Department of Agriculture Community Connect Grant Program, 7 U.S.C. § 903 et seq.; 7 CFR § 1.739 et seq.; Hawaii Revised Statutes § 206r-1 et seq. (establishing Broadband Infrastructure Grant Initiative); N.H. Rev. Stat. §§ 12-O:61- 12-O:63 (establishing Broadband Matching Grant Initiative and Fund).

⁴⁶³ A provider operating without subsidization will exit if it cannot recover operating costs and the costs of capital renewal necessary to continue production.

⁴⁶⁴ See Future of USF Report at 24, para. 44 & n.171.

geographic and demographic conditions, or other factors? Should updates to the model similarly consider such changing circumstances?

- 175. Alternatives to a model. We next ask about other alternatives to a model. There may be certain disadvantages to the model-based approach. For example and based on previous experience, it may take some time, several years, to develop and update the model. In addition, a model makes certain assumptions of uniformity among potential support recipients, including uniform assumptions about cost, particularly given terrain and population characteristics, and uniform penetration and expected revenues. The CAM, as currently designed does not take into consideration other sources of support, such as those from the states or federal agencies. In light of these complications, are there any alternatives to a model that we should consider?
- 176. Given that the adaption of existing models is likely to require significant time and investment, should we prioritize other approaches? Should we adopt an interim plan for providing support while the cost model is developed? For example, as suggested in one publication, the Commission could measure the need for universal service support by requiring applicants for support to answer certain standard financially-oriented questions, the answers to which would then be fed into a standard financial model. This model would take into account potential sources of finance (including the cost of equity and debt and other possible sources of support), the cost of the initial build-out (or initial network capex), the relative amounts of fixed and success-based capex, the penetration rate and changes in the penetration rate over time, and projected revenues. One advantage of this approach is that it can permit us to take into account the individual characteristics of the applicants for support. We seek comment on this approach.
- 177. Since the *USF/ICC Transformation Order*, the Commission has sought to use competitive processes to determine support levels.⁴⁷⁰ We seek comment on whether we should use such competitive mechanisms going forward to assign universal service support obligations and determine support levels, either in the context of determining ongoing operating support or more generally to achieve our universal service goals. Would it be possible to competitively determine support levels following the BEAD Program, and are there areas where competitive mechanisms could not be used? What obligations should apply to winners of support? One approach for using a competitive mechanism would be to change the focus of the high-cost program from the deployment of networks towards the long-standing universal service goals of universal affordability and adoption.⁴⁷¹ The most recent Internet

⁴⁶⁵ In 2011, the Commission directed the Bureau to undertake a public process for the model. *See USF/ICC Transformation Order*, 26 FCC Rcd at 17673, para. 24. The *CAM Inputs Order* was adopted in 2014.

⁴⁶⁶ See CAM Inputs Order, 29 FCC Rcd at 4000-4001, paras. 75-77 (adopting approach where capex input values take into account other factors that affect costs, such as size or type of material, terrain and soil conditions, density of the area, or region of the country); CAM Platform Order, 28 FCC Rcd at 5327-28, paras. 67-68 (adopting regional cost adjustment factors to capture regional cost differences in labor and material costs by three-digit ZIP codes.).

⁴⁶⁷ See CAM Inputs Order, 29 FCC Rcd at 4017-18, 4035-36, paras. 121-23, 170-71 (adopting a funding benchmark that estimates the likely revenues available through reasonable end user rates, taking into account the assumed subscription rate); CAM Platform Order, 28 FCC Rcd at 5327-28, paras. 67-68 (describing CAM's use of uniform input values for various capital costs, with adjustments for regional variations in labor and material costs).

⁴⁶⁸ See generally Broadband Primer.

⁴⁶⁹ *Id.* at 7-23.

⁴⁷⁰ USF/ICC Transformation Order, 26 FCC Rcd at 17725, para. 156 (adopting an approach to providing universal service support in price cap areas through a combination of "a new forward-looking model of the cost of constructing modern multi-purpose networks" and a competitive bidding process (Phase II support)); see generally CAF Phase II Auction Order and/or FNPRM, 31 FCC Rcd 5949; RDOF Order, 35 FCC Rcd 686.

⁴⁷¹ One of the enumerated principles in section 254(b) of the Communication Act that the Commission should take into consideration when adopting support mechanisms is that "[q]uality services should be available at just,

Access Services Report shows that broadband adoption rates in the wealthiest and most dense areas of the country are well above 90 percent, but below 40 percent in some of the least dense and poorest areas of the country. We seek comment on whether and how the USF high-cost program could be reoriented towards closing these substantial digital equity and affordability gaps. Should the Commission consider reorienting its high-cost programs towards closing the adoption and affordability gaps in high-cost areas?

- 178. We also ask about *force majeure* events and whether and how a high-cost program focused on providing ongoing operating support should account for these events. Are there events that providers cannot reasonably anticipate, or insure against, that will materially affect the need for universal service support going forward? Are these location-specific events, or is it possible to accommodate support needed in responses to these events equally across the United States and territories? If the USF were to cover certain unforeseeable costs that a carrier could not reasonably anticipate, such as generally rare weather-related events (e.g., hurricanes, volcanic eruptions, tornados, floods), should we establish and administer a separate funding mechanism? Or would it be simpler to incorporate such costs in the broader universal service program? We also seek information about the role private, commercial or government insurance can play in helping to offset the financial harm caused by these events.
- 179. Area eligibility. We next seek comment on areas and locations eligible to receive support. When would a full service network be deemed or become economically viable without continuing support, and thus become ineligible for support? Consistent with past Commission policy, we expect to preclude support to any overbuilt locations, i.e., locations where an unsubsidized network provider offers broadband services comparable to those in urban areas at comparable prices and seek comment on maintaining this policy going forward.⁴⁷⁴ What parameters should we place around such a restriction? Should we also preclude support to locations or areas where future overbuild is likely to occur? How would we identify these areas? How would we ensure the overbuild rates would remain comparable to urban rates if the subsidized provider were to exit the market? If we do not provide support in areas with an unsubsidized competitor, how would we ensure the overbuild rates would remain comparable to urban rates if the subsidized provider were to exit the market?

3. Setting a Budget and Support Term

180. The Commission has an obligation to limit support to carriers to no more than necessary and to encourage carriers to be prudent and efficient in their expenditures, including operating as well as capital expenses.⁴⁷⁵ First and foremost, the Commission must ensure that its support mechanisms remain

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reasonable, and affordable rates." 47 U.S.C. § 254(b). We note that questions regarding how to promote
affordability and adoption have been raised by the Commission in other contexts, such as in its considerations of
how best to implement anti-discrimination measures. Implementing the Infrastructure Investment and Jobs Act:
Prevention and Elimination of Digital Discrimination, GN Docket No. 22-69, Notice of Proposed Rulemaking, FCC
22-98, at 25, para. 45 (2022).

⁴⁷² See Internet Access Services Report at Figure 49.

⁴⁷³ See Future of USF Report, at 6, para. 12 (adopting the goals of affordability and equitable access to broadband).

⁴⁷⁴ See, e.g., CAF Phase II Auction Order, 31 FCC Rcd at 5968-74, 5974-79, paras. 51-73, 82-90 (excluding from eligibility, areas served by unsubsidized providers offering at least 10/1 Mbps with a minimum usage allowance of 150 GBs at a rate meeting the Commission's reasonable comparability benchmark, with latency not exceeding 100 milliseconds and establishing a challenge process for determining these areas); see also Wireline Competition Bureau Releases List and Map of Eligible Census Blocks for the Connect America Fund Phase II Auction (Auction 903), AU Docket No. 17-182 et al., Public Notice, 32 FCC Rcd 10381 (WCB 2017) (explaining that "[a]s a general matter, census blocks eligible for the Phase II auction include those in price cap study areas where the price cap carriers declined the statewide offers of model-based support").

⁴⁷⁵ See Qwest Comm'ns Int'l Inc. v. FCC, 398 F.3d 1222, 1234 (10th Cir. 2005) (stating that "excessive subsidization arguably may affect the affordability of telecommunications, thus violating the principle in [section] (continued....)

responsive to consumer needs by balancing the need for affordable broadband service against the burden on contributors to the USF. 476 How should we determine a budget for ongoing support to sustain operations of a full-service network operating in high-cost areas while protecting the interests of ratepayers? Can we use a cost model to set a budget or should it use some other means, and if so, what should those means be?

- 181. Further, to ensure that support does not continue for a longer time period than carriers will need such support, we expect that a fixed term for support is necessary to permit the Commission to revisit carriers' support eligibility. A set support term has the advantage of providing firms with good incentives to reduce costs from the start and adds predictability to revenue estimates. Incentives for cost reduction arise because, for the duration of the promised payments, any cost reductions directly increase the provider's profit.⁴⁷⁷ We seek comment on this position.
- 182. How long should the support term be and what data or assumptions should we use to evaluate term length? Should it be based on predictions regarding how quickly consumer demand will change or on routine evaluations of factors that define high-cost areas, such as population density? How should we coordinate the support term and the schedule for updating the model? Should support terms differ based on the probability of unsubsidized competition developing? Should there be automatic triggers for cutting off funding, perhaps with a glide path, if, for example, population reaches a certain density? Should we reserve the right to revisit ongoing commitments in the light of radical technological change? How should we account for the pace of technological development and how that may end up affecting service demand/expectations, while also balancing the effect that would have potentially on support amounts and contributions?⁴⁷⁸

4. Service Obligations and Accountability

183. The Commission's current high-cost programs include specific, defined service obligations for deployment and specific reporting requirements.⁴⁷⁹ In addition, the Commission requires recipients of high-cost support to participate in performance testing to monitor compliance with speed and latency requirements, which includes conducting, at a minimum, one download test and one upload test per testing hour at each subscriber test location over a week time frame each quarter and to provide that information to the Commission.⁴⁸⁰ Performance testing has protected ratepayers' investment and ensured

⁴⁷⁶ USF/ICC Transformation Order, 26 FCC Rcd at 17745, para. 221 (citing Rural Cellular Assoc. v. FCC, 588 F.3d 1095, 1103 (D.C. Cir. 2009) ("Section 254 does not mandate the receipt of support by any particular carrier. Rather, as the Commission has indicated and the courts have agreed, the 'purpose of universal service is to benefit the customer, not the carrier."") (quoting Alenco, 201 F.3d at 621)).

⁴⁷⁷ See USF/ICC Transformation Order, 26 FCC Rcd at 17744-48, paras. 219-25 (updating reasonable limits on the recovery of capital and operating costs then available through High Cost Loop Support (HCLS) and extending such limits to ICLS because without such limits, carriers had no incentive to lower costs and might have incentives to inflate costs to maximize support recovery).

⁴⁷⁸ See Future of USF Report at 8, para. 17 ("[O]ur universal service goals for broadband should evolve over time as technology advances.").

⁴⁷⁹ See 47 CFR §§ 54.313, 54.314, 54.316.

⁴⁸⁰ First Performance Measures Order, 33 FCC Rcd at 6519, para. 28; see Connect America Fund, WC Docket No. 10-90, Order on Reconsideration, 34 FCC Rcd 10109, 10110, para. 4 (2019) (expanding performance measure testing requirements); see generally Connect America Fund, WC Docket No. 10-90, Order, WC Docket No. 10-90, Order, 35 FCC Rcd 14658 (WCB 2020) (clarifying certain requirements); Rural Digital Opportunity Fund Phase I Auction Scheduled for October 29, 2020; Notice and Filing Requirements and Other Procedures for Auction 904, AU Docket No. 20-34 et al., Public Notice, 35 FCC Rcd 6077, 6083, para. 15 (2020) (stating that RDOF support (continued....)

that carriers receiving universal service high-cost support deploy networks that meet the performance standards they promised to deliver. To ensure accountability in the use of support to sustain operation of full-service networks, should we consider adopting similar rules for a future funding mechanism or should we require annual reporting regarding the state of facilities, business operations, and other factors? Should we require annual or quarterly performance testing and if so, what would be the parameters of such testing? If performance testing shows that a provider has failed to meet the requirements imposed for continuing support receipt, should the support be placed on hold until the problems are remediated? What kind of time limit should we impose to remediate? Should we implement any mechanisms similar to those used for other high-cost programs, such as receipt of a letter of credit, that would enable recovery of disbursed support in the event of default?⁴⁸¹ Should we limit these requirements to service providers that are currently receiving support?⁴⁸²

VI. PROCEDURAL MATTERS

- 184. Effective Date. We conclude that good cause exists to make the Report and Order effective immediately upon publication in the Federal Register, pursuant to section 553(d)(3) of the Administrative Procedure Act, 483 except for those portions containing information collection requirements that have not been approved by the Office of Management and Budget (OMB). 484 Agencies determining whether there is good cause to make an order take effect less than 30 days after Federal Register publication must balance the necessity for immediate implementation against principles of fundamental fairness that require that all affected persons be afforded reasonable time to prepare for the effective date. 485
- 185. Here, we find that implementing the rules for the Enhanced A-CAM program as expeditiously as possible is necessary for aligning Enhanced A-CAM offers with the allocation of support through the BEAD program to avoid the duplication of funds across programs and promote the efficient use of federal funds in supporting broadband deployment. We conclude that furthering this objective outweighs any potential impact on affected parties. The Order does not require affected parties to take any specific action until the Bureau extends Enhanced A-CAM offers, and the Order delegates to the Bureau the task of implementing the process for carriers to accept offers, consistent with the same

⁴⁸¹ 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).

⁴⁸² We note that the Commission has long held that in the absence of a forbearance order, ETCs must provide supported services throughout their service areas regardless of funding status and regardless of whether an unsubsidized competitor competes for customers in the same area. *In re: FCC 11-161*, 753 F.3d 1015, 1088 (10th Cir. 2014); *Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) from Enforcement of Obsolete ILEC Legacy Regulations that Inhibit Deployment of Next Generation Networks*, WC Docket Nos. 14-192, 11-42, 10-90, Memorandum Opinion and Order, 31 FCC Rcd 6157, 6228-229, paras.138-43 (2015) (holding that the obligation to provide voice service arises from an ETC's eligibility for support, not its receipt of support).

⁴⁸³ 5 U.S.C. § 553(d)(3). The Notice of Proposed Rulemaking and Notice of Inquiry will become effective 30 days after publication in the Federal Register. 5 U.S.C. § 553(d).

⁴⁸⁴ Those portions containing information collection requirements that have not been approved by OMB will be submitted to OMB for review under section 3507(d) of the Paper Work Reduction Act of 1995 (PRA) Public Law 104-13. The Commission will publish a document in the Federal Register announcing the effective date of these provisions.

⁴⁸⁵ Omnipoint Corporation v. FCC, 78 F.3d 620, 630 (D.C. Cir. 1996) (citing United States v. Gavrilovic, 551 F.2d 1099, 1105 (8th Cir. 1977)).

procedures the Commission adopted for carriers electing to receive A-CAM II support. Accordingly, even with immediate implementation, eligible rate-of-return carriers will still be afforded reasonable time to take any necessary steps to prepare to accept an Enhanced A-CAM offer before and after the Bureau extends such offers.

- 186. 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).
- 187. Regulatory Flexibility Act. The Regulatory Flexibility Act of 1980, as amended (RFA), 486 requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." Accordingly, we have prepared a Final Regulatory Flexibility Analysis (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.
- 188. We have also prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning the potential impact of the rule and policy changes contained in the *NPRM*. The IRFA is set forth in Appendix C. Written public comments are requested on the IRFA. Comments must be filed by the deadlines for comments on the *NPRM* indicated on the first page of this document and must have a separate and distinct heading designating them as responses to the IRFA.
- 189. Paperwork Reduction Act Analysis. The 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 and modified information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, 488 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.
- 190. The Further Notice of Proposed Rulemaking contains proposed new and modified information collection requirements. The Commission as part of its continuing effort to reduce paperwork burdens, invites the general public and OMB to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.
- 191. Ex Parte Presentations- Permit-But-Disclose. The proceedings these Notice of Proposed Rulemaking and Notice of Inquiry initiate shall be treated as "permit-but-disclose" proceedings in accordance with the Commission's ex parte rules. 489 Persons making ex parte presentations must file a

⁴⁸⁶ 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).

⁴⁸⁷ 5 U.S.C. § 605(b).

⁴⁸⁸ Small Business Paperwork Relief Act of 2002, Pub. L. No. 107-198, 116 Stat 729 (2002); *see* 44 U.S.C. § 3506(c)(4).

⁴⁸⁹ 47 CFR § 1.1200 et seq.

copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies).

- 192. In light of the Commission's trust relationship with Tribal Nations and our commitment to engage in government-to-government consultation with them, we find the public interest requires a limited modification of the *ex parte* rules in these proceedings.⁴⁹⁰ Tribal Nations, like other interested parties, should file comments, reply comments, and *ex parte* presentations in the record to put facts and arguments before the Commission in a manner such that they may be relied upon in the decision-making process consistent with the requirements of the Administrative Procedure Act.⁴⁹¹ However, at the option of the Tribe, *ex parte* presentations made during consultations by elected and appointed leaders and duly appointed representatives of federally recognized Indian Tribes and Alaska Native Villages to Commission decision makers shall be exempt from disclosure in permit-but-disclose proceedings.⁴⁹² and exempt from the prohibitions during the Sunshine Agenda period.⁴⁹³ To be clear, while the Commission recognizes consultation is critically important, we emphasize that the Commission will rely in its decision-making only on those presentations that are placed in the public record for these proceedings.⁴⁹⁴
- 193. Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in these proceedings should familiarize themselves with the Commission's *ex parte* rules.
- 194. Comments and Replies. Interested parties may file comments and reply comments on or before the dates indicated on the first page of this document.⁴⁹⁵ Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).
 - Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: www.fcc.gov/ecfs.

⁴⁹⁰ See 47 CFR § 1.1200(a). Although the Rules do not generally require ex parte presentations to be treated as "permit but disclose" in Notice of Inquiry proceedings, see 47 CFR § 1.1204(b)(1), we exercise our discretion in this instance, and find that the public interest is served by making ex parte presentations available to the public, in order to encourage a robust record. See id.

⁴⁹¹ 5 U.S.C. § 551 et seq.

⁴⁹² See generally 47 CFR § 1.1206.

⁴⁹³ See 47 CFR § 1.1203.

⁴⁹⁴ See Updating of the Commission's Ex Parte Rules, GN Docket No. 20-21, Notice of Proposed Rulemaking, 35 FCC Rcd 6947, 6950-54, paras. 9-21 (2020).

⁴⁹⁵ Comments and reply comments filed in response to the Notice of Proposed Rulemaking and the Notice of Inquiry are subject to sections 1.415,1.419, and 1.430 of the Commission's rules. 47 CFR §§ 1.415, 1.419, 1.430.

- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L
 Street NE Washington, DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. 496 See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, 35 FCC Rcd 2788, 2788-89 (OS 2020).
- 195. Comments and reply comments exceeding ten pages must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with section 1.49 and all other applicable sections of the Commission's rules. We direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission. We also strongly encourage parties to track the organization set forth in the Notice of Proposed Rulemaking or the Notice of Inquiry in order to facilitate our internal review process.
- 196. *People with Disabilities*. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0530.
- 197. Contact Person. For further information about these proceedings, please contact, Theodore Burmeister, Special Counsel, Telecommunications Access Policy Division, Wireline Competition Bureau, at Theodore.Burmeister@fcc.gov, or Jesse Jachman, Deputy Division Chief, Telecommunications Access Policy Division, Wireline Competition Bureau, at Jesse.Jachman@fcc.gov.

VII. ORDERING CLAUSES

198. Accordingly, IT IS ORDERED, pursuant to the authority contained in sections 4(i), 214, 218-220, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 214, 218-220, 254, 303(r), and 403, and sections 1.1 and 1.425 of the Commission's rules, 47 CFR §§ 1.1 and 1.425 this Report and Order IS ADOPTED. The Report and Order SHALL BE EFFECTIVE upon publication in the Federal Register, except for portions containing information collection requirements in sections 54.308, 54.313 and 54.316 that have not been approved by OMB. The Federal Communications Commission will publish a document in the Federal Register announcing the effective date of these provisions.

199. IT IS FURTHER ORDERED that, pursuant to the authority contained in sections 4(i), 214, 218-220, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 214, 218-220, 254, 303(r), and 403, and sections 1.1, 1.411, and 1.412 of the Commission's rules, 47 CFR §§ 1.1, 1.411, and 1.412, this Notice of Proposed Rulemaking IS ADOPTED. This Notice of

⁴⁹⁶ See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, 35 FCC Rcd 2788 (OS 2020), https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy.

Proposed Rulemaking will be EFFECTIVE upon publication in the Federal Register, with comment dates indicated therein.

- 200. IT IS FURTHER ORDERED that, pursuant to the authority contained in sections 4(i), 214, 218-220, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 214, 218-220, 254, 303(r), and 403, and sections 1.1 of the Commission's rules, 47 CFR § 1.1, this Notice of Inquiry IS ADOPTED. This Notice of Inquiry will be EFFECTIVE upon publication in the Federal Register, with comment dates indicated therein.
- 201. IT IS FURTHER ORDERED that Part 54 of the Commission's rules IS AMENDED as set forth in Appendix A, and that any such rule amendments that contain new or modified information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act SHALL BE EFFECTIVE after announcement in the Federal Register of Office of Management and Budget approval of the rules, and on the effective date announced therein.
- 202. IT IS FURTHER ORDERED that the Commission's Office of the Secretary, Reference Information Center, SHALL SEND a copy of this Report and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, including the Initial Regulatory Flexibility Analysis and Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.
- 203. 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).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch Secretary

APPENDIX A

Final Rules

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

PART 54- UNIVERSAL SERVICE

1. 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, 1302, 1601-1609, and 1752, unless otherwise noted.

2. Amend § 54.5 by revising the definition of "High-cost support" to read as follows:

§ 54.5 Terms and Definitions.

* * * * *

High-Cost Support. "High-cost support" refers to those support mechanisms provided pursuant to subparts D, J, K, L, M, and O of this part.

* * * * *

3. Amend \S 54.308 by revising paragraph (a)(1) introductory text and adding paragraphs (a)(1)(v), (a)(3) and (e) to read as follows:

§ 54.308 Broadband public interest obligations for recipients of high-cost support.

(a) * * *

(1) Carriers that have elected to receive Connect America Fund-Alternative Connect America Cost Model (CAF–ACAM) support pursuant to § 54.311, other than Enhanced A-CAM support, are required to offer broadband service at actual speeds of at least 10 Mbps downstream/1 Mbps upstream to a defined number of locations as specified by public notice, with a minimum usage allowance of 150 GB per month, subject to the requirement that usage allowances remain consistent with mean usage in the United States over the course of the term. In addition, such carriers must offer other speeds to subsets of locations, as specified below:

* * * * *

(v) After December 31, 2023, to the extent that an Enhanced A-CAM carrier was previously subject to the foregoing deployment obligations pursuant to A-CAM I, Revised A-CAM I, or A-CAM II, the Enhanced A-CAM carrier will instead be subject to § 54.308(a)(3).

* * * * *

- (3) An Enhanced A-CAM carrier, as defined by § 54.311(a)(4), must offer broadband speeds of at least 100 Mbps downstream/20 Mbps upstream to 100 percent of locations in its study areas within the state by the end of 2028.
- (i) Enhanced A-CAM required locations are those locations identified in the National Broadband Map within the carrier's service area where voice and terrestrial broadband services of speeds 100 Mbps downstream/20 Mbps upstream or faster are not yet available or lack an enforceable commitment for deployment of such broadband service. In the context of Enhanced A-CAM, an enforceable commitment exists where a carrier commits to deploying broadband service as a condition of any federal or state grants or other funding. The Wireline Competition Bureau shall provide a list of Enhanced A-CAM required locations for each carrier concurrently with the Enhanced A-CAM offer pursuant to section 54.311(a), and will update such list to reflect any additional information related locations, broadband coverage, or enforceable commitments determined to have existed at the time of the offer.

(ii) An Enhanced A-CAM carrier that has reported deployment of 100 Mbps downstream/20 Mbps upstream or faster service to particular locations in its Enhanced A-CAM study area(s) in the National Broadband Map or the Universal Service Administrative Company's High Cost Universal Broadband Portal must maintain the same or faster service at those locations through the end of the Enhanced A-CAM term.

* * * * *

- (e) Enhanced A-CAM Cybersecurity and Supply Chain Risk Management Requirements
- (1) An Enhanced A-CAM carrier shall implement operational cybersecurity and supply chain risk management plans meeting the requirements of this section by January 1, 2024.
- (2) An Enhanced A-CAM carrier shall certify that it has implemented plans required under paragraph (1) and submit the plans to the Administrator by January 2, 2024 or within 30 days of approval under the Paperwork Reduction Act, whichever is *later*.
- (3) Failure to Comply with Enhanced A-CAM Cybersecurity and Supply Chain Risk Management Requirements:
- (i) The Wireline Competition Bureau shall direct the Administrator to withhold 25 percent of the Enhanced A-CAM carrier's monthly support for failure to comply with paragraph (2) until the carrier makes the required certification and submits the required plans.
- (ii) At any time during the support term, if an Enhanced A-CAM carrier does not have in place operational cybersecurity and supply chain risk management plans meeting the requirements of this section, Wireline Competition Bureau shall direct the Administrator to withhold 25 percent of the carrier's monthly support.
- (iii) Once the carrier comes into compliance, the Administrator shall stop withholding support, and the carrier will receive all of the support that had been withheld pursuant to this section.
- (4) An Enhanced A-CAM carrier's cybersecurity risk management plans shall reflect the latest version of the National Institute of Standards and Technology (NIST) Framework for Improving Critical Infrastructure Cybersecurity, and shall reflect an established set of cybersecurity best practices, such as the standards and controls set forth in the Cybersecurity & Infrastructure Security Agency (CISA) Cybersecurity Cross-sector Performance Goals and Objectives or the Center for Internet Security Critical Security Controls.
- (5) An Enhanced A-CAM carrier's supply chain risk management plans shall incorporate the key practices discussed in NISTIR 8276, Key Practices in Cyber Supply Chain Risk Management: Observations from Industry, and related supply chain risk management guidance from NIST 800-161.
- (6) If an Enhanced A-CAM carrier makes a substantive modification to its plans under this section, the carrier shall file an updated plan with the Administrator within 30 days of making the modification. A modification to a plan under this section is substantive if at least one of the following conditions apply:
- (i) There is a change in the plan's scope, including any addition, removal, or significant alternation to the types of risks covered by the plan (e.g., expanding a plan to cover new areas such as supply chain risks to Internet of Things devices or cloud security could be a substantive change);
- (ii) There is a change in the plan's risk mitigation strategies (e.g., implementing a new encryption protocol or deploying a different firewall architecture);
- (iii) There is a shift in organizational structure (e.g., creating a new information technology department or hiring a Chief Information Security Officer);
- (iv) There is a shift in the threat landscape prompting the organization to recognize that emergence of new threats or vulnerabilities that weren't previously accounted for in the plan;

- (v) Any updates made to comply with new cybersecurity regulations, standards, or laws;
- (vi) Significant changes in the supply chain, including offboarding major suppliers or vendors, or shifts in procurement strategies that may impact the security of the supply chain; or
- (vii) Any large-scale technological changes, including the adoption of new systems or technologies, migrating to a new information technology infrastructure, or significantly changing the information technology architecture.
- 4. Amend § 54.311 by revising paragraphs (a) introductory text, (a)(2) and (3), adding paragraph (a)(4), revising paragraphs (b), (c), and (d), adding paragraphs (d)(3) and (4), revising paragraph (e) introductory text, (e)(3), (e)(4)(iii), (e)(5) and (6), and adding paragraph (f) to read as follows:

§ 54.311 Connect America Fund Alternative-Connect America Cost Model

(a) *Voluntary election of model-based support.* A rate-of-return carrier (as that term is defined in § 54.5) receiving support pursuant to subparts K or M of this part shall have the opportunity to voluntarily elect, on a state-level basis, to receive Connect America Fund–Alternative Connect America Cost Model (CAF–ACAM) support as calculated by the Alternative–Connect America Cost Model (A–CAM) adopted by the Commission in lieu of support calculated pursuant to subparts K or M of this part, subject to the conditions specific to each A-CAM offer as determined by the Commission. Any rate-of-return carrier not electing support pursuant to this section shall continue to receive support calculated pursuant to those mechanisms as specified in Commission rules for high-cost support.

* * * * *

- (2) For the purposes of this section, "Revised A–CAM I" refers to carriers initially authorized to receive CAF–ACAM support as of January 24, 2017, and were subsequently authorized to receive CAF–ACAM pursuant to a revised offer on April 29, 2019. For such carriers, the first program year of CAF–ACAM is 2017.
- (3) For the purposes of this section, "A–CAM II" refers to carriers initially authorized to receive A–CAM support on August 22, 2019 or November 13, 2020. For such carriers, the first program year of CAF–ACAM is 2019.
- (4) For purposes of this section, "Enhanced A-CAM" refers to carriers authorized to receive Enhanced A-CAM support after October 1, 2023. For the purpose of determining deployment obligations for such carriers, the first program year of CAF-ACAM is 2025.

(b) Geographic areas eligible for support.

- (1) CAF-ACAM model-based support, except for Enhanced A-CAM support, will be made available for a specific number of locations in census blocks identified as eligible for each carrier by public notice. The eligible areas and number of locations for each state identified by the public notice shall not change during the term of support identified in paragraph (c) of this section.
- (2) Enhanced A-CAM support will be made available for each carrier's service areas within the state, in consideration for the deployment and maintenance obligations described in section 54.308(a)(3) of this part.
- (c) *Term of support*. CAF–ACAM model-based support shall be provided to A–CAM I carriers for a term that extends until December 31, 2026, to Revised A–CAM I and A–CAM II carriers for a term that extends until December 31, 2028, and to Enhanced A-CAM carriers for a term that extends from January 1, 2024, until December 31, 2038.
- (d) *Interim deployment milestones*. Recipients of CAF–ACAM model-based support must meet the following interim milestones with respect to their deployment obligations set forth in § 54.308(a)(1)(i) and (a)(3) of this subpart.

* * * * *

- (3) For the purposes of A-CAM I, Revised A-CAM I, and A-CAM II, compliance shall be determined based on the total number of fully funded locations in a state. Carriers that complete deployment to at least 95 percent of the requisite number of locations will be deemed to be in compliance with their deployment obligations. The remaining locations that receive capped support are subject to the standard specified in § 54.308(a)(1)(ii).
- (4) Enhanced A-CAM carriers must complete deployment of 100/20 Mbps service to a number of locations equal to 50 percent of locations required by § 54.308(a)(3)(i) of this subpart by the end of 2026, 75 percent of requisite locations by the end of 2027, and 100 percent of requisite locations by the end of 2028. After December 31, 2023, to the extent that an Enhanced A-CAM carrier was subject to the interim deployment milestones set forth in § 54.311(d)(1) and (2), the Enhanced A-CAM carrier will instead be subject to the interim deployment milestones set forth in this paragraph.
- (e) Transition to CAF-ACAM Support. An A-CAM I, Revised A-CAM I, A-CAM II, or Enhanced A-CAM carrier not previously subject to A-CAM support, any of whose final model-based support is less than the carrier's legacy rate-of-return support in its base year as defined in paragraph (e)(4) of this section, will transition as follows:

* * * * *

(4) * * *

- (iii) For Enhanced A-CAM carriers not previously subject to A-CAM I, Revised A-CAM I, or A-CAM II, the amount of high-cost loop support and Connect America Fund—Broadband Loop Support disbursed to the carrier for 2022 without regard to prior period adjustments related to years other than 2022, as determined by the Administrator as of July 31, 2023 and publicly announced prior to the election period for the voluntary path to the model. The first year of the transition pursuant to this paragraph (e) will be 2035.
- (5) An Enhanced A-CAM carrier not previously subject to A-CAM I, Revised A-CAM I, or A-CAM II, and whose final model-based support is less than the carrier's legacy rate-of-return support in its base year as defined in paragraph (e)(4)(iii) of this section, will transition from its frozen base year support to its full Enhanced A-CAM support on the following schedule:
 - (i) In 2024-2029, it will receive its frozen base year support.
 - (ii) In 2030, it will receive its base year support minus 4% of the base year support;
 - (iii) In 2031, it will receive its base year support minus 8% of the base year support;
 - (iv) In 2032, it will receive its base year support minus 12% of the base year support;
 - (v) In 2033, it will receive its base year support minus 16% of the base year support;
 - (vi) In 2034, it will receive its base year support minus 20% of the base year support;
- (vii) In 2035-2038, it will transition to its Enhanced A-CAM support pursuant to paragraphs (e)(1) through (3).
- (6) An Enhanced A-CAM carrier that was previously subject to A-CAM I, Revised A-CAM I, or A-CAM II and will continue to receive transitional support consistent with its prior A-CAM I, Revised A-CAM I, or A-CAM II authorization, and will not have its transitional support amount adjusted to reflect its Enhanced A-CAM support amounts.
- (f) Legacy Carrier Transitioning to Higher Enhanced A-CAM. An Enhanced A-CAM carrier that was not subject to A-CAM I, Revised A-CAM I, or A-CAM II and whose final model-based support is more than the carrier's legacy rate-of-return support in its base year as defined in paragraph (f)(2) of this section, will transition from its frozen base year support to its full Enhanced A-CAM support.

- (1) The transition will occur on the following schedule:
 - (i) In 2024-2029, it will receive its frozen base year support.
- (ii) In 2030, it will receive its base year support plus 20% of the difference between its base year support and its Enhanced A-CAM support;
- (iii) In 2031, it will receive its base year support plus 40% of the difference between its base year support and its Enhanced A-CAM support;
- (iv) In 2032, it will receive its base year support plus 60% of the difference between its base year support and its Enhanced A-CAM support;
- (v) In 2033, it will receive its base year support plus 80% of the difference between its base year support and its Enhanced A-CAM support; and
 - (vi) In 2034, it will receive its Enhanced A-CAM support.
- (2) The carrier's base year support for purposes of the calculation of transition payments is the amount of high-cost loop support and Connect America Fund—Broadband Loop Support disbursed to the carrier for 2022 without regard to prior period adjustments related to years other than 2022, as determined by the Administrator as of July 31, 2023 and publicly announced prior to the election period for the voluntary path to the model.
- 5. Amend § 54.313 by revising paragraph (f)(1) and adding paragraph (f)(6) to read as follows:

§ 54.313 Annual Reporting requirements for high-cost recipients.

* * * * *

(f) * * *

- (1) Beginning July 1, 2015 and Every Year Thereafter. The following information:
- (i) If the rate-of-return carrier is receiving support pursuant to subparts K and M of this part, a certification that it is taking reasonable steps to provide upon reasonable request broadband service at actual speeds of at least 25 Mbps downstream/3 Mbps upstream, with latency suitable for real-time applications, including Voice over internet Protocol, and usage capacity that is reasonably comparable to comparable offerings in urban areas as determined in an annual survey, and that requests for such service are met within a reasonable amount of time; if the rate-of-return carrier receives CAF-ACAM support, except for Enhanced A-CAM support, a certification that it is meeting the relevant reasonable request standard; if the carrier is receiving Enhanced A-CAM support, a certification that it is offering broadband service with latency suitable for real-time applications, including Voice over internet Protocol, and usage capacity that is reasonably comparable to comparable offerings in urban areas; or if the rate-of-return carrier is receiving Alaska Plan support pursuant to § 54.306, a certification that it is offering broadband service with latency suitable for real-time applications, including Voice over internet Protocol, and usage capacity that is reasonably comparable to comparable offerings in urban areas, and at speeds committed to in its approved performance plan to the locations it has reported pursuant to § 54.316(a), subject to any limitations due to the availability of backhaul as specified in paragraph (g) of this section.

* * * * *

- (6) Enhanced A-CAM carriers must provide the following:
- (i) Enhanced A-CAM carriers must certify that, in the previous calendar year, they participated, in good faith, in any relevant BEAD Program challenge processes or other processes conducted by states or other BEAD Program eligible entities to determine the eligibility of locations for the BEAD Program, and that they otherwise coordinated with states, Tribes, and other eligible entities to help avoid duplicative federal broadband funding. Additionally, Enhanced A-CAM carriers must certify that, in the previous calendar year, they complied with

the obligation not to receive or use BEAD Program funding or other future federal grant funding, unless otherwise specified by the Commission or Bureau, that supports broadband deployment for those locations for which they are receiving Enhanced A-CAM support.

- (ii) Enhanced A-CAM carriers must describe how and certify that, in the previous calendar year, they continued to participate in the Affordable Connectivity Program or any substantially similar successor program, as required by the terms of their Enhanced A-CAM offers.
- (iii) Enhanced A-CAM carriers must certify that they have maintained their cybersecurity and supply chain risk management plans pursuant to section 54.308(e), report whether they filed any substantive modifications pursuant to section 54.308(e)(6) in the prior year, and report the date they filed any substantive modifications.

* * * * *

- 6. Amend § 54.316 by adding paragraph (a)(9), revising paragraph (b)(2), and adding paragraph (b)(8) to read as follows:
- § 54.316 Broadband Deployment reporting and certification requirements for high-cost recipients.
- (a) * * *
- (9) Recipients subject to the requirements of § 54.308(a)(3) shall report the number of locations for each state and locational information, including geocodes, indicating whether they are offering service providing speeds of at least 100 Mbps downstream/20 Mbps upstream.

* * * * *

- (b) * * *
- (2) Rate-of-return carriers electing CAF-ACAM support pursuant to § 54.311, other than Enhanced A-CAM carriers, shall provide:

* * * * *

(8) Enhanced A-CAM carriers shall provide, no later than March 1 following each service milestone specified in § 54.311(d)(3), a certification that by the end of the prior calendar year, it was offering broadband meeting the requisite public interest obligations to the required percentage of its required locations in the state.

* * * * *

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 *Connect America Fund: A National Broadband Plan for Our Future High-Cost Universal Service Support, Notice of Proposed Rulemaking (Enhanced ACAM FNPRM)* released in May of 2022.² The Commission sought written public comment on the proposals in the *Enhanced ACAM FNRPM*, including comment on the IRFA. No comments were filed addressing the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

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

- 2. In the *Report and Order*, we adopt the Enhanced Alternative Connect America Cost Model (A-CAM) program as a voluntary path for supporting the widespread deployment of 100/20 Mbps broadband service throughout the rural areas served by carriers currently receiving A-CAM support and in areas served by rate-of-return carriers eligible to receive legacy support by the end of 2028. In adopting this program, we further our long-standing goals by promoting the universal availability of voice and broadband networks, while also taking measures to minimize the burden on the nation's ratepayers. We also adopt requirements for the Enhanced A-CAM program to complement existing federal, state, and local funding programs, so that broadband funding can be used efficiently to maximize the deployment of high-quality broadband service across the United States.
- In exchange for the commitment to complete this deployment, the Commission will extend offers to current A-CAM carriers and current legacy support recipients within a budget totaling no more than \$1.27 billion annually, or no more than \$1.33 billion annually if certain conditions are met, over a 15-year term beginning January 1, 2024. We require that carriers make their Enhanced A-CAM elections by no later than October 1, 2023 to ensure alignment with the expected BEAD Program timeline as required by the Infrastructure Act and obligate them to serve 100% of unserved locations with service levels consistent with the standard established in the Infrastructure Act. We also establish a framework to avoid duplicating existing efforts from other government programs funding broadband deployment. To address the unique challenges of deploying high-speed broadband in rural Tribal communities, we also adopt a Tribal Broadband Factor for Enhanced A-CAM. We adopt requirements and safeguards for Enhanced A-CAM that address other concerns expressed by commenters requesting that we wait before implementing Enhanced A-CAM. In response to concerns that areas will not be served as quickly as they might be if they were funded by the BEAD Program, we align the deployment timeline for Enhanced A-CAM recipients with the timeline required by the Infrastructure Act. We also require performance requirements that align with the Infrastructure Act, and subject Enhanced A-CAM recipients to the reporting requirements and non-compliance measures that we apply to all high-cost support recipients so that we can monitor and incentivize deployment. We also adopt a minimum carrier participation threshold of 50% for implementing the Enhanced A-CAM program. As we extend Enhanced A-CAM offers to carriers serving Tribal lands, we require Enhanced A-CAM recipients engage, within 90 days of their Enhanced A-CAM elections and at least annually thereafter, with relevant Tribal government(s) regarding deployment to Tribal locations.

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 Connect America Fund: A National Broadband Plan for Our Future High-Cost Universal Service Support, WC Docket No. 10-90 et al., Notice of Proposed Rulemaking, FCC 22-35 (May 20, 2022).

³ 5 U.S.C. § 604.

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

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

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

- 5. Pursuant to the Small Business Jobs Act of 2010, 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.⁴
- 6. 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 Will Apply

- 7. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁵ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small-business concern" under the Small Business Act.⁷ A "small-business concern" is one that: (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.⁸
- 8. Small Businesses, Small Organizations, Small Governmental Jurisdictions. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe, at the outset, three broad groups of small entities that could be directly affected herein. 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. These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million businesses.
- 9. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." The

⁴ 5 U.S.C. § 604(a)(3).

⁵ *Id.* § 604 (a)(4).

⁶ 5 U.S.C. § 601(6).

⁷ 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."

⁸ 15 U.S.C. § 632.

⁹ 5 U.S.C. § 601(3)-(6).

¹⁰ SBA, Office of Advocacy, "What's New With Small Business?," https://advocacy.sba.gov/wp-content/uploads/2023/03/Whats-New-Infographic-March-2023-508c.pdf. (Mar. 2023)

¹¹ *Id*.

¹² 5 U.S.C. § 601(4).

Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations. ¹³ Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS. ¹⁴

10. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." U.S. Census Bureau data from the 2017 Census of Governments¹⁶ indicate there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. ¹⁷ Of this number, there were 36,931 general purpose governments (county, ¹⁸ municipal, and town or township ¹⁹) with populations of less than 50,000 and 12,040 special purpose governments—independent school districts²⁰ with enrollment

¹³ The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C. § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number of small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations – Form 990-N (e-Postcard), "Who must file," https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

¹⁴ See Exempt Organizations Business Master File Extract (EO BMF), "CSV Files by Region," https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2020 with revenue less than or equal to \$50,000 for Region 1-Northeast Area (58,577), Region 2-Mid-Atlantic and Great Lakes Areas (175,272), and Region 3-Gulf Coast and Pacific Coast Areas (213,840) that includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.

¹⁵ 5 U.S.C. § 601(5).

¹⁶ 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.

¹⁷ See U.S. Census Bureau, 2017 Census of Governments – Organization Table 2. Local Governments by Type and State: 2017 [CG1700ORG02], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also tbl.2. CG1700ORG02 Table Notes Local Governments by Type and State 2017.

¹⁸ See id. at tbl.5. County Governments by Population-Size Group and State: 2017 [CG1700ORG05], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

¹⁹ See id. at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2017 [CG1700ORG06], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 18,729 municipal and 16,097 town and township governments with populations less than 50,000.

²⁰ See id. at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 12,040 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes_Special Purpose Local Governments by State Census Years 1942 to 2017.

populations of less than 50,000.²¹ 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."²²

- 11. Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks.²³ Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband Internet services.²⁴ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.²⁵ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.²⁶
- 12. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.²⁷ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.²⁸ Of this number, 2,964 firms operated with fewer than 250 employees.²⁹ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were engaged in the provision of fixed local services.³⁰ Of these providers, the Commission estimates that 4,146

²¹ 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.

²² This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations tbls.5, 6 & 10.

²³ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

²⁴ *Id*.

²⁵ *Id*.

²⁶ Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.

²⁷ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

²⁸ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

²⁹ *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.

³⁰ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf. https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf (2022 Monitoring Report).

providers have 1,500 or fewer employees.³¹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- 13. Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include both incumbent and competitive local exchange service providers. Wired Telecommunications Carriers³² is the closest industry with an SBA small business size standard. Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were fixed local exchange service providers. Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 14. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers⁴⁰ is the closest industry with an SBA small business size standard.⁴¹ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁴² U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁴³ Of this number, 2,964 firms operated with fewer than

³¹ *Id*.

³² See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

³³ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

³⁴ Fixed Local Exchange Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

³⁵ *Id*.

³⁶ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

³⁷ *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.

³⁸ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

³⁹ *Id*.

⁴⁰ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁴¹ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁴² *Id*.

⁴³ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311,

250 employees.⁴⁴ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 1,212 providers that reported they were incumbent local exchange service providers.⁴⁵ Of these providers, the Commission estimates that 916 providers have 1,500 or fewer employees.⁴⁶ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

- developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers. Wired Telecommunications Carriers⁴⁸ is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 3,378 providers that reported they were competitive local exchange service providers. Of these providers, the Commission estimates that 3,230 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 16. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for Interexchange Carriers. Wired Telecommunications Carriers⁵⁴ is the closest industry with a SBA small business size standard.⁵⁵ The SBA small business size

(Continued from previous page) <u>https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.</u>

⁴⁴ *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.

⁴⁵ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

⁴⁶ *Id*

⁴⁷ Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

⁴⁸ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁴⁹ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁵⁰ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁵¹ *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.

⁵² Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

⁵³ *Id*.

⁵⁴ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁵⁶ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁵⁷ Of this number, 2,964 firms operated with fewer than 250 employees.⁵⁸ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 127 providers that reported they were engaged in the provision of interexchange services. Of these providers, the Commission estimates that 109 providers have 1,500 or fewer employees.⁵⁹ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of providers in this industry can be considered small entities.

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

⁵⁶ *Id*.

⁵⁷ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁵⁸ *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.

⁵⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

⁶⁰ See U.S. Census Bureau, 2017 NAICS Definition, "517911 Telecommunications Resellers," https://www.census.gov/naics/?input=517911&year=2017&details=517911.

⁶¹ *Id*.

⁶² *Id*.

⁶³ *Id*.

⁶⁴ See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

⁶⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517911, https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁶⁶ *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.

⁶⁷ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

estimates that 202 providers have 1,500 or fewer employees.⁶⁸ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- 18. *Toll Resellers*. Neither the Commission nor the SBA have developed a small business size standard specifically for Toll Resellers. Telecommunications Resellers⁶⁹ is the closest industry with a SBA small business size standard. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.⁷⁰ Mobile virtual network operators (MVNOs) are included in this industry.⁷¹ The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.⁷² U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.⁷³ Of that number, 1,375 firms operated with fewer than 250 employees.⁷⁴ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 457 providers that reported they were engaged in the provision of toll services.⁷⁵ Of these providers, the Commission estimates that 438 providers have 1,500 or fewer employees.⁷⁶ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 19. Other Toll Carriers. Neither the Commission nor the SBA has developed a definition for small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. Wired Telecommunications Carriers⁷⁷ is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.

⁶⁸ *Id*.

⁶⁹ See U.S. Census Bureau, 2017 NAICS Definition, "517911 Telecommunications Resellers," https://www.census.gov/naics/?input=517911&year=2017&details=517911.

⁷⁰ *Id*.

⁷¹ *Id*.

⁷² See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

⁷³ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517911, https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

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

⁷⁵ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf. https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf.

⁷⁶ *Id*.

⁷⁷ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁷⁸ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁷⁹ *Id*.

Of this number, 2,964 firms operated with fewer than 250 employees.⁸¹ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 90 providers that reported they were engaged in the provision of other toll services.⁸² Of these providers, the Commission estimates that 87 providers have 1,500 or fewer employees.⁸³ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

Prepaid Calling Card Providers. Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. Telecommunications Resellers⁸⁴ is the closest industry with a SBA small business size standard. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. 85 Mobile virtual network operators (MVNOs) are included in this industry. 86 The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.⁸⁷ U.S. Census Bureau data for 2017 show that 1.386 firms in this industry provided resale services for the entire year.⁸⁸ Of that number, 1,375 firms operated with fewer than 250 employees.⁸⁹ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 62 providers that reported they were engaged in the provision of prepaid card services. 90 Of these providers, the Commission estimates that 61 providers have 1,500 or fewer employees. 91 Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

⁸¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁸² Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf. https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf

 $^{^{83}}$ Id

⁸⁴ See U.S. Census Bureau, 2017 NAICS Definition, "517911 Telecommunications Resellers," https://www.census.gov/naics/?input=517911&year=2017&details=517911.

⁸⁵ *Id*.

⁸⁶ Id.

⁸⁷ See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

⁸⁸ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517911, https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁸⁹ *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.

⁹⁰ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf. https://docs.fcc.gov/public/attachments/DOC-39181A1.pdf.

⁹¹ *Id*.

- 21. 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. The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year. Of that number, 2,837 firms employed fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 594 providers that reported they were engaged in the provision of wireless services. Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 22. Cable and Other Subscription Programming. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. ⁹⁹ The broadcast programming is typically narrowcast in nature (e.g., limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources. ¹⁰⁰ The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers. ¹⁰¹ The SBA small business size standard for this industry classifies firms with annual receipts less than \$41.5 million as small. ¹⁰² Based on U.S. Census Bureau data for 2017, 378 firms operated in this industry during that year. ¹⁰³ Of that number, 149 firms operated with revenue of less than

⁹² See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

⁹³ *Id*.

⁹⁴ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁹⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁹⁶ *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.

⁹⁷ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

⁹⁸ *Id*.

⁹⁹ See U.S. Census Bureau, 2017 NAICS Definition, "515210 Cable and Other Subscription Programming," https://www.census.gov/naics/?input=515210&year=2017&details=515210.

¹⁰⁰ *Id*.

¹⁰¹ *Id*.

¹⁰² See 13 CFR § 121.201, NAICS Code 515210 (as of 10/1/22, NAICS Code 516210).

¹⁰³ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 515210, https://data.census.gov/cedsci/table?y=2017&n=515210&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. The US Census Bureau withheld publication of the number of firms that operated for the entire year to avoid disclosing data for individual companies (see Cell Notes for this category).

\$25 million a year and 44 firms operated with revenue of \$25 million or more. 104 Based on this data, the Commission estimates that a majority of firms in this industry are small.

- 23. Cable Companies and Systems (Rate Regulation). The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide. Based on industry data, there are about 420 cable companies in the U.S. Of these, only seven have more than 400,000 subscribers. In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Based on industry data, there are about 4,139 cable systems (headends) in the U.S. Of these, about 639 have more than 15,000 subscribers. Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.
- 24. *Cable System Operators (Telecom Act Standard)*. The Communications Act of 1934, as amended, contains a size standard for a "small cable operator," which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."¹¹¹ For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 677,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator based on the cable subscriber count established in a 2001 Public Notice. ¹¹² Based on industry data, only six cable system operators have more than 677,000 subscribers. ¹¹³ Accordingly, the Commission estimates that the majority of cable system operators are small under this

¹⁰⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in all categories of revenue less than \$500,000 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term ReceiptsRevenueServices.

¹⁰⁵ 47 CFR § 76.901(d).

¹⁰⁶ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited July 23, 2023).

¹⁰⁷ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited July 23, 2023); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

¹⁰⁸ 47 CFR § 76.901(c).

¹⁰⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited July 23, 2023).

¹¹⁰ S&P Global Market Intelligence, S&P Capital IQ Pro, Top Cable MSOs 12/21Q (last visited July 23, 2023).

¹¹¹ 47 U.S.C. § 543(m)(2).

¹¹² FCC Announces New Subscriber Count for the Definition of Small Cable Operator, Public Notice, 16 FCC Rcd 2225 (CSB 2001) (2001 Subscriber Count PN). In this Public Notice, the Commission determined that there were approximately 67.7 million cable subscribers in the United States at that time using the most reliable source publicly available. Id. We recognize that the number of cable subscribers changed since then and that the Commission has recently estimated the number of cable subscribers to traditional and telco cable operators to be approximately 49.8 million. See Communications Marketplace Report, GN Docket No. 22-203, 2022 WL 18110553 at 80, para. 218, Fig. II.E.1. (2022) (2022 Communications Marketplace Report). However, because the Commission has not issued a public notice subsequent to the 2001 Subscriber Count PN, the Commission still relies on the subscriber count threshold established by the 2001 Subscriber Count PN for purposes of this rule. See 47 CFR § 76.901(e)(1).

¹¹³ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited July 23, 2023); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million. Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

- 25. All Other Telecommunications. This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Providers of Internet services (e.g. dial-up ISPs) or Voice over Internet Protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry. The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small. U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year. Of those firms, 1,039 had revenue of less than \$25 million. Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.
- 26. Wired Broadband Internet Access Service Providers (Wired ISPs). 121 Providers of wired broadband Internet access service include various types of providers except dial-up Internet access providers. Wireline service that terminates at an end user location or mobile device and enables the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction is classified as a broadband connection under the Commission's rules. 122 Wired broadband Internet services fall in the Wired Telecommunications Carriers industry. 123 The SBA small business size standard for this industry classifies firms having 1,500 or fewer employees as small. 124 U.S. Census Bureau data for 2017 show

¹¹⁴ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to \S 76.901(e) of the Commission's rules. See 47 CFR \S 76.910(b).

¹¹⁵ See U.S. Census Bureau, 2017 NAICS Definition, "517919 All Other Telecommunications," https://www.census.gov/naics/?input=517919&year=2017&details=517919.

¹¹⁶ *Id*.

¹¹⁷ *Id*.

¹¹⁸ See 13 CFR § 121.201, NAICS Code 517919 (as of 10/1/22, NAICS Code 517810).

¹¹⁹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

¹²⁰ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term ReceiptsRevenueServices.

¹²¹ Formerly included in the scope of the Internet Service Providers (Broadband), Wired Telecommunications Carriers and All Other Telecommunications small entity industry descriptions.

¹²² See 47 CFR § 1.7001(a)(1).

¹²³ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

¹²⁴ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

that there were 3,054 firms that operated in this industry for the entire year. ¹²⁵ Of this number, 2,964 firms operated with fewer than 250 employees. ¹²⁶

- 27. Additionally, according to Commission data on Internet access services as of December 31, 2018, nationwide there were approximately 2,700 providers of connections over 200 kbps in at least one direction using various wireline technologies. The Commission does not collect data on the number of employees for providers of these services, therefore, at this time we are not able to estimate the number of providers that would qualify as small under the SBA's small business size standard. However, in light of the general data on fixed technology service providers in the Commission's 2022 Communications Marketplace Report, 128 we believe that the majority of wireline Internet access service providers can be considered small entities.
- Providers of wireless broadband Internet Access Service Providers (Wireless ISPs or WISPs). 129
 Providers of wireless broadband Internet access service include fixed and mobile wireless providers. The Commission defines a WISP as "[a] company that provides end-users with wireless access to the Internet[.]" Wireless service that terminates at an end user location or mobile device and enables the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction is classified as a broadband connection under the Commission's rules. 131 Neither the SBA nor the Commission have developed a size standard specifically applicable to Wireless Broadband Internet Access Service Providers. The closest applicable industry with an SBA small business size standard is Wireless Telecommunications Carriers (except Satellite). 132 The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees. 133 U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year. 134 Of that number, 2,837 firms employed fewer than 250 employees. 135

¹²⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

¹²⁶ *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.

¹²⁷ See IAS Status 2018, Fig. 30 (The technologies used by providers include aDSL, sDSL, Other Wireline, Cable Modem and FTTP). Other wireline includes: all copper-wire based technologies other than xDSL (such as Ethernet over copper, T-1/DS-1 and T3/DS-1) as well as power line technologies which are included in this category to maintain the confidentiality of the providers.

¹²⁸ 2022 Communications Marketplace Report, 2022 WL 18110553 at 10, paras. 26-27, Figs. II.A.5-7.

¹²⁹ Formerly included in the scope of the Internet Service Providers (Broadband), Wireless Telecommunications Carriers (except Satellite) and All Other Telecommunications small entity industry descriptions.

¹³⁰ Federal Communications Commission, Internet Access Services: Status as of December 31, 2018 (*IAS Status 2018*), Industry Analysis Division, Office of Economics & Analytics (September 2020). The report can be accessed at https://www.fcc.gov/economics-analytics/industry-analysis-division/iad-data-statistical-reports.

¹³¹ See 47 CFR § 1.7001(a)(1).

¹³² See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

¹³³ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

¹³⁴ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

- 29. Additionally, according to Commission data on Internet access services as of December 31, 2018, nationwide there were approximately 1,209 fixed wireless and 71 mobile wireless providers of connections over 200 kbps in at least one direction. The Commission does not collect data on the number of employees for providers of these services, therefore, at this time we are not able to estimate the number of providers that would qualify as small under the SBA's small business size standard. However, based on data in the Commission's 2022 Communications Marketplace Report on the small number of large mobile wireless nationwide and regional facilities-based providers, the dozens of small regional facilities-based providers and the number of wireless mobile virtual network providers in general, as well as on terrestrial fixed wireless broadband providers in general, we believe that the majority of wireless Internet access service providers can be considered small entities.
- 30. *Internet Service Providers (Non-Broadband)*. Internet access service providers using client-supplied telecommunications connections (e.g., dial-up ISPs) as well as VoIP service providers using client-supplied telecommunications connections fall in the industry classification of All Other Telecommunications. The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small. For this industry, U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year. Of those firms, 1,039 had revenue of less than \$25 million. Consequently, under the SBA size standard a majority of firms in this industry can be considered small.
- 31. *All Other Information Services*. This industry comprises establishments primarily engaged in providing other information services (except news syndicates, libraries, archives, Internet publishing and broadcasting, and Web search portals). ¹⁴³ The SBA small business size standard for this industry classifies firms with annual receipts of \$30 million or less as small. ¹⁴⁴ U.S. Census Bureau data for 2017 show that there were 704 firms in this industry that operated for the entire year. ¹⁴⁵ Of those

¹³⁶ See IAS Status 2018, Fig. 30.

¹³⁷ 2022 Communications Marketplace Report, 2022 WL 18110553 at 27, paras. 64-68.

¹³⁸ *Id.* at 8, para. 22.

¹³⁹ See U.S. Census Bureau, 2017 NAICS Definition, "517919 All Other Telecommunications," https://www.census.gov/naics/?input=517919&year=2017&details=517919.

¹⁴⁰ See 13 CFR § 121.201, NAICS Code 517919 (as of 10/1/22, NAICS Code 517810).

¹⁴¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

¹⁴² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

¹⁴³ See U.S. Census Bureau, 2017 NAICS Definition, "519190 All Other Information Services," https://www.census.gov/naics/?input=519190&year=2017&details=519190.

¹⁴⁴ See 13 CFR § 121.201, NAICS Code 519190 (as of 10/1/22, NAICS Codes 519290).

¹⁴⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 519190, https://data.census.gov/cedsci/table?y=2017&n=519190&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

firms, 556 had revenue of less than \$25 million. 146 Consequently, we estimate that the majority of firms in this industry are small entities.

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

- 32. In the Report and Order, we adopt rules that will create recordkeeping, reporting and other compliance obligations for small and other recipients of the Enhanced A-CAM program. We adopt a 15-year support term and deployment obligations that require every Enhanced A-CAM recipient to deploy, over a four-year term, 100/20 Mbps or faster broadband service, with latency of 100 milliseconds or less, and usage allowances reasonably comparable to those available through comparable offerings in urban areas, to all unserved locations in their service areas. Enhanced A-CAM recipients must also offer voice service to their required locations, and must offer their voice and broadband services at rates that are reasonably comparable to offerings of comparable services in urban areas. Additionally, Enhanced A-CAM recipients must participate in the Affordable Connectivity Program as well as any successor program and describe and certify their compliance with this requirement. Enhanced A-CAM carriers must also implement operational cybersecurity and supply chain risk management plans by January 1, 2024, submit and certify such plans, and file updates for the plans when there are substantive modifications with 30 days of the modification. Enhanced A-CAM carriers must annually certify that they have maintained their cybersecurity and supply chain risk management plans, report whether they filed any substantive modifications, and the date the modification was filed.
- 33. Like all high-cost support recipients, Enhanced A-CAM recipients must participate in the Lifeline Program. Enhanced A-CAM recipients also remain subject to the Commission's National Security Supply Chain proceeding and remain subject to the annual requirement to demonstrate they meaningfully engaged with the Tribal governments in their supported areas. To the extent a carrier's Enhanced A-CAM offer covers Tribal lands, we require Enhanced A-CAM recipients engage, within 90 days of the Bureau extending an Enhanced A-CAM offer, and at least annually thereafter—as they currently are, with relevant Tribal government(s) regarding deployment to Tribal locations.
- 34. We also adopt interim deployment milestones. Specifically, at the end of a carrier's second year of Enhanced A-CAM support, the carrier must deploy 100/20 Mbps or faster broadband service to at least 50% of required new locations, and the carrier must deploy such service to an additional 25% of required new locations at the end of each subsequent year, until the carrier deploys to 100% of required new locations at the end of the fourth year of Enhanced A-CAM support. Enhanced A-CAM recipients will also be subject to the same performance testing requirements as other high-cost-support recipients, along with the same support withholding and recovery provisions currently applicable to A-CAM carriers and other high-cost support recipients, with the exception that we do not extend to Enhanced A-CAM the flexibility for A-CAM carriers to deploy to only 95% of their required locations by the end of their final milestone without a reduction in support.
- 35. To make efforts to avoid duplicative federal broadband funding, Enhanced A-CAM recipients will be required to participate, in good faith, in any relevant Broadband Equity, Access, and Deployment Program (BEAD Program) challenge processes conducted by the states or other BEAD Program eligible entities. Additionally, they will be required to certify annually that they are not receiving or using BEAD Program funding or other future federal grant funding, unless otherwise

¹⁴⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue of less than \$100,000 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in this category). Therefore, the number of firms revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term ReceiptsRevenueServices.

specified herein, that supports broadband deployment to those areas in which they are receiving Enhanced A-CAM support. Eligible carriers that elect to participate in the Enhanced A-CAM program must identify in their election letters the technology they intend to use to meet their deployment obligations on a state-by-state basis. Legacy rate-of-return carriers that choose to accept an Enhanced A-CAM offer will have requirements related to their tariffs. To monitor the use of Enhanced A-CAM support to ensure that it is being used for its intended purposes, support recipients will be required to file location data on an annual basis in the online High Cost Universal Broadband (HUBB) portal and to make certifications when they have met their service milestones. Recipients must also file annual FCC Form 481 reports. Additionally, support recipients will be subject to the annual section 54.314 certifications and the same record retention and audit requirements as other high-cost ETCs.

36. The Commission does not have sufficient information on the record to determine whether small entities will be required to hire professionals to comply with its decisions or to quantify the cost of compliance for small entities. The Commission, however, anticipates the approaches it has taken to implement the requirements will have minimal or de minimis cost implications and may reduce compliance requirements for small entities that may have smaller staff and fewer resources.

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

- 37. The RFA requires an agency to provide, "a description of the steps the agency has taken to minimize the significant economic impact on small entities...including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected."¹⁴⁷
- 38. 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 *Report and Order* will provide greater certainty and flexibility for all carriers, including small entities. For example, we adopt a process for calculating Enhanced A-CAM offers that takes into account the challenges that all Enhanced A-CAM recipients, including small businesses, may face in serving high-cost areas. Specifically, we adopt a voluntary election process that allows each eligible carrier to consider whether accepting an Enhanced A-CAM offer will be most beneficial to that carrier. We adopt a Tribal Broadband Factor to address the unique challenges for deploying high-speed broadband in rural Tribal communities. Moreover, we delegated to the Bureau consideration of whether Enhanced A-CAM support should be increased to cover operational costs for carriers that already deployed broadband at speeds of 100/20 Mbps, which may ease the economic burden on small carriers.
- 39. We create a voluntary pathway to model-based support for small carriers that currently receive support under legacy embedded cost support mechanisms. We also provide transitional support to those legacy rate-of-return carriers that accept an Enhanced A-CAM offer that is lower than their existing legacy support, easing the economic burden on small entities that choose to accept Enhanced A-CAM offers by giving them time to adapt to the reduction in support. The legacy carriers that elect model-based support will also be eligible to elect incentive regulation for their business data service offerings, reducing the economic burden of providing those services. We also take action to re-set the legacy support budget for CAF BLS and HCLS to reflect the exit from the budget control mechanism of newly electing A-CAM carriers. This recalibration will mitigate the uncertainty for rate-of-return carriers that continue to receive legacy support, many of which are small businesses, caused by application of the Commission's budget control mechanism as the Commission considers additional budget updates.

 Absent recalibration, carriers would be under annual threat of increasing budget constraints going forward and the uncertainty of obtaining waiver relief while the Commission considers important and necessary budget updates.

¹⁴⁷ 5 U.S.C. § 604(a)(6).

- We also considered the ACAM Broadband Coalition's proposal to require complete 40. deployment within eight years. 148 but reject this in favor of a four-year deployment timeline for Enhanced A-CAM, beginning in 2025 and ending in 2028. The additional time may favor small carriers who may require more time to implement a construction and deployment plan, however that timeline runs counter to the Commission's goal of achieving buildout to all locations within four years. Instead, we direct the Bureau to consider, in 2027, whether a one-year extension for Enhanced A-CAM carriers' final deployment milestones would be appropriate in light of any such BEAD Program deployment delays. In adopting cybersecurity requirements, we took steps to mitigate concerns that development and implementation of cybersecurity plans are expensive and time consuming. We afford carriers flexibility to include standards and controls in their cybersecurity management plans that are reasonably tailored to their business needs. Our approach will also likely reduce compliance costs because it allows carriers that have already implemented the National Institute of Standards and Technology Framework for Improving Critical Infrastructure Cybersecurity to comply with the requirement without redoing their plan so long as they implement an established set of cybersecurity best practices. To further mitigate costs for small providers we encouraged Enhanced A-CAM carriers to take advantage of existing federal government resources designed to share supply chain security risk information with trusted communications providers and suppliers and facilitate the creation of cybersecurity and supply-chain risk management plans.
- 41. Finally, the reporting requirements we adopt for all Enhanced A-CAM 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 service milestones. 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 support and they will be able to submit their location data on a rolling basis to help minimize the burden of uploading a large number of locations at once.

G. Report to Congress

42. The Commission will send a copy of the *Report and Order*, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act. ¹⁴⁹ In addition, the Commission will send a copy of the *Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *Report and Order* and FRFA (or summaries thereof) will also be published in the Federal Register. ¹⁵⁰

¹⁴⁸ Comments of the ACAM Broadband Coalition, WC Docket Nos. 10-90, 14-58, 09-197, and 16-271, RM-11868, at 19 (rec. July 18, 2022).

¹⁴⁹ 5 U.S.C. § 801(a)(1)(A).

¹⁵⁰ *Id.* § 604(b).

APPENDIX C

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in the *Notice of Proposed Rulemaking (NPRM)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided on the first page of the *NPRM*. The Commission will send a copy of the *NPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the *NPRM* and IRFA (or summaries thereof) will be published in the Federal Register.³

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

- 2. In the *NPRM*, the Commission seeks comment on how to amend legacy rate-of-return mechanisms to align them with the current broadband deployment and support environment. The broadband landscape has changed significantly in recent years. The Commission, meanwhile, maintains its commitment to promote deployment of broadband at evolving levels of service, while seeking to avoid unnecessary duplication of services that would be provided in the absence of high-cost universal service, whether by unsubsidized competitors or through awards made by other programs.
- 3. To address immediate needs, we seek comment on three key areas. First, we seek comment on a variety of reforms to legacy support mechanisms and appropriate funding, so that rate-of-return carriers are subject to a smaller reduction when the budget control mechanism applies. We then seek comment regarding appropriate deployment obligations for carriers receiving Connect America Fund Broadband Loop Support (CAF BLS) when the current deployment term ends this year. Finally, we seek comment regarding methodologies for preventing duplication of support between legacy high-cost universal service support mechanisms and funding provided by other federal and state agencies for the deployment of broadband.

B. Legal Basis

4. The proposed action is authorized pursuant to sections 4(i), 214, 218-220, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 214, 218-220, 254, 303(r), and 403.

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

5. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small-business concern" under the Small Business Act.⁶ A "small-business

¹ 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 845 (1996).

² 5 U.S.C. § 603(a).

³ *Id*.

⁴ *Id.* § 603(b)(3).

⁵ *Id.* § 601(6).

⁶ Id. § 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 (continued....)

concern" is one that: (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.⁷

- 6. Small Businesses, Small Organizations, Small Governmental Jurisdictions. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe, at the outset, three broad groups of small entities that could be directly affected herein.⁸ 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.⁹ These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million businesses.¹⁰
- 7. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." 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. Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.
- 8. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." U.S. Census Bureau data from the 2017 Census of Governments¹⁵ indicate there were 90,075 local governmental jurisdictions consisting of general

⁷ 15 U.S.C. § 632.

⁸ 5 U.S.C. § 601(3)-(6).

⁹ See SBA, Office of Advocacy, "What's New With Small Business?," https://advocacy.sba.gov/wp-content/uploads/2023/03/Whats-New-Infographic-March-2023-508c.pdf. (Mar. 2023).

 $^{^{10}}$ Id

¹¹ 5 U.S.C. § 601(4).

¹² The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C. § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number of small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations – Form 990-N (e-Postcard), "Who must file," https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

¹³ Exempt Organizations Business Master File Extract (EO BMF), "CSV Files by Region," https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2020 with revenue less than or equal to \$50,000 for Region 1-Northeast Area (58,577), Region 2-Mid-Atlantic and Great Lakes Areas (175,272), and Region 3-Gulf Coast and Pacific Coast Areas (213,840) that includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.

¹⁴ 5 U.S.C. § 601(5).

¹⁵ 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.

purpose governments and special purpose governments in the United States. ¹⁶ Of this number, there were 36,931 general purpose governments (county, ¹⁷ municipal, and town or township ¹⁸) with populations of less than 50,000 and 12,040 special purpose governments—independent school districts ¹⁹ with enrollment populations of less than 50,000. ²⁰ 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." ²¹

9. Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks.²² Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband Internet services.²³ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.²⁴ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.²⁵

¹⁶ U.S. Census Bureau, 2017 Census of Governments – Organization Table 2. Local Governments by Type and State: 2017 [CG1700ORG02], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). *See also* tbl.2. CG1700ORG02 Table Notes Local Governments by Type and State_2017.

¹⁷ *Id.* at tbl.5. County Governments by Population-Size Group and State: 2017 [CG1700ORG05], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

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

¹⁹ *Id.* at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 12,040 independent school districts with enrollment populations less than 50,000. *See also* tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes_Special Purpose Local Governments by State Census Years 1942 to 2017.

²⁰ 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.

²¹ This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations tbls.5, 6 & 10.

²² U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

²³ *Id*.

²⁴ *Id*.

²⁵ Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.

- 10. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.²⁶ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.²⁷ Of this number, 2,964 firms operated with fewer than 250 employees.²⁸ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were engaged in the provision of fixed local services.²⁹ Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees.³⁰ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 11. Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include both incumbent and competitive local exchange service providers. Wired Telecommunications Carriers³¹ is the closest industry with an SBA small business size standard.³² Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.³³ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.³⁴ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.³⁵ Of this number, 2,964 firms operated with fewer than 250 employees.³⁶ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were fixed local exchange service providers.³⁷ Of these providers, the Commission estimates that 4,146 providers have 1,500 or

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

²⁷ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

²⁸ *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.

²⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf. https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf

³⁰ *Id*.

³¹ U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

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

³³ Fixed Local Exchange Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

³⁴ *Id*.

³⁵ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

³⁶ *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.

³⁷ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

fewer employees.³⁸ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- 12. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers³⁹ is the closest industry with an SBA small business size standard.⁴⁰ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁴¹ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁴² Of this number, 2,964 firms operated with fewer than 250 employees.⁴³ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 1,212 providers that reported they were incumbent local exchange service providers.⁴⁴ Of these providers, the Commission estimates that 916 providers have 1,500 or fewer employees.⁴⁵ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.
- 13. Competitive Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers. He Wired Telecommunications Carriers is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than

³⁸ *Id*.

³⁹ U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

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

⁴¹ *Id*.

⁴² U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁴³ *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.

⁴⁴ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

⁴⁵ *Id*.

⁴⁶ Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

⁴⁷ U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

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

⁴⁹ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

250 employees.⁵⁰ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 3,378 providers that reported they were competitive local exchange service providers.⁵¹ Of these providers, the Commission estimates that 3,230 providers have 1,500 or fewer employees.⁵² Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- 14. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for Interexchange Carriers. Wired Telecommunications Carriers⁵³ is the closest industry with a SBA small business size standard.⁵⁴ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁵⁵ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁵⁶ Of this number, 2,964 firms operated with fewer than 250 employees.⁵⁷ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 127 providers that reported they were engaged in the provision of interexchange services. Of these providers, the Commission estimates that 109 providers have 1,500 or fewer employees.⁵⁸ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of providers in this industry can be considered small entities.
- 15. Local Resellers. Neither the Commission nor the SBA have developed a small business size standard specifically for Local Resellers. Telecommunications Resellers is the closest industry with a SBA small business size standard.⁵⁹ The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households.⁶⁰ Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.⁶¹ Mobile virtual network operators (MVNOs) are included in this industry.⁶² The SBA small business size standard for Telecommunications Resellers

⁵⁰ *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.

⁵¹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

⁵² *Id*.

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

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

⁵⁵ *Id*.

⁵⁶ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁵⁷ *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.

⁵⁸ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

⁵⁹ U.S. Census Bureau, 2017 NAICS Definition, "517911 Telecommunications Resellers," https://www.census.gov/naics/?input=517911&year=2017&details=517911.

⁶⁰ *Id*.

⁶¹ *Id*.

⁶² *Id*.

classifies a business as small if it has 1,500 or fewer employees.⁶³ U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.⁶⁴ Of that number, 1,375 firms operated with fewer than 250 employees.⁶⁵ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 207 providers that reported they were engaged in the provision of local resale services.⁶⁶ Of these providers, the Commission estimates that 202 providers have 1,500 or fewer employees.⁶⁷ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

16. *Toll Resellers*. Neither the Commission nor the SBA have developed a small business size standard specifically for Toll Resellers. Telecommunications Resellers⁶⁸ is the closest industry with a SBA small business size standard. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.⁶⁹ Mobile virtual network operators (MVNOs) are included in this industry.⁷⁰ The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.⁷¹ U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.⁷² Of that number, 1,375 firms operated with fewer than 250 employees.⁷³ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 457 providers that reported they were engaged in the provision of toll services.⁷⁴ Of these providers, the Commission estimates that

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

⁶⁴ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517911, https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁶⁵ *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.

⁶⁶ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

⁶⁷ *Id*.

⁶⁸ U.S. Census Bureau, 2017 NAICS Definition, "517911 Telecommunications Resellers," https://www.census.gov/naics/?input=517911&vear=2017&details=517911.

⁶⁹ *Id*.

⁷⁰ *Id*.

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

⁷² U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517911, https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁷³ *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.

⁷⁴ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf. https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf.

438 providers have 1,500 or fewer employees.⁷⁵ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- 17. Other Toll Carriers. Neither the Commission nor the SBA has developed a definition for small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. Wired Telecommunications Carriers⁷⁶ is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 90 providers that reported they were engaged in the provision of other toll services. Of these providers, the Commission estimates that 87 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 18. Prepaid Calling Card Providers. Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. Telecommunications Resellers⁸³ is the closest industry with a SBA small business size standard. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.⁸⁴ Mobile virtual network operators (MVNOs) are included in this industry.⁸⁵ The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.⁸⁶ U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale

⁷⁵ *Id*.

⁷⁶ U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

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

⁷⁸ *Id*

⁷⁹ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁸⁰ *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.

⁸¹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf. https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf.

⁸² *Id*.

⁸³ U.S. Census Bureau, 2017 NAICS Definition, "517911 Telecommunications Resellers," https://www.census.gov/naics/?input=517911&year=2017&details=517911.

⁸⁴ *Id*.

⁸⁵ *Id*.

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

services for the entire year. ⁸⁷ Of that number, 1,375 firms operated with fewer than 250 employees. ⁸⁸ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 62 providers that reported they were engaged in the provision of prepaid card services. ⁸⁹ Of these providers, the Commission estimates that 61 providers have 1,500 or fewer employees. ⁹⁰ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- 19. 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. The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year. Of that number, 2,837 firms employed fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 594 providers that reported they were engaged in the provision of wireless services. Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 20. Cable and Other Subscription Programming. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. 98 The broadcast programming is typically narrowcast in nature

⁸⁷ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517911, https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

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

⁸⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf. https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf.

⁹⁰ Id

⁹¹ U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

⁹² *Id*.

^{93 13} CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁹⁴ U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁹⁵ *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.

⁹⁶ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.

⁹⁷ Id.

⁹⁸ U.S. Census Bureau, 2017 NAICS Definition, "515210 Cable and Other Subscription Programming," https://www.census.gov/naics/?input=515210&year=2017&details=515210.

(e.g., limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources.⁹⁹ The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.¹⁰⁰ The SBA small business size standard for this industry classifies firms with annual receipts less than \$41.5 million as small.¹⁰¹ Based on U.S. Census Bureau data for 2017, 378 firms operated in this industry during that year.¹⁰² Of that number, 149 firms operated with revenue of less than \$25 million a year and 44 firms operated with revenue of \$25 million or more.¹⁰³ Based on this data, the Commission estimates that a majority of firms in this industry are small.

- 21. Cable Companies and Systems (Rate Regulation). The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide. Based on industry data, there are about 420 cable companies in the U.S. Of these, only seven have more than 400,000 subscribers. In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Based on industry data, there are about 4,139 cable systems (headends) in the U.S. Of these, about 639 have more than 15,000 subscribers. Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.
- 22. Cable System Operators (Telecom Act Standard). The Communications Act of 1934, as amended, contains a size standard for a "small cable operator," which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."¹¹⁰ For purposes of the Telecom Act Standard, the Commission determined that a cable

⁹⁹ Id.

¹⁰⁰ Id.

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

¹⁰² U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 515210, https://data.census.gov/cedsci/table?y=2017&n=515210&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. The US Census Bureau withheld publication of the number of firms that operated for the entire year to avoid disclosing data for individual companies (see Cell Notes for this category).

¹⁰³ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in all categories of revenue less than \$500,000 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

¹⁰⁴ 47 CFR § 76.901(d).

¹⁰⁵ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited July 23, 2023).

¹⁰⁶ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited July 23, 2023); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

¹⁰⁷ 47 CFR § 76.901(c).

¹⁰⁸ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited July 23, 2023).

¹⁰⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited July 23, 2023).

¹¹⁰ 47 U.S.C. § 543(m)(2).

system operator that serves fewer than 677,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator based on the cable subscriber count established in a 2001 Public Notice. Based on industry data, only six cable system operators have more than 677,000 subscribers. Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million. Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

23. *All Other Telecommunications*. This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Providers of Internet services (e.g. dial-up ISPs) or Voice over Internet Protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry. The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small. U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year. Of those firms, 1,039 had revenue of less than \$25 million. Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

¹¹¹ FCC Announces New Subscriber Count for the Definition of Small Cable Operator, Public Notice, 16 FCC Rcd 2225 (CSB 2001) (2001 Subscriber Count PN). In this Public Notice, the Commission determined that there were approximately 67.7 million cable subscribers in the United States at that time using the most reliable source publicly available. Id. We recognize that the number of cable subscribers changed since then and that the Commission has recently estimated the number of cable subscribers to traditional and telco cable operators to be approximately 49.8 million. See Communications Marketplace Report, GN Docket No. 22-203, 2022 WL 18110553 at 80, para. 218, Fig. II.E.1. (2022) (2022 Communications Marketplace Report). However, because the Commission has not issued a public notice subsequent to the 2001 Subscriber Count PN, the Commission still relies on the subscriber count threshold established by the 2001 Subscriber Count PN for purposes of this rule. See 47 CFR § 76.901(e)(1).

¹¹² S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited July 23, 2023); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

¹¹³ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to \S 76.901(e) of the Commission's rules. *See* 47 CFR \S 76.910(b).

¹¹⁴ U.S. Census Bureau, 2017 NAICS Definition, "517919 All Other Telecommunications," https://www.census.gov/naics/?input=517919&year=2017&details=517919.

¹¹⁵ *Id*.

¹¹⁶ *Id*.

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

¹¹⁸ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

¹¹⁹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term ReceiptsRevenueServices.

- 24. Wired Broadband Internet Access Service Providers (Wired ISPs). 120 Providers of wired broadband Internet access service include various types of providers except dial-up Internet access providers. Wireline service that terminates at an end user location or mobile device and enables the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction is classified as a broadband connection under the Commission's rules. 121 Wired broadband Internet services fall in the Wired Telecommunications Carriers industry. 122 The SBA small business size standard for this industry classifies firms having 1,500 or fewer employees as small. 123 U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. 124 Of this number, 2,964 firms operated with fewer than 250 employees. 125
- 25. Additionally, according to Commission data on Internet access services as of December 31, 2018, nationwide there were approximately 2,700 providers of connections over 200 kbps in at least one direction using various wireline technologies. ¹²⁶ The Commission does not collect data on the number of employees for providers of these services, therefore, at this time we are not able to estimate the number of providers that would qualify as small under the SBA's small business size standard. However, in light of the general data on fixed technology service providers in the Commission's 2022 Communications Marketplace Report, ¹²⁷ we believe that the majority of wireline Internet access service providers can be considered small entities.
- 26. Wireless Broadband Internet Access Service Providers (Wireless ISPs or WISPs). 128
 Providers of wireless broadband Internet access service include fixed and mobile wireless providers. The Commission defines a WISP as "[a] company that provides end-users with wireless access to the Internet[.]" Wireless service that terminates at an end user location or mobile device and enables the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kilobits per second (kbps) in at least one direction is classified as a broadband connection

¹²⁰ Formerly included in the scope of the Internet Service Providers (Broadband), Wired Telecommunications Carriers and All Other Telecommunications small entity industry descriptions.

¹²¹ 47 CFR § 1.7001(a)(1).

¹²² U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

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

¹²⁴ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

¹²⁵ *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.

¹²⁶ IAS Status 2018, Fig. 30 (The technologies used by providers include aDSL, sDSL, Other Wireline, Cable Modem and FTTP). Other wireline includes: all copper-wire based technologies other than xDSL (such as Ethernet over copper, T-1/DS-1 and T3/DS-1) as well as power line technologies which are included in this category to maintain the confidentiality of the providers.

¹²⁷ 2022 Communications Marketplace Report, 2022 WL 18110553 at 10, paras. 26-27, Figs. II.A.5-7.

¹²⁸ Formerly included in the scope of the Internet Service Providers (Broadband), Wireless Telecommunications Carriers (except Satellite) and All Other Telecommunications small entity industry descriptions.

¹²⁹ Federal Communications Commission, Internet Access Services: Status as of December 31, 2018 (*IAS Status 2018*), Industry Analysis Division, Office of Economics & Analytics (September 2020). The report can be accessed at https://www.fcc.gov/economics-analytics/industry-analysis-division/iad-data-statistical-reports.

under the Commission's rules. ¹³⁰ Neither the SBA nor the Commission have developed a size standard specifically applicable to Wireless Broadband Internet Access Service Providers. The closest applicable industry with an SBA small business size standard is Wireless Telecommunications Carriers (except Satellite). ¹³¹ The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees. ¹³² U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year. ¹³³ Of that number, 2,837 firms employed fewer than 250 employees. ¹³⁴

- 27. Additionally, according to Commission data on Internet access services as of December 31, 2018, nationwide there were approximately 1,209 fixed wireless and 71 mobile wireless providers of connections over 200 kbps in at least one direction. The Commission does not collect data on the number of employees for providers of these services, therefore, at this time we are not able to estimate the number of providers that would qualify as small under the SBA's small business size standard. However, based on data in the Commission's 2022 Communications Marketplace Report on the small number of large mobile wireless nationwide and regional facilities-based providers, the dozens of small regional facilities-based providers and the number of wireless mobile virtual network providers in general, as well as on terrestrial fixed wireless broadband providers in general, we believe that the majority of wireless Internet access service providers can be considered small entities.
- 28. *Internet Service Providers (Non-Broadband)*. Internet access service providers using client-supplied telecommunications connections (e.g., dial-up ISPs) as well as VoIP service providers using client-supplied telecommunications connections fall in the industry classification of All Other Telecommunications. The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small. For this industry, U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year. Of those firms, 1,039

¹³⁰ 47 CFR § 1.7001(a)(1).

¹³¹ U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

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

¹³³ U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

¹³⁴ *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.

¹³⁵ IAS Status 2018, Fig. 30.

¹³⁶ 2022 Communications Marketplace Report, 2022 WL 18110553 at 27, paras. 64-68.

¹³⁷ *Id.* at 8, para. 22.

¹³⁸ U.S. Census Bureau, 2017 NAICS Definition, "517919 All Other Telecommunications," https://www.census.gov/naics/?input=517919&year=2017&details=517919.

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

¹⁴⁰ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

had revenue of less than \$25 million. 141 Consequently, under the SBA size standard a majority of firms in this industry can be considered small.

29. All Other Information Services. This industry comprises establishments primarily engaged in providing other information services (except news syndicates, libraries, archives, Internet publishing and broadcasting, and Web search portals). The SBA small business size standard for this industry classifies firms with annual receipts of \$30 million or less as small. U.S. Census Bureau data for 2017 show that there were 704 firms in this industry that operated for the entire year. Of those firms, 556 had revenue of less than \$25 million. Consequently, we estimate that the majority of firms in this industry are small entities.

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

- 30. The Commission's proposal to reform legacy rate-of-return mechanisms to align these mechanisms with current broadband deployment and the specific issues to implement the reform upon which we seek comment in the NPRM, may impose new or additional reporting or recordkeeping and/or other compliance obligations on small entities. For example, we seek comment regarding the deployment obligations for rate-of-return carriers receiving CAF BLS. We seek comment on whether we should continue to require CAF BLS recipients to meet broadband deployment obligations or increase the broadband speeds beyond their current obligations. If the Commission chooses to continue to require deployment obligations, small entities and other CAF BLS recipients will likely have to serve a certain number of locations with broadband service meeting certain performance requirements.
- 31. We also seek comment on whether the Universal Service Administrative Company should collect information regarding grants received by legacy support recipients on CAF BLS-related forms, or in annual compliance forms to prevent double recovery of investment paid for with grants. This would require legacy support recipients, including small entities, to track and report the grants they receive from other funding programs. Additionally, we seek comment on updating a challenge process for determining which census blocks are competitively served. As part of this process, competitive carriers, that may include small entities, could be required to submit data to demonstrate that they are already serving a location or that they received awards from other programs to serve an area in order to prevent a rate-of-return carrier from receiving support from legacy support mechanisms to serve the same area. As an alternative, we also seek comment on relying on existing data sources instead of requiring competitors to submit information.

¹⁴¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

¹⁴² U.S. Census Bureau, 2017 NAICS Definition, "519190 All Other Information Services," https://www.census.gov/naics/?input=519190&year=2017&details=519190.

¹⁴³ 13 CFR § 121.201, NAICS Code 519190 (as of 10/1/22, NAICS Codes 519290).

¹⁴⁴ U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 519190, https://data.census.gov/cedsci/table?y=2017&n=519190&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

¹⁴⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue of less than \$100,000 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in this category). Therefore, the number of firms revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term ReceiptsRevenueServices.

32. At this time, the Commission is not in a position to determine whether, if adopted, our proposals and the matters upon which we seek comment will require small entities to hire professionals to comply, and cannot quantify the cost of compliance with the potential rule changes discussed herein. We anticipate the information we receive in comments including where requested, cost and benefit analyses, will help the Commission identify and evaluate relevant compliance matters for small entities, including compliance costs and other burdens that may result from the proposals and inquiries made in the *NPRM*.

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

- 33. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities." ¹¹⁴⁶
- In the NPRM, we seek to balance the requirement to provide support that is sufficient to achieve the Commission's universal service goals, but also provide appropriate incentives for prudent and efficient expenditures. With these goals in mind, we seek comment on measures related to the budget for CAF BLS and other legacy support mechanisms that could potentially benefit legacy support recipients, including small entities, by having their support shifted towards costs that are trending higher for such carriers. For example, we seek comment on alternatives like resetting the budget amount to account for trends like the conversion of voice lines in consumer broadband-only loops, reducing high-cost loop support (HCLS) and targeting the support to CAF BLS to account for broadband deployment costs, or shifting support from another mechanism like Connect America Fund Intercarrier Compensation (CAF ICC). We also seek comment on increasing the amount of end-user revenue imputed to CBOL lines in the CAF BLS calculation. While some of these proposals may have the consequence of reducing highcost universal support to small entities, they may potentially result in more stable and predictable annual support when the budget control is applied, giving all legacy carriers, including small carriers, more certainty regarding their support. In considering these matters, we note that the costs of high-cost universal service is ultimately borne by consumers, including small entities, through the contributions factors assessed on their bills.
- obligations for rate-of-return carriers receiving support through legacy support mechanisms. For example, we consider whether we should increase the obligations to require the deployment of broadband at 100/20 Mbps consistent with the Infrastructure Act and the Enhanced Alternative Connect America Cost Model (A-CAM) program, and what methodology to use to determine those obligations. Alternatively, we seek comment on retaining the existing requirement that legacy support recipients offer broadband at speeds of 25/3 Mbps deployment obligations and the methodology for determining these obligations. We also seek comment on revisiting deployment obligations to account for another agency making a qualifying award with enforceable deployment obligations in the rate-of-return carrier's service area. If the Commission were to adopt lower broadband speed obligations, like 25/3 Mbps, it might reduce costs for all legacy support recipients, including small entities. A carrier's costs may also be reduced if other funding programs award grants in the rate-of-return carrier's service area, and the legacy rate-of-return carrier is no longer required to serve the locations receiving the alternative funding. However, these scenarios may also result in the reduction of support for such carriers if the Commission adjusts support to account for the lower costs or duplicative funding.

¹⁴⁶ 5 U.S.C. § 603(c)(1)-(4).

- 36. We seek comment on alternatives for reducing a rate-of-return carrier's support amount to reflect the availability of funding from other federal and state programs in their service areas or to reflect that an unsubsidized competitor serves the area. For example, we seek comment on alternatives for identifying overlap, methods for disaggregating CAF BLS between competitor-served or -obligated areas, the timing for making support reductions, and the process for making the determinations that qualifying awards have been made to a competitor. In areas where the rate-of-return carrier receives a grant from another source, we seek comment on alternatives for how to account for the grant in the rate-of-return's cost recovery.
- 37. More generally, the Commission expects to more fully consider the economic impact on small entities following its review of comments filed in response to the NPRM and the IRFA, including costs and benefits information and any alternative proposals. The matters discussed in the NPRM are designed to ensure the Commission has a complete understanding of the benefits and potential burdens associated with the different actions and methods before reaching its final. The Commission's evaluation of the comments filed in this proceeding will shape the final alternatives it considers, the final conclusions it reaches, and the actions it ultimately takes in this proceeding to minimize any significant economic impact that may occur on small entities as a result of any final rules that are adopted.
 - F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules
 - 38. None.