

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

In the Matter of)
Report on the Future of the Universal Service Fund) WC Docket No. 21-476

REPORT

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By the Commission: Commissioners Carr and Simington issuing separate statements.

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I. INTRODUCTION

1. The Federal Communications Commission (Commission) adopts this Report on the Future of the Universal Service Fund (Report) as required by Section 60104(c) of the Infrastructure Investment and Jobs Act (Infrastructure Act or Act), which instructs the Commission to submit to Congress “a report on options of the Commission for improving its effectiveness in achieving the universal service goals for broadband in light of this Act . . . and other legislation that addresses those goals.”¹ The Infrastructure Act includes the largest ever federal investment in broadband, totaling approximately \$65 billion. This Report provides recommendations for further actions by the Commission and Congress to build upon that investment and improve the ability of the Commission to achieve its goals of universal deployment, affordability, adoption, availability, and equitable access to broadband

¹ Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, div. F, tit. I, § 60104(c), 135 Stat. 429, 1205 (2021) (Infrastructure Act).

through the Universal Service Fund (USF or Fund) and other Commission programs, to ensure that all of us have the broadband needed to succeed and thrive today.²

II. BACKGROUND

2. Prior to the creation of the Universal Service Fund, the Commission sought to make local phone service available and affordable to residential customers, no matter where they lived, through tariff policies that created implicit subsidies, which allowed telephone companies operating as regulated monopolies to earn an acceptable return while simultaneously assisting with public policy goals. For example, higher rates for business customers or long distance service were set for the express purpose of reducing local rates charged to residential customers, or cross-subsidization or other mechanisms allowed similar rates for urban and rural customers even though the costs of providing service to rural and more remote areas routinely exceeded the costs of providing service to less rural areas.³

3. This system evolved in response to changing circumstances, the most significant being the divestiture of AT&T in 1982 and enactment of the Telecommunications Act of 1996 (1996 Act). The AT&T divestiture led to the development of access charges and subscriber line charges, as well as the first Universal Service Fund, created using the Commission's authority to promote and preserve universal service.⁴ The Lifeline program was also created during this time to keep rates affordable in response to the imposition of the new subscriber line charge on consumer bills.⁵ The Commission further modified its approach to universal service following passage of the 1996 Act. Among other changes, Section 254 of the 1996 Act codified the Commission's long-standing universal service policy, providing that consumers in all regions of the nation, including rural, insular, and high-cost areas, should have access to telecommunications and information services at rates "reasonably comparable" to the services and charges offered in urban areas.⁶ The 1996 Act also expanded the traditional goals of universal service to include increased access to advanced services—such as high-speed Internet—for all consumers at just, reasonable, and affordable rates.⁷ The 1996 Act established principles for universal service that specifically focused on increasing access to evolving services for consumers living in rural and insular areas and for low-income consumers. Additional principles in the 1996 Act called for increased access to advanced telecommunications and information services in the nation's schools and libraries, and rural health care facilities. In response to the 1996 Act, the Commission established four USF programs:

- High Cost Program, to support the cost of network deployment and maintenance in rural areas;⁸

² *Id.* § 60104(c)(2).

³ See *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8784-85, paras. 10-12 (1997) (*Universal Service First Report and Order*); *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, 26 FCC Rcd 4554, 4571, para. 46 (2011) (*USF/ICC Transformation NPRM*). See also Jonathan Nuechterlein & Philip Weiser, *Digital Crossroads* 52-54 (1st ed. 2005) (discussing common cross-subsidies used in tariffs to promote universal telephone service prior to 1996).

⁴ See *USF/ICC Transformation NPRM*, 26 FCC Rcd at 4572, para. 49.

⁵ See *Lifeline and Link Up Reform and Modernization et al.*, WC Docket 11-42 et al., Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd 6656, 6662-63, para. 12 (2012) (*2012 Lifeline Order*).

⁶ 47 U.S.C. §254.

⁷ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified at 47 U.S.C. § 151 *et seq.*) (1996 Act).

⁸ *Universal Service First Report and Order*, 12 FCC Rcd at 8782, 8888-8951, paras. 6, 199-325.

- Low-income programs (consisting of the Lifeline and Link Up), to make service affordable for low-income households, including an enhanced benefit for low-income residents of Tribal lands;⁹
- E-Rate Program (also referred to as the Schools and Libraries program), to help offset the cost of communications service to school and libraries;¹⁰ and
- Rural Health Care Program, to support communications service to rural health care providers.¹¹

Initially, the four programs were limited to telephone service, but as the Internet emerged and rapidly expanded, the Fund began authorizing more Internet-related expenses, such as supporting the adoption of dual-use technologies that could transmit both voice and data traffic.

4. The four programs are all supported by contributions from providers of telecommunications services based on an assessment on their interstate and international end-user revenues.¹² Examples of entities that contribute to the Fund are telecommunications carriers, including wireline and wireless companies, and interconnected Voice over Internet Protocol (VoIP) providers, including cable companies that provide voice service. The Commission's rules permit these providers to pass through the fees to their end-users.¹³ When implementing the 1996 Act, the Commission designated the Universal Service Administrative Company (USAC) as the administrator of the four programs. The Commission's annual monitoring report tracks contributions and disbursements.¹⁴

5. In 2009, Congress mandated that the Commission prepare the National Broadband Plan to promote broadband access for all people in the United States by assessing the state of broadband deployment and creating strategies to deploy necessary infrastructure.¹⁵ In 2011, following the National Broadband Plan's recommendations, the Commission created the Connect America Fund to shift away from a voice-centric High Cost program and prioritize broadband service and funding.¹⁶ Similar reforms to the other universal service programs followed in subsequent years: the Healthcare Connect Fund to provide support for broadband networks for rural healthcare providers;¹⁷ the E-Rate program to increase its emphasis on supporting high-speed broadband and Wi-Fi;¹⁸ and the Lifeline program to provide support for broadband for low-income consumers.¹⁹

⁹ *Id.* at 8952-93, paras. 326-409.

¹⁰ *Id.* at 9002-92, paras. 424-607.

¹¹ *Id.* at 9093-9156, paras. 608-739.

¹² 47 CFR § 54.709(a)(2).

¹³ *Id.* § 54.712.

¹⁴ FCC, Universal Service Monitoring Report (2021), <https://www.fcc.gov/general/federal-state-joint-board-monitoring-reports> (Universal Service Monitoring Report).

¹⁵ American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 6001(k)(2)(D), 123 Stat. 115, 516 (2009).

¹⁶ *Connect America Fund et. al.*, WC Docket 10-90, Report, Order & Further Notice, 26 FCC Rcd 17663 (2011) (*USF/ICC Transformation Order*), *aff'd sub nom. In re FCC*, 753 F.3d 1015 (10th Cir. 2014).

¹⁷ *Rural Healthcare Support Mechanism*, WC Docket No. 02-60, Report and Order, 27 FCC Rcd 16678, 16681, para. 3 (2012) (*HCF Order*).

¹⁸ *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC 8870, 8873, para. 5 (2014) (*First E-Rate Modernization Order*).

¹⁹ *See 2012 Lifeline Order*, 27 FCC Rcd at 6662-3, para. 12; *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11042 et al., Third Report and Order, Further Report and Order, Order on Reconsideration, 31 FCC Rcd 3962, 3964, para. 5 (2016) (*2016 Lifeline Order*).

6. The Infrastructure Act and other legislation enacted in 2020 and 2021 provided unprecedented funding for broadband deployment, equity, affordability, and adoption. The Infrastructure Act directed the National Telecommunications and Information Administration’s (NTIA) to implement a \$42.45 billion Broadband Equity, Access, and Deployment (BEAD) Program that nearly matches the Commission’s universal service High Cost program disbursements from 2011 to 2020.²⁰ This level of funding is even more striking because these three examples represent only a portion of the new broadband funding authorized by the recent legislation – there are billions of dollars more that are available for broadband programs now being implemented by the Commission, NTIA, the Department of Treasury (Treasury), and Department of Agriculture (USDA).

7. The Commission’s High Cost program consists of more than 13 “processes,” or sub-programs, created at varying times, to serve different geographic areas, to provide different types of service, or to accommodate specific types of Internet service providers.²¹ The newest High Cost processes define unserved as an area served by broadband of less than 25/3 Mbps²² and include a preference for deployment of facilities to transmit at 1000/500 Mbps.²³ Other High Cost processes follow different standards. As enacted, BEAD defines an unserved area as one with service speeds below 25/3 Mbps²⁴ and “underserved” locations as those lacking reliable service with latency characteristics sufficient to support real-time, interactive applications at speeds below 100/20 Mbps.²⁵

8. Other federal broadband infrastructure programs now underway include:

- ReConnect, operated by the Rural Utilities Service in USDA, has received appropriations of \$4.8 billion from fiscal year 2018 to the present.²⁶ Its requirements have evolved over time, and in Round 3, announced in October 2021, an eligible area was defined as one where at least 90 percent of households lack access to 100/20 Mbps service.²⁷ For Round 3, new projects are to build capacity to support 100/100 Mbps service.²⁸

²⁰ The BEAD Program received an appropriation in the Infrastructure Act. Infrastructure Act, § 60102. The High Cost program disbursed \$44.8 billion from 2011-2020. *Universal Service Monitoring Report* at 23, Table 1.10.

²¹ Some High Cost program processes focus on specific areas (Alaska, Puerto Rico, U.S. Virgin Islands), some are for fixed or mobile or fixed/mobile, and some are oriented toward small carriers. The speed thresholds, type of support, duration of support, and definition of unserved vary by program. See USAC, High Cost Funds, <https://www.usac.org/high-cost/funds/> (last visited Aug. 12, 2022). The largest five components of the program by annual dollar amount are: CAF BLS/HCLS (\$1.2 billion), A-CAM (\$626 million), Rural Digital Opportunity Fund (\$512 million), A-CAM II (\$508 million), and Frozen Support (\$404 million). See USAC, About, Reports & Orders, FCC Filings, [HC01-High-Cost-Support-Projected-by-State-by-Study-Area-3Q2022.xlsx](https://www.usac.org/about/reports-orders/fcc-filings/), <https://www.usac.org/about/reports-orders/fcc-filings/> (last visited Aug. 12, 2022) and Authorized Auction 904 Long-Form Applicants (updated June 14, 2022), <https://www.fcc.gov/file/23415/download>.

²² *RDOF Order*, 35 FCC Rcd at 688, para. 4.

²³ For example, the Rural Digital Opportunity Fund (RDOF) offers funding for service at 1 Gigabit per second download and 500 megabits per second upload. *Rural Digital Opportunity Fund et al.*, WC Docket No. 19-126 et al., Report and Order, 35 FCC Rcd 686, 702-3, para. 31 (2020) (*RDOF Order*).

²⁴ Infrastructure Act, § 60102(a)(1)(A), § 60102(a)(1)(C).

²⁵ An “underserved location” lacks access to reliable broadband service with a speed not less than 100/20 Mbps. Infrastructure Act, § 60104(c).

²⁶ ReConnect was established in the Consolidated Appropriations Act, 2018 (Pub. L. 115-141), 132 Stat. 348 at 399, Sec. 779 (2018). Funding levels from 2018 to the IJA are listed in “USDA’s ReConnect Program: Expanding Rural Broadband,” Congressional Research Service, [R47017](https://www.crs.org/), summary page (Jan. 26, 2022). Funding levels for FY 2022 can be found in the Explanatory Statement for the Consolidated Appropriations Act, 2022, 168 Cong. Rec. [H1714](https://www.congress.gov/) (2022).

²⁷ Department of Agriculture, Rural Utilities Service, Funding Opportunity Announcement, 86 Fed. Reg. 58860, 588861, sec. 3-iv, and 588862, sec. C-2-i. (Oct. 25, 2021)

- The Tribal Broadband Connectivity Program, operated by NTIA, has received appropriations of \$3 billion.²⁹ To be unserved, a household should lack access to 25/3 Mbps service, with less than 100 millisecond latency.³⁰ The program awards prioritization points on a sliding scale for higher speeds: 10 points for 1000 Mbps, 9 points for 100/20 and above 25/3, and 3 points for 25/3. Networks with high latency are “viewed less favorably.”³¹
- The Enabling Middle Mile Infrastructure Program, operated by NTIA, received a \$1 billion appropriation.³² It prioritizes funding for middle mile infrastructure supporting last-mile deployment to areas lacking 25/3 Mbps service.³³
- The Broadband Infrastructure Program, also run by NTIA, received a \$288 million appropriation.³⁴ It defines unserved as a household lacking at least 25/3 Mbps service with less than 100 milliseconds of latency.³⁵ Its minimum requirement for funded projects is 25/3 Mbps service, with prioritization for higher speeds and ability to scale.³⁶

9. Beyond broadband infrastructure, Congress appropriated \$17.2 billion for the Affordable Connectivity Program and its predecessor, the Emergency Broadband Benefit Program, an amount exceeding Lifeline program disbursements from 2011 to 2020.³⁷ The Emergency Connectivity Fund, funded at \$7.171 billion, exceeds the past three years of E-Rate Program disbursements.³⁸

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²⁸ *Id.* at 588861, sec. 3-v.

²⁹ The Tribal Broadband Connectivity Program received an appropriation of \$1 billion in the Consolidated Appropriations Act, 2021 and \$2 billion in the Infrastructure Act. Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, div. N, Title IX, § 905(c), 134 Stat. 1182 at 2138-9 (2021) (*Consolidated Appropriations Act, 2021*). Infrastructure Act, Division J, Title II, 135 Stat. 429 at 1353.

³⁰ Department of Commerce, NTIA, Tribal Broadband Connectivity Program, Notice of Funding Opportunity at 42 (2021), https://broadbandusa.ntia.doc.gov/sites/default/files/2021-06/NTIA.Tribal%20Broadband%20Connectivity%20Program.Final_.OMB%20Cleared.pdf. (*Tribal NOFO*) at 8, 9.

³¹ *Tribal NOFO* at 42.

³² Infrastructure Act, Division J, Title II, 135 Stat. 429 at 1355.

³³ Department of Commerce, NTIA, Middle Mile Grant Program, Notice of Funding Opportunity (2022), <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/MIDDLE%20MILE%20NOFO.pdf> (*Middle Mile NOFO*). See also, Press Release, NTIA, Biden-Harris Administration Launches \$45 Billion “Internet for All” Initiative to Bring Affordable, Reliable High-Speed Internet to Everyone in America (May 13, 2021), <https://broadbandusa.ntia.doc.gov/news/latest-news/biden-harris-administration-launches-45-billion-internet-all-initiative-bring>.

³⁴ The Broadband Infrastructure Program received an appropriation of \$288 million in the Consolidated Appropriations Act, 2021. *Consolidated Appropriations Act, 2021*, div. N, Title IX, § 905(d), 134 Stat. 1182 at 2139-42.

³⁵ Department of Commerce, NTIA, Broadband Infrastructure Program, Notice of Funding Opportunity at 7 (2021), https://broadbandusa.ntia.doc.gov/sites/default/files/2021-05/NTIA%20Broadband%20Infrastructure%20Grant%20Program%20NOFO.Final_.pdf (*BIP NOFO*). See also Press Release, NTIA, Commerce Department’s NTIA Announces \$288 Million in Funding Available to States to Build Broadband Infrastructure (May 19, 2021), <https://www.ntia.doc.gov/press-release/2021/commerce-department-s-ntia-announces-288-million-funding-available-states-build>.

³⁶ *BIP NOFO* at 4, 9.

³⁷ The Emergency Broadband Benefit Program received an appropriation of \$3.2 billion in the Consolidated Appropriations Act, 2021. *Consolidated Appropriations Act, 2021*, div. N, § 904, 134 Stat. 1182 at 2129-2136. It was replaced by the Affordable Connectivity Program, which received an additional appropriation of \$14.2 billion in

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10. The Infrastructure Act directs the Commission to submit this Report “[n]ot later than 270 days after the date of enactment of this Act.”³⁹ The Commission may make recommendations on further actions the Commission and Congress could take to improve the ability of the Commission to achieve the universal service goals for broadband” in the Report.⁴⁰ The Commission may not make recommendations that “in any way reduce the congressional mandate to achieve the universal service goals for broadband” but may make recommendations “to expand the universal service goals for broadband, if the Commission believes such an expansion is in the public interest.”⁴¹

III. DISCUSSION

A. Universal Service Goals for Broadband

1. Adoption of Goals

11. The Infrastructure Act defines the Commission’s universal service goals for broadband as those mandated by section 706 of the 1996 Act, which discusses the deployment of advanced telecommunications capability to all Americans and directs the Commission to periodically examine the availability of such capability to all Americans.⁴² In addition, in the *Future of the USF NOI* the Commission also proposed as additional universal service goals for the purposes of this Report universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States.⁴³ We sought comment on these goals, including whether they should evolve over time, and asked parties to focus on how the broadband-related provisions of the Infrastructure Act would impact the Commission’s efforts to achieve these goals.⁴⁴

12. To fulfill Congress’ directive that we report on options for improving our effectiveness in achieving the universal service goals for broadband, we must first define those goals. We therefore adopt the proposed goals of universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States as the Commission’s universal service goals for broadband. Commenters generally support the Commission’s proposed goals.⁴⁵ USTelecom – The Broadband Association (USTelecom) argues that these goals are “consistent with the universal service definition and principles in Section 254” as well as the “deployment goal specified in Section 706,” and further that they

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the Infrastructure Act, div. J, tit. IV. The Lifeline program disbursed \$14.7 billion from 2011-2020. *Universal Service Monitoring Report* at 23, Table 1.10.

³⁸ The Emergency Connectivity Fund was created and received an appropriation of \$7.17 billion in the American Rescue Plan Act, Pub. L. No. 117-2, 135 Stat. 4 at 109, § 7402 (2021). The E-Rate program disbursed \$6.2 billion from 2018-2020. *Universal Service Monitoring Report* at 23, Table 1.10.

³⁹ Infrastructure Act, § 60104(c)(1).

⁴⁰ *Id.* § 60104(c)(2).

⁴¹ *Id.* § 60104(c)(3).

⁴² *Report on the Future of the Universal Service Fund*, WC Docket No. 21-476, Notice of Inquiry, FCC 21-127 (rel. Dec. 15, 2021) (*Future of the USF NOI*); 47 U.S.C. § 1302. Section 706 requires the Commission to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms)” and to periodically examine the “availability” of such capability to all Americans. *Id.*

⁴³ *Future of the USF NOI* at 2-3, 8-12, paras. 4, 17-28.

⁴⁴ *Id.*

⁴⁵ *See, e.g.*, ACA Connects Comments at 5-6; CETF Comments at 5; CTIA Comments at 3; Free Press Comments at 14; Hughes Comments at 3-4; John Staurulakis LLC Comments at 10; NASUCA Comments at 3-4; NTCA Comments at 12; Ochsner Health System Comments at 4; Public Knowledge Comments at 4; RBP Comments at 12-13; Starry Comments at 2; US Chamber of Commerce Comments at 1-2; USTelecom Comments at 3.

are “flexible in recognition of the fact that new technologies are constantly advancing and consistent with the Act’s recognition that universal service must also evolve over time along with changes in the broadband marketplace.”⁴⁶ Likewise, Public Knowledge contends that the funding programs established by Congress in the Infrastructure Act “validate the Commission’s determination that these are the appropriate universal broadband service goals.”⁴⁷

13. We disagree with criticisms that our proposed goals are too broad. Verizon and the Free State Foundation, for instance, argue that the goals should focus on deployment and availability, and that goals such as affordability, adoption, and equitable access are not statutorily mandated under section 706.⁴⁸ Section 706 requires the Commission to not only encourage deployment, but also to consider whether broadband is available to all Americans.⁴⁹ To achieve and measure broadband availability, we believe we must necessarily promote affordability, adoption, and equitable access. Starry, Inc. (Starry), for instance, agrees with this approach, stating that “many consumers continue to lack affordable, robust connectivity and other economic and educational barriers to adoption persist,” and that “[b]roadband connections should be widely available at reasonable rates and with comparable quality across geographic and socioeconomic boundaries.”⁵⁰ As such, it is necessary that we identify goals beyond deployment to fulfill our statutorily-mandated responsibilities.

14. We also decline to expand the goals beyond those we proposed as we believe the adopted goals suitably capture the necessary objectives of the universal service programs. Some commenters suggested additional goals, such as ACA Connects, the California Emerging Technology Fund (CETF), and the National Association of State Utility Consumer Advocates (NASUCA), which encourage us to consider reliability or cybersecurity as goals.⁵¹ We decline to adopt reliability or cybersecurity as universal service goals because we believe those important concepts are already captured by our existing availability goals. Likewise, we decline to adopt sustainability or adaptability as separate goals. NTCA suggests that sustainability should be a separate goal, stating that because universal service support is necessary after a network is deployed, “areas that become served must stay served.”⁵² We generally agree with this premise and we believe that the existing goals of availability, affordability, and equitable access will already ensure continued access to broadband networks and at reasonable rates. ACA Connects also believes our goals should include key attributes of broadband service that users require, including that the service is adaptable or “future-proof.”⁵³ We agree that broadband networks must evolve with continuing technology trends in order to be available, affordable, and accessible for all, and given the scope of these existing goals, we do not see the need to separately adopt sustainability or adaptability as separate, independent universal service goals.

15. We also decline to adopt competition as a separate goal. INCOMPAS states that the Commission should “ensure that there is sufficient competition in the marketplace for broadband and

⁴⁶ USTelecom Comments at 3.

⁴⁷ Public Knowledge Comments at 4.

⁴⁸ Free State Foundation Comments at 15; Verizon Comments at 4.

⁴⁹ 47 U.S.C. § 1302(b).

⁵⁰ Starry Comments at 2.

⁵¹ See ACA Connects Comments at 5-6 (“we believe that the term ‘universal deployment’ – solely as it applies to the public interest obligations for new deployments – should include the key attributes of broadband service that users require – ‘high-performance,’ ‘reliable,’ and ‘future-proof.’”); CETF Comments at 6 (stating that concepts of reliability, redundancy, and cybersecurity should be included); NASUCA Comments at 3-4.

⁵² NTCA Comments at 9; see also Vantage Point Solutions Comments at 9-10 (stating that Commission should focus on sustainability).

⁵³ ACA Connects Comments at 5-6; see also CETF Comments at 7 (“[T]he universal service goals must continue to evolve with advancements in technology.”).

communications services for consumers and business customers,” and recommends adopting competition as a separate universal service goal for broadband.⁵⁴ While one of the Commission’s main objectives is to ensure sufficient competition in the broadband marketplace, we decline at this time to make competition a standalone universal service goal for broadband. Our existing goals of affordability and equitable access will further competition, as well as the Commission’s additional tools to promote competition in the broadband market outside the universal service context, as envisioned by the 1996 Act. We further agree with commenters that including competition as a separate goal may “muddle the overall goals of the Commission’s universal service programs.”⁵⁵ We therefore decline to adopt competition as a separate universal service goal for broadband.

16. Lastly, we decline to adopt a separate deployment goal specifically targeted at mobile broadband as a universal service goal for broadband. CTIA – The Wireless Association (CTIA) contends that “the Commission should affirm its longstanding determination that the availability of mobile wireless broadband is an essential part of achieving universal service for broadband.”⁵⁶ We agree with CTIA that mobile broadband is an essential part of achieving universal service. Indeed, the Commission has repeatedly committed to the principle of technological neutrality in universal service and in recent Broadband Deployment Reports, observed that fixed and mobile broadband are not complete substitutes.⁵⁷ Consistent with this finding, we find it unnecessary to embrace a goal focused only on mobile deployment, and we likewise believe that our goals of deployment and availability necessarily encompass deployment and availability of both fixed and mobile broadband.

2. Evaluation of Goals

17. We next conclude that our universal service goals for broadband should evolve over time as technology advances. In the *Future of the USF NOI*, we sought comment on this issue,⁵⁸ and many commenters supported it.⁵⁹ We reviewed the ways in which the USF programs have changed, from primarily supporting voice service to providing support for fixed and mobile voice and broadband.⁶⁰ We further detailed ways in which the Commission has increased the speed benchmark for advanced telecommunications capability—or broadband—in the annual report required by section 706 of the Telecommunications Act, as well as imposed minimum speeds for broadband service in the USF programs.⁶¹ Starry states that the Commission’s goals should evolve to reflect “changing technologies and consumer demand.”⁶² Likewise, the US Chamber of Commerce states that “connectivity technologies

⁵⁴ INCOMPAS Comments at 5-7.

⁵⁵ See, e.g., US Chamber of Commerce Reply Comments at 2.

⁵⁶ CTIA Comments at 2.

⁵⁷ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Fourteenth Broadband Deployment Report, 36 FCC Rcd 836, 839, para. 11 (2021) (*Fourteenth Broadband Deployment Report*) (“Accordingly, we find, as before, that fixed broadband and mobile wireless broadband services are not substitutes in all cases. We continue to assess advanced telecommunications capability by analyzing mobile and fixed services both separately and together for a more complete understanding of whether these services are being deployed to all Americans in a reasonable and timely fashion.”).

⁵⁸ *Future of the USF NOI* at 8-9, para. 19.

⁵⁹ See, e.g., Lumen Comments at 3 (“We agree that the FCC’s universal service goals for broadband should evolve over time.”); Starry Comments at 2 (“The Commission also should ensure that its USF goals evolve to reflect changing technologies and consumer demand.”)

⁶⁰ *Future of the USF NOI* at 8-9, para. 19.

⁶¹ *Id.*

⁶² Starry Comments at 2.

and innovations stemming from increased connectivity are rapidly evolving so the Chamber agrees with the Commission that the universal service goals may change over time.”⁶³

18. We also asked how we should measure progress towards our goals, and we conclude that we can measure progress towards deployment and availability goals in large part with more precise and granular broadband mapping data.⁶⁴ As commenters pointed out, access to accurate broadband maps is an essential tool to evaluate where broadband spending is needed, as well as to measure progress towards ubiquitous broadband deployment.⁶⁵ The Commission has created the Broadband Data Collection (BDC) and has taken recent steps to create a reliable data resource to evaluate the status of broadband availability throughout the United States.⁶⁶ Providers of broadband service are currently filing fixed and mobile availability data in the new BDC system, and the maps we will publish as part of this initiative will be an important tool to measure progress towards the universal service goals.

19. The Commission can also measure progress towards goals like affordability, adoption, and equitable access, in part, by looking to existing universal service and appropriated programs. Affordability and adoption can be informed by whether universal service programs and congressionally appropriated programs, like the Affordable Connectivity Program, Lifeline, or E-Rate, are widely available and meet the broadband needs of eligible households and institutions. Further, we can measure adoption by examining the rate at which people who have a service available to them subscribe to that service, via data reported in, for instance, the Form 477.⁶⁷ We expect that our work with other federal agencies to implement the Infrastructure Act will also provide valuable insight into the ways in which our universal service goals for broadband are being met.

20. The Commission can measure progress towards the goal of equitable access to broadband through its work to implement the Infrastructure Act, which directs the Commission to take action to prevent and eliminate digital discrimination.⁶⁸ Through the preventing digital discrimination proceeding and related efforts, the Commission seeks to define and facilitate equal access to broadband, as well as

⁶³ US Chamber of Commerce Reply Comments at 2.

⁶⁴ *Future of the USF NOI* at 8, para. 18.

⁶⁵ See, e.g., ACA Connects Reply Comments at 9 (stating that accurate, comprehensive broadband mapping needs to be completed, and that the map should include “all locations where service is available and where service is going to be made available by virtue of any government support.”); INCOMPAS Comments at 12 (stating that the Commission should “create a layer on the new FCC broadband maps that show which areas have received broadband funding, including through from FCC and non-FCC federal and state programs.”); Starry Comments at 4 (stating that updated broadband maps are a worthy priority, and the Commission should leverage data sets collected from other federal, state, and local government entities); TechFreedom Comments at 3-4 (stating that there is no current map that accurately depicts where broadband exists and where it is lacking).

⁶⁶ See *Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, Third Report and Order, 36 FCC Rcd 1126, 1127, para. 2 (2021) (*Digital Opportunity Data Collection Order*).

⁶⁷ See, e.g., *Digital Opportunity Data Collection Order*, 36 FCC Rcd at 1127-28, para. 3 (describing the Form 477 and noting that “[i]nitially, the Form 477 data collection was limited to subscribership information from broadband Internet access service providers,” that “[i]n 2013, the Commission revised Form 477 to begin collecting deployment data, in addition to subscribership information, from such providers,” and that “[t]he Commission has used the Form 477 deployment data to monitor the state of broadband deployment in annual reporting and to identify the unserved parts of the country for purposes of providing universal service support for broadband deployment, among other Commission proceedings and actions.”).

⁶⁸ Infrastructure Act, § 60506; see also *Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination*, GN Docket No. 22-69, Notice of Inquiry, FCC 22-21 (Mar. 17, 2022) (*Digital Discrimination NOI*).

identify and prevent digital discrimination on the basis of income level, race, ethnicity, color, religion, or national origin.⁶⁹

3. Implications of the Infrastructure Act

21. We next turn to the interplay between the Infrastructure Act and the Commission's universal service programs. In the *Future of the USF NOI*, we sought comment on the potential impact of the Infrastructure Act on the Commission's proposed universal service goals for broadband.⁷⁰ We also sought comment on how to evaluate the Infrastructure Act in the 270 days the Commission was required to issue its Report to Congress, given that much of the broadband funding from the Act will not have been disbursed in August 2022.⁷¹ We also sought comment on how the Commission's existing universal service programs and new programs created by the Infrastructure Act could complement each other while minimizing the potential for overlap and duplicative funding.⁷²

22. First, we agree with the majority of commenters who caution that the Infrastructure Act will not achieve all of the universal service goals for broadband, and as such, the Commission should not abandon its universal service programs.⁷³ NTCA – The Rural Broadband Association (NTCA) argues that, despite the new federal funding for broadband in the Infrastructure Act, “the Commission’s ultimate charge from Congress with respect to universal service appears and remains unaltered in Section 254 of the Communications Act.”⁷⁴ Likewise, GCI Communication Corp. (GCI) notes that because the Infrastructure Act’s “programs serve different purposes than USF programs, funds made available by the Infrastructure Act should complement—but not replace—USF funding.”⁷⁵ This Report contains recommendations for modifications to our existing universal service programs in light of the Infrastructure Act, but we affirm that our universal service goals for broadband cannot be achieved without our existing USF programs.

23. A broad evaluation of the impact of the Infrastructure Act on our universal service programs is not yet possible, as implementation of that funding is still in the early stages, and disbursements will likely go into 2026 or later.⁷⁶ A full analysis of, for example, whether or to what extent BEAD Program funding impacts the Commission's High Cost programs to achieve the goal of universal deployment, will be possible only in the future.⁷⁷ Likewise, an analysis of whether, for instance,

⁶⁹ *Digital Discrimination NOI* at 4-14, paras. 9-33. For example, the *Digital Discrimination NOI* seeks comment on identifying instances of discrimination, to identify when and where digital discrimination is occurring. It also seeks comment on using sources such as the Broadband Data Collection, the Form 477, and the Commission's network outage reporting tools to identify instances of discrimination. *See id.* at 11-12, paras. 26-27. Data collected in this manner can be used to identify instances where additional funding for broadband may be needed.

⁷⁰ *Future of the USF NOI* at 10, para. 21.

⁷¹ *Id.* at 10, para. 22.

⁷² *Id.* at 11-16, paras. 23-27.

⁷³ *See, e.g.*, ACA Connects Comments at 17; GCI Comments at 4; Lumen Comments at 9; NRECA Comments at 14; NTCA Comments at 4; RWA Comments at 2; USTelecom Comments at 15; Vantage Point Solutions Comments at 10.

⁷⁴ NTCA Comments at 4.

⁷⁵ GCI Comments at 4.

⁷⁶ NTIA released a Notice of Funding Opportunity on May 13, 2022, that required interested applicants to submit Letters of Intent to participate in the BEAD program by July 18, 2022. Dates for many of the other steps in the application and disbursement process have yet to be announced. *See* <https://www.internetforall.gov/program/broadband-equity-access-and-deployment-bead-program> (last visited Aug. 12, 2022).

⁷⁷ *See* Infrastructure Act § III.d.1.b.

the E-Rate program will see a change in demand for subsidies given new, robust broadband networks serving schools can only be completed once BEAD Program funding has been used to fund network buildout and such buildout occurs.⁷⁸ That said, as this Report details, by working closely with our federal partners and considering targeted modifications to our existing USF and appropriations-funded programs, we can be best positioned to ensure that future USF dollars are put to their highest and best use.

B. Interagency Coordination

24. The Infrastructure Act and other recent legislation delivered unprecedented broadband funding to NTIA, USDA, Treasury, and the Commission. Effective deployment of future USF support will require extensive interagency coordination with regard to mapping and funding commitments to identify proper locations for broadband funding and to avoid duplicative support. As a result, we commit to continued close coordination with other agencies to, among other tasks, share data and program updates. The Commission will also look for opportunities to coordinate with other federal agencies and states regarding administrative matters such as application and reporting procedures to reduce burdens on applicants.⁷⁹

25. Commenters emphasize the importance of interagency coordination and detailed mapping, with several emphasizing that accurate, comprehensive maps developed in coordination with other agencies will be essential to efficiently distribute USF support in the future.⁸⁰ We agree. The Commission's Broadband Data Task Force (Task Force) is leading the agency's work to develop an efficient broadband data collection resulting in a first of its kind map that will accurately identify where fixed and mobile broadband service is and is not available.⁸¹ The Broadband DATA Act requires the Commission to collect granular data from providers on the availability and quality of broadband Internet access service, to create publicly available coverage maps, to establish processes for members of the public and other stakeholders to challenge and verify the coverage maps, and to create a common dataset of all locations where fixed broadband Internet access services can be installed.⁸² Pursuant to these requirements, the Task Force has developed and initiated the BDC, a complex set of interrelated systems and processes to collect, validate, and publish complete, granular, and reliable data on broadband availability.⁸³ NTIA is required by the Infrastructure Act to rely on the maps created using BDC data to determine unserved and underserved areas eligible for BEAD Program support.⁸⁴ The Infrastructure Act also requires the Commission to establish a Deployment Locations Map that will provide a comprehensive view of federal funding of broadband infrastructure. The Deployment Locations Map will

⁷⁸ See, e.g., John Staurulakis LLC Comments at 19-20 (noting that newly connected schools and libraries may request E-Rate support, and thus, it is possible that the Commission will see increases in E-Rate participants in the coming years).

⁷⁹ ITI Comments at 2. See also Government Accountability Office (GAO), Broadband: National Strategy Needed to Guide Federal Efforts to Reduce Digital Divide (May 31, 2022), <https://www.gao.gov/products/gao-22-104611#:~:text=GAO%20was%20asked%20to%20review,a%20strategy%2C%20among%20other%20objectives> (last visited Aug. 12, 2022).

⁸⁰ ACA Connects Reply Comments at 8-9; Free State Foundation Comments at 3-4; NCTA Comments at 11; Public Knowledge Comments at 6.

⁸¹ Additional information about the Broadband Data Task Force is available at <https://www.fcc.gov/BroadbandData/bdtf>.

⁸² Broadband Deployment Accuracy and Technology Availability Act, Publ. L. No. 116-130, 134 Stat. 228 (2020) (codified at 47 U.S.C. §§ 641-646) (Broadband DATA Act).

⁸³ *Inaugural Filing Window for Broadband Data Collection Has Opened; Filers May Begin Submitting Broadband Availability Data*, WC Docket Nos. 11-10, 19-195, Public Notice, DA 22-696 (OEA June 30, 2022). See also *Digital Opportunity Data Collection Order* 36 FCC Rcd 1126.

⁸⁴ Infrastructure Act, § 60102(a)(1).

identify locations served by federally funded infrastructure, as well as provide detailed data for each agency's funding programs, including network details, company names, project timelines, and broadband speeds.⁸⁵ The Deployment Locations Map will be a valuable resource for federal agencies, as well as states, Tribal governments, and other stakeholders working to harmonize distinct broadband funding streams. The Commission and NTIA have begun to engage with other federal agencies with broadband funding programs to ensure that the Deployment Locations Map captures all available deployment data across the federal government.

26. Commenters also encouraged the Commission to expand existing interagency agreements to several other federal agencies that play a role in broadband deployment.⁸⁶ Commission staff has a longstanding course of coordination with other agencies pertaining to broadband funding programs. The Broadband Interagency Coordination Act, for example, requires the Commission, USDA, and NTIA to enter into an agreement to provide for sharing information about broadband funding awarded through programs administered by the agencies.⁸⁷ The agreement was finalized on June 25, 2021.⁸⁸ In anticipation of the need for close coordination of both existing and newly established federal funding programs, the Commission, USDA, and NTIA began regular meetings to discuss these important issues in early 2021 and have continued to share information and develop plans together since the execution of that agreement required by the Broadband Interagency Coordination Act. More recently, on May 12, 2022, the Commission, USDA, NTIA, and Treasury announced an interagency agreement to share information about and collaborate regarding the collection and reporting of certain data and metrics relating to broadband deployment.⁸⁹ Under the agreement, each agency will share information about projects that have received or will receive funding from their respective broadband support programs. The agencies also agreed to “develop consistent, complementary, and, to the extent possible, uniform formats, standards, protocols, and reporting processes” for data collection and make data related to funded projects publicly available.⁹⁰ These agreements, and the commitments they memorialize, have helped to establish robust communications channels through which the agencies share data and information about planned and potential funding decisions. These efforts will continue to be a vital part of closing the digital divide.

C. Recommendations

27. In the Infrastructure Act, Congress found that “[a]ccess to affordable, reliable, high-speed broadband is essential to full participation in modern life in the United States.”⁹¹ The funding provided by the Infrastructure Act along with broadband funding from other recent major legislation will make

⁸⁵ *Id.* § 60105.

⁸⁶ See ACA Connects Reply Comments at 7; USTelecom Comments at 19; WISPA Comments at 14-15 (recommending extending the existing interagency agreement between the FCC, USDA, and NTIA to include Treasury); Digital Progress Institute Comments at 9-10 (recommending expansion of the interagency agreement to several agencies including the Treasury, Dept. of Transportation, U.S. Forest Service, Indian Health Service, and Appalachian Regional Commission).

⁸⁷ *Consolidated Appropriations Act, 2021*, § 904.

⁸⁸ 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>.

⁸⁹ Press Release, FCC, NTIA, USDA and Treasury Announce Interagency Agreement to Collaborate on Federal Broadband Funding (May 12, 2022), <https://www.fcc.gov/document/fcc-ntia-usda-treasury-announce-broadband-info-sharing-agreement>.

⁹⁰ Memorandum of Understanding Regarding Information Sharing, dated as of May 9, 2022, between the Federal Communications Commission, U.S. Department of Agriculture, the National Telecommunications and Information Administration of the U.S. Department of Commerce, and the U.S. Department of the Treasury, <https://www.fcc.gov/document/fcc-ntia-usda-treasury-announce-broadband-info-sharing-agreement>.

⁹¹ Infrastructure Act, § 60101.

affordable broadband available throughout the country. Moreover, the Commission now has the opportunity to consider how existing universal service programs can take full advantage of Infrastructure Act funding and begin the exercise of assessing the role of universal service in a post-Infrastructure Act national broadband landscape, consistent with the goals we adopt in this Report.

28. In the *Future of the USF NOI*, we sought comment on recommendations for improving the Commission's effectiveness in achieving its universal service goals for broadband in light of the Infrastructure Act.⁹² In this section we make recommendations that will center the future of the USF on maintaining new and existing networks, promoting equitable access in underserved communities and populations, and ensuring sufficient support for the ever-expanding broadband needs of schools, libraries, and health care providers. We also recommend several Commission actions, including initiating rulemakings, considering new rules, evaluating existing programs, considering new strategies for achieving goals, and collecting new data or conducting surveys to inform our work. We further recommend that if, in the course of carrying out these recommendations, the Commission encounters issues that may require Congressional action, it should consider making referrals to Congress where appropriate.

1. Reorientation of the High Cost Program

29. Through the BEAD Program, NTIA will allocate \$42.45 billion to states to support deployment of broadband services at 100/20 Mbps upload/download speeds to unserved and underserved areas within the United States.⁹³ In addition, several other programs created through the Infrastructure Act and administered by different federal agencies in conjunction with state and Tribal authorities will provide carriers with additional opportunities to receive deployment support.⁹⁴ This infusion of new capital and administrative resources will move the United States closer to near ubiquitous deployment of advanced telecommunications services, thus materially impacting the need to support infrastructure development. In this section, we discuss recommendations for revisions to the High Cost program in light of this influx of funding for broadband infrastructure deployment.

a. Overview of the High Cost Program

30. The High Cost program provides monetary support to providers of telecommunications services to allow for the provision of voice and broadband services at reasonable prices in rural and insular areas that, due to low population density, difficult terrain, and other factors, might otherwise be prohibitively expensive to serve.⁹⁵ Spanning more than two decades, the Commission has focused on bridging the digital divide between urban and rural areas by supporting build-out and operation of fixed voice and broadband capable networks.⁹⁶

31. *High Cost Support for Fixed Services.* In 2011, the Commission unanimously adopted reforms that modernized the High Cost program to support explicitly broadband-capable networks.⁹⁷ One

⁹² *Future of the USF NOI* at 12, para. 29.

⁹³ Infrastructure Act, § 60102(b)(1).

⁹⁴ See *GAO Report to Congressional Requesters*, GAO-22-104611, *BROADBAND National Strategy Needed to Guide Federal Efforts to Reduce Digital Divide*, May 2022, <https://www.gao.gov/assets/gao-22-104611.pdf>.

⁹⁵ The High Cost program has an annual budget of approximately \$4.5 billion. See Universal Service Administrative Company, High Cost Program Overview, <https://www.usac.org/high-cost/program-overview/> (last visited Aug. 12, 2022); see 47 CFR § 54.101.

⁹⁶ *Universal Service First Report and Order*, 12 FCC Rcd at 8899, para. 224 (stating 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 . . .”).

⁹⁷ See *USF/ICC Transformation Order*, 26 FCC Rcd at 17725, para. 156 (adopting a “new forward-looking model of the cost of constructing modern multi-purpose networks” for certain areas served by incumbent local exchange carriers).

component of the post-2011 High Cost support processes is the Commission's use of forward-looking cost models, i.e., the Connect America Model (CAM or model) for areas within the territories of generally larger telephone companies known as price-cap carriers⁹⁸ and the Alternative Connect America Models (A-CAM and A-CAM II), for areas within the territories of generally smaller telephone companies known as rate-of-return carriers.⁹⁹ These models provide estimates of the combined capital and operating costs of serving specific census blocks within the relevant service territories.¹⁰⁰ The Commission used this information and combined it with assumed revenue amounts to identify census blocks that would be servable only with support.¹⁰¹ The Commission then made initial offers of support to incumbent price-cap carriers on a state-by-state basis (CAM offer)¹⁰² and several offers of support to rate-of-return carriers (A-CAM I, A-CAM I Revised, and A-CAM II offers).¹⁰³ The Commission also conducted several reverse auctions to allocate support in price-cap areas, including the Rural Broadband Experiments (RBE),¹⁰⁴ Connect America Fund (CAF) Phase II Auction,¹⁰⁵ and, most recently, the Rural Digital Opportunity Fund (RDOF) Phase I Auction (RDOF Auction),¹⁰⁶ using the CAM to set reserve prices. The

⁹⁸ See *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, 29 FCC Rcd 3964 (WCB 2014) (*CAM Inputs Order*); *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, 28 FCC Rcd 5301 (WCB 2013) (*CAM Platform Order*); *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.”). See also 47 CFR § 61.33(ee) (defining “Price Cap Local Exchange Carrier,” as a “local exchange carrier subject to regulation pursuant to §§ 61.41 through 61.49.”).

⁹⁹ 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, 11903-15, paras. 31-69 (2018) (*2018 Rate-of-Return Reform Order*) (revising A-CAM I offer and making a new offer of support, based on a revised model, A-CAM II); *Connect America Fund, ETC Annual Reports and Certifications, Developing a Unified Intercarrier Compensation Regime*, WC Docket No. 10-90, et al., Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 31 FCC Rcd 3087, 3094-3117, paras. 17-79 (2016) (*2016 Rate-of-Return Reform Order*). See also 47 CFR § 54.5 (defining “rate-of-return carrier” as “any incumbent local exchange carrier not subject to price cap regulation as that term is defined in § 61.3(ee) of this chapter.”).

¹⁰⁰ See generally *CAM Platform Order*, 28 FCC Rcd at 5305, para. 8 (explaining that the cost-to-serve module of the CAM, which contains the technical and engineering assumptions about network topology that, together with input data, produce an estimate of the monthly cost of providing voice and broadband, considers both capital expenditures and operating expenses); *CAM Inputs Order*, 29 FCC Rcd at 3970, para. 11. See *2016 Rate-of-Return Reform Order*, 31 FCC Rcd at 3094-3117, paras. 17-79. For aspects of the model tailored to the requirements in rate-of-return areas, see *id.* at 3102-11, paras. 36-59.

¹⁰¹ See *CAM Inputs Order*, 29 FCC Rcd at 4030-31, 4036-37, paras. 157, 170-171.

¹⁰² See *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, 29 FCC Rcd 15644 (2014) (*December 2014 Connect America Order*). Prior to the CAM offer, the Commission made a Phase I offering that froze support under the existing cost-based support mechanisms for price cap carriers and then followed with the CAM offer to the same companies. *USF/ICC Transformation Order*, 26 FCC Rcd at 17712, 17727, paras. 128-29, 166.

¹⁰³ See generally *2018 Rate-of-Return Reform Order*, 33 FCC Rcd 11893; *2016 Rate-of-return Reform Order*, 31 FCC Rcd 3087.

¹⁰⁴ 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 8769, 8781, para. 33 (2014) (*Rural Broadband Experiments Order*) (stating that a comparison of bid amount to CAM determined support enables testing of the model for purposes of setting reserve prices for future implementation of the CAF Phase II Auction).

¹⁰⁵ 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 5949, 5979, para. 90 (2016) (*CAF Phase II Auction Order*).

¹⁰⁶ See *RDOF Order*, 35 FCC Rcd at 697.

Commission has adopted preliminary plans for an RDOF Phase II Auction but has indicated that it will not take any action until the BDC and new broadband map are complete and can guide Phase II eligibility.¹⁰⁷

32. For some programs, the Commission has used cost models to set support levels or has used preexisting cost-based support methods. In administering the *PR-USVI Stage 2 Order*, for example, the Commission used the CAM to allocate portions of the total budget among carriers serving Puerto Rico and the US Virgin Islands by a competitive process to determine and award support based on different factors, including price, quality of service, and network resiliency.¹⁰⁸ In creating the Alaska Plan, the Commission permitted rate-of-return carriers and their wireless affiliates to select cost-based legacy funding frozen at 2011 levels to serve remote and rural parts of Alaska.¹⁰⁹ Finally, certain rate-of-return carriers that declined model-based support continue to receive legacy cost-based support, including High Cost Loop Support (HCLS) and CAF Broadband Loop Support (CAF BLS).¹¹⁰

33. All High Cost program support recipients must serve a set number of qualifying locations within a fixed deployment term. For price-cap carriers accepting the CAM offer and carriers accepting CAF Phase II Auction support, this number is based on the CAM estimates; however, the Commission also offered these carriers some flexibility in meeting deployment obligations by, for example, setting the obligation at the state rather than census block level¹¹¹ and allowing them to serve 95% of their total obligation and return funding in lieu of default.¹¹² In contrast, carriers receiving RBE support had to commit to serving the total number of locations in a given census block, regardless of the number of funded locations (estimated by the CAM) within that block, subject to default consequences that included recovery of all support disbursed (not just a percentage represented by the unserved locations).¹¹³ Carriers receiving support under any of these programs could also seek adjustment to their defined deployment obligations either through a waiver (CAM offer, RBE) or through a Commission-created adjudication process (CAF Phase II Auction).¹¹⁴ For RDOF support recipients, because service deployment milestones will account for updated location counts thereby requiring RDOF recipients to serve every location in

¹⁰⁷ See *Id.* at 691, para. 9. The Commission stated that the RDOF Phase II Auction would target census blocks that are only partial served, as determined “through the Digital Opportunity Data Collection, or suitable alternative data source,” as well as census blocks unawarded in the RDOF Phase I Auction. *Id.*

¹⁰⁸ See *Uniendo a Puerto Rico Fund and the Connect USVI Fund*, WC Docket Nos. 18-143, 10-90, and 14-58, Report and Order and Order on Reconsideration, 34 FCC Rcd 9109, 9119-30, paras. 19-33 (2019) (*PR-USVI Stage 2 Order*).

¹⁰⁹ 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, 10150-53, paras. 34-40 (2016) (*Alaska Plan Order*).

¹¹⁰ See *2016 Rate-of-Return Reform Order*, 31 FCC Rcd at 3091, para. 5; *2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 11915-34, paras. 70-135.

¹¹¹ See *CAF Phase II Auction Order*, 31 FCC Rcd at 6014-15, para. 181; *December 2014 Connect America Order*, 29 FCC Rcd at 15689, paras. 43 n.97, 128; *USF/ICC Transformation Order*, 26 FCC Rcd at 17725, para. 156

¹¹² See *RDOF Order*, 35 FCC Rcd at 714-715, paras. 60-61; *Phase II Auction Order*, 31 FCC Rcd at 5964, 5966, paras. 40, 45-46; *December 2014 Connect America Order*, 29 FCC Rcd at 15659-61, paras. 38-42; *USF/ICC Transformation Order*, 26 FCC Rcd at 17725, para. 156.

¹¹³ See *Rural Broadband Experiments Order*, 29 FCC Rcd at 8776, paras. 13 n.34, 15 (“We require applicants to commit to serving the total number of locations in a given census block. For instance, if a census block has 100 total locations, with 50 of those locations eligible for funding, an entity must commit to serve 100 locations, with the understanding that the support amount determined by the cost model covers only those 50 eligible locations.”); *id.* at 8799-8800, paras. 92-94.

¹¹⁴ See *CAF Phase II Auction Reconsideration Order*, 33 FCC Rcd at 1389-92, paras. 23-28; *December 2014 Connect America Order*, 29 FCC Rcd at 15659, para. 38 n.88; *Connect America Fund et al.*, Order, 34 FCC Rcd 10308 (WCB 2019).

their service areas, the Commission made commensurate modifications to the consequences for failing to fully comply with such milestones.¹¹⁵

34. The deployment obligations of rate-of-return carriers are program specific and are based on certain percentages of locations within their supported areas. Specifically, rate-of-return carriers accepting A-CAM I and Revised A-CAM must provide at least 10/1 Mbps service to a number of locations equal to the “fully funded” locations identified by the model (all locations for which the cost of supply lay below a specified amount, called the funding cap) and must provide at least 25/3 Mbps service to a certain percentage of these locations; these carriers must also provide at least 4/1 Mbps service to a certain percentage of the total number of capped locations (i.e., locations in eligible census blocks which the model determined could be served for costs above the funding cap) based on density, and upon reasonable request of a consumer, for all remaining locations.¹¹⁶ A-CAM II support recipients must 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 service to a number of locations equal to the number of capped locations as well as upon reasonable request of a consumer.¹¹⁷ These carriers may serve 5% or less of fully funded locations at the standards applicable to capped locations.¹¹⁸ Rate-of-return carriers receiving support through the Alaska Plan must meet requirements set forth in a performance plan approved by the Wireline Competition Bureau (the Bureau);¹¹⁹ the Commission required that that report specify how many locations the carrier would commit to serving.¹²⁰ Carriers receiving support under legacy rate-of-return support mechanisms must allocate a defined percentage of their CAF BLS support to the provision of 25/3 Mbps service in areas where there is no such service, and this percentage is directly proportional to the percentage of the service area unserved with 25/3 Mbps service.¹²¹

35. As summarized in the following table, RBE support recipients have completed their five-year build-out term but have not yet completed their 10-year support term. CAF Phase II Auction and PR/USVI Stage 2 support recipients are within their six-year build-out terms and have 10-year support terms. RDOF support recipients must deploy to the model-estimated locations (or all actual locations if less than such estimate) within six years plus any additional locations identified by the Commission by the end of year eight, and also have a 10-year support term.¹²² RDOF support recipients are currently

¹¹⁵ See *RDOF Order*, 35 FCC Rcd at 714-15, paras. 60-61.

¹¹⁶ See *2016 Rate-of-Return Reform Order*, 31 FCC Rcd at 3097-3100, paras. 25-29; *2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 11898-903, paras. 14-30; 47 CFR 54.308. See also Authorization Report 5.1, <https://docs.fcc.gov/public/attachments/DOC-352788A1.xlsx> (summarizing authorized A-CAM I support amounts and deployment obligations) (last visited Aug. 12, 2022); Authorization Report 6.2, <https://docs.fcc.gov/public/attachments/DOC-359222A1.xlsx> (summarizing authorized A-CAM II support amounts and deployment obligations) (last visited Aug. 12, 2022).

¹¹⁷ See *2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 11913-14, paras. 64-65.

¹¹⁸ See *2016 Rate-of-Return Reform Order*, 31 FCC Rcd at 3101, para. 33 and n.68 (providing that any of the remaining, unserved fully funded locations after a 95% threshold had to be served at the lower standards adopted for capped locations, i.e., service at 4/1 Mbps to a certain percentage of locations based on density and upon request, to the remaining locations); 47 CFR 54.308(c)(2) (for more information regarding the required service to capped locations); *2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 11914, para. 67 (extending the same flexibility afforded other A-CAM recipients to deploy to only 95% of the required number of fully funded locations by the end of the term of support” to A-CAM II support recipients); *id.* at 11914 n.149 (clarifying that “[t]hose 5% of [unserved fully funded] locations would then shift into the carriers’ obligations to offer service to the number of capped locations”).

¹¹⁹ See *Alaska Plan Order*, 31 FCC Rcd at 10144, para. 12; 47 CFR § 54.306(b).

¹²⁰ See *id.*

¹²¹ See *2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 11927, para. 112; 47 CFR § 54.308(a)(2).

being authorized by the Bureau on a rolling basis.¹²³ A-CAM I, Revised A-CAM, A-CAM II, and Alaska Plan support recipients have ten-year build-out terms and support terms.

Table 1: High Cost Program Build Out and Support Terms

Process	Build-out Term	Support Term	Total Support Authorized
RBE	5-year term, staggered based on date recipient is authorized and ending for last support recipient by September 2021 ¹²⁴	10-year support term, staggered based on date recipient is authorized and ending for last support recipient by September, 2026 ¹²⁵	\$32,670,039.42
CAF Phase II Auction	6-year term aligned for all support recipients to end on December 31, 2025 ¹²⁶	10-year support term, staggered based on date recipient is authorized and ending for last support recipient by November 2030 ¹²⁷	\$1,476,784,840.20 (plus an additional \$65,486,852 for CAF II NY)
A-CAM I and Revised ACAM	A-CAM I: Maintain voice and existing broadband service prior to the election of support (all locations deployed in 2016 and earlier), and fulfill all deployment and performance requirements by the end of 10-year support term ¹²⁸ Revised A-CAM II: Maintain voice and existing broadband service as of December 31,	A-CAM I: 10-year support term ending December 2026 ¹³⁰ Revised A-CAM: 10-year support term ending 2028	\$6,303,147,994

(Continued from previous page) _____

¹²² Information relating to the CAM offer is not included in the table because the process has been completed. These carriers had a six-year support term ending 2020 but elected to extend for a seventh year ending year end 2021. *December 2014 Connect America Order*, 29 FCC Rcd at 15656, para. 31 (setting six-year support term); *RDOF Order*, 35 FCC Rcd at 740-42, paras. 127, 129 (directing Bureau to establish a process by which eligible price cap carriers could elect to receive an additional year of support); *Wireline Competition Bureau Authorizes all Eligible Price Cap Carriers to Receive a Seventh Year of Connect America Fund Phase II Model-Based Support*, WC Docket No. 10-90, Public Notice, 35 FCC Rcd 12933 (WCB 2020).

¹²³ See, e.g., *Rural Digital Opportunity Fund Support Authorized for 513 Winning bids; Bid Defaults Announced*, Public Notice, DA 22-634 (WCB, RBATF, OEA June 14, 2022).

¹²⁴ See *Rural Broadband Experiments Order*, 29 FCC Rcd at 8794, para. 74; *Rural Broadband Experiment Support Authorized for Winning Bid Submitted by Lake County Minnesota d/b/a Lake Connections*, Public Notice, 31 FCC Rcd 13133 (WCB 2016) (final RBE authorization on December 12, 2016).

¹²⁵ *Rural Broadband Experiments Order*, 29 FCC Rcd at 8774-75, para. 12.

¹²⁶ For the CAF Phase II Auction, the Commission aligned the deployment term and related milestones, the final of which occurs December 31, 2025. See *Connect America Fund et al.*, WC Docket 10-90, AU Docket 17-182, Order, 35 FCC Rcd 109, 112, para. 9 (WCB 2020) (waiving 54.310(c) of the Commission's rules).

¹²⁷ 47 CFR § 54.310(b). See *CAF Phase II Auction Order*, 31 FCC Rcd at 6017, para. 191; *CAF Phase II Auction Support Authorized for Six Winning Bids*, Public Notice, DA 20-1339 (WCB Nov. 12, 2020) (final CAF Phase II support authorization).

¹²⁸ 47 CFR § 54.311(d); *2016 Rate-of-Return Reform Order*, 31 FCC Rcd at 3097-99, 3165, paras. 25-26, 213; *Connect America Fund*, WC Docket No. 10-90, Order, 32 FCC Rcd 1445, 1449, para. 14 (WCB 2017) (clarifying CAF-ACAM carriers' "pre-existing" locations are all locations deployed in 2016 and earlier).

¹³⁰ 47 CFR § 54.311(c); *2016 Rate-of-Return Reform Order*, 31 FCC Rcd at 3100-01.

	2018 and fulfill all deployment and performance requirements by end of 10-year support term ¹²⁹		
A-CAM-II	Maintain voice and existing broadband service as of December 31, 2018 and fulfill all deployment and performance requirements by end of 10-year support term ¹³¹	10-year support term ending December 2028 ¹³²	\$5,076,294,769
RDOF Phase I	Obligation based on CAM estimate as adjusted for Commission determination of locations at the end of the sixth year. If the locations determined by the Commission at the end of the sixth year of receiving support (staggered based on date recipient is authorized) are: <ul style="list-style-type: none"> • equal to the number estimated by the model, the carrier must deploy service to all locations by the end of the sixth year; • less than the number estimated by the model, the carrier must notify the Commission by March 1 of the fifth year, and upon confirmation, must deploy to the adjusted number of locations by the end of the sixth year • greater than the number estimated by the model, the carrier must build out to all model-estimated locations by the end of the sixth year, and all remaining locations by the end of year eight¹³³ 	10-year support term, based on date recipient is authorized with authorizations still underway as of the release date of this report ¹³⁴	\$5,115,591,338.70 to date
Alaska Plan support	10-year term ending December 31, 2026 ¹³⁵	10-year support term ending December 31, 2026 ¹³⁶	\$543,762,240 (fixed service)
PR/USVI Stage 2	6-year deployment term, staggered based on date recipient is authorized and ending for last support recipient by August 2028	10-year support term staggered based on date of authorization and ending for last authorized support	\$211,552,033 (fixed service)

¹²⁹ 47 CFR § 54.311(d); *2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 11913-15, paras. 64-67.

¹³¹ 47 CFR § 54.311(d); *2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 11913-15, paras. 64-67.

¹³² 47 CFR § 54.311(c); *2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 11902, 11914, paras. 29, 67.

¹³³ 47 CFR § 54.802(c).

¹³⁴ *Id.* § 54.802(b); *See RDOF Order*, 35 FCC Rcd at 690, para. 27; *id.* at 711, para. 53 (staggering milestone years but providing that each milestone shall fall on December 31st).

¹³⁵ 47 CFR § 54.321.

¹³⁶ *Id.* *See Alaska Plan Order*, 31 FCC Rcd at 10146, 10149, 10166, paras. 16, 30, 85; 47 CFR § 54.321.

		recipient by July 2031 ¹³⁷	
CAF-BLS	5-year term ending December 31, 2023	Ongoing	\$1.42 billion overall budget (including high-cost loop support) adopted in 2018, increased annually by inflation

36. All carriers receiving High Cost support must also comply with reporting and testing requirements designed to ensure accountability and transparency so that both the Commission and the public may assess an individual carrier's progress in meeting deployment and public interest commitments as well as the overall effectiveness of the High Cost program in fulfilling the universal service principles of ubiquitous deployment and access to advanced telecommunications services.¹³⁸ In addition, the Commission has established the Rural Broadband Accountability Program (RBAP) to increase audits, verifications, and transparency for USF High Cost processes.¹³⁹ Performance requirements for speed (bandwidth) and latency differ among programs and technologies¹⁴⁰ and reflect the Commission's assessment of consumer needs as they existed at the time funds were allocated as well as the costs of deployment.¹⁴¹ Further, carriers must provide minimum monthly usage, in almost all circumstances, reflecting the average usage of a majority of fixed broadband customers, and must set

¹³⁷ 47 CFR § 54.316(b)(7). See *PR-USVI Stage 2 Order*, 34 FCC Rcd at 9136, para. 45; *id.* at 9144-45, para. 62; *Wireline Competition Bureau Authorizes Stage 2 Support for Puerto Rico Telephone Company and Liberty Communications of Puerto Rico*, WC Docket No. 18-143, 10-90, Public Notice, 36 FCC Rcd 9914, 9916-17 (WCB 2021) (authorized June 21, 2021 with payments beginning in July); *Connect USVI Fund Stage 2 Support Authorized for Broadband VI*, Public Notice, 36 FCC Rcd, 9405 (WCB 2021) (authorized on June 8, 2021 with payments beginning in July).

¹³⁸ Rate-of-Return ETCs, ETCs that elect to receive Connect America Phase II model-based support, and ETCs awarded support to serve fixed locations through a competitive bidding process must report information about deployed locations annually and must certify their compliance with meeting certain deployment milestones. 47 CFR § 54.313; *id.* § 54.316. See *Connect America Fund*, WC Docket No. 10-90, Order, 33 FCC Rcd 6509, 6530-33, paras. 56-67 (WCB 2018) (requiring carriers subject to public interest service requirements to annually test and report the speed and latency of a random sample of locations).

¹³⁹ Fact Sheet: Rural Broadband Accountability Plan (rel. Jan. 28, 2022), <https://www.fcc.gov/document/fcc-creates-rural-broadband-accountability-plan> (last visited Aug. 12, 2022); see also 47 CFR § 54.320.

¹⁴⁰ See, e.g., 47 CFR § 54.805 (codifying public interest obligations of RDOF support recipients in different bid tiers (e.g., 25/3 Mbps 50/5 Mbps, 100/20 Mbps speeds, and 1 Gbps/500 Mbps); *id.* § 54.309 (codifying public interest obligations of price-cap carriers accepting the CAM offer (e.g., 10/1 Mbps speed) and carriers receiving support through the CAF Phase II Auction (e.g., four performance tiers with speeds of 1 Gbps/500 Mbps, 100/20 Mbps, 25/3 Mbps, and 10/1 Mbps)); *id.* § 54.308 (codifying rate-of-return broadband public interest obligations, including under A-CAM I, Revised A-CAM, A-CAM II, and CAF BLS); *Rural Broadband Experiments Order*, 29 FCC Rcd at 8779-80, paras. 24-29 (stating that the highest bidding tier requires speeds of 100/25 Mbps and the two other bidding tiers require 10/1 Mbps).

¹⁴¹ See, e.g., *2016 Rate-of-Return Reform Order*, 31 FCC Rcd at 3097, para. 24 (noting that "our minimum requirements for rate-of-return carriers will likely evolve over the next decade"); *2018 Rate-of-Return Reform Order*, 33 FCC Rcd at 11900, 11914, paras. 22, 64 (increasing speed requirements for rate-of-return carriers under revised A-CAM offer and imposing same speed requirements for fully funded locations on carriers accepting the A-CAM-II offer).

prices at reasonably comparable rates for both fixed voice and broadband services, standards set and announced by the Bureau on an annual basis.¹⁴²

37. *High Cost Support for Mobile Service.* In addition to supporting fixed services, the Commission has repeatedly underscored a parallel commitment to ensuring affordable access to broadband and voice services over a mobile wireless platform.¹⁴³ To this end, the Commission has striven to provide “sufficient but not excessive funding,” consistent with its fiduciary duties to the public in managing the Fund.¹⁴⁴ As part of its 2011 High Cost reforms, the Commission eliminated a legacy support mechanism for competitive eligible telecommunications carriers (CETCs), including mobile providers (subject to a freeze and a five-year transition period)¹⁴⁵ and adopted the Mobility Fund (MF), a process divided into two parts.¹⁴⁶ MF Phase I, which has been completed, involved two reverse auctions: a 2012 auction which awarded support to deploy 3G and 4G mobile services to unserved areas,¹⁴⁷ and a 2014 Tribal auction which awarded support to deploy 3G and 4G mobile services to unserved Tribal areas.¹⁴⁸ Through these auctions, the Commission awarded a total of \$350 million.¹⁴⁹ MF Phase II was a planned third auction expected to take place in 2014.¹⁵⁰ As per the terms of the *2011 USF/ICC Transformation Order*, because this auction did not take place by July 1, 2014, the Commission paused the phase down of frozen legacy High Cost support at the 60% frozen support level.¹⁵¹

38. In 2012, the Commission developed a comprehensive record relating to the geographic areas that should be eligible for MF Phase II support and the base unit for bidding and measuring coverage, performance obligations, and the term of support.¹⁵² Based on this record and recognizing significant commercial deployment of 4G LTE in the United States, the Commission in 2014 proposed targeting the MF Phase II auction funding to those areas of the country where 4G LTE would not be available absent support and existing mobile voice and broadband service would not be preserved without support.¹⁵³ In September 2016, the Wireless Telecommunications Bureau (WTB) released its analysis of

¹⁴² *Wireline Competition Bureau and Office of Economics and Analytics Announce Results of 2022 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*, Public Notice, WC Docket No. 10-90, DA 21-1588 (WCB Dec. 16, 2021) (setting 2022 usage allowance for reflecting the average usage of a majority of fixed broadband customers and reasonably comparable rates for fixed voice and broadband services).

¹⁴³ See *USF/ICC Transformation Order*, 26 FCC Rcd at 17682, para. 57.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 17675, para. 28. The Commission provided for a five-year transition period during which the CETCs receiving identical support would experience a 20% reduction per year. See *id.* at 17832, para. 519. During this transition period, mobile carriers could also seek a one-time MF I support payment to expand 3G or better service to areas where such service was unavailable while phasing down legacy support. See *id.* at 17831, para. 517.

¹⁴⁶ *USF/ICC Transformation Order*, 26 FCC Rcd at 17675, para. 28.

¹⁴⁷ See *id.*; *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 (2012).

¹⁴⁸ *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 (2013).

¹⁴⁹ *Connect America Fund; Universal Service Reform — Mobility Fund*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 2152, 2154, para. 5 (2017) (*Mobility Fund Phase II Report and Order*).

¹⁵⁰ *USF/ICC Transformation Order*, 26 FCC Rcd at 17773, para. 299.

¹⁵¹ See *id.* at 17832, para. 519.

¹⁵² See *Further Inquiry Into Issues Related to Mobility Fund Phase II*, Public Notice, 27 FCC Rcd 14798 (WTB/WCB 2012).

mobile broadband providers' December 2015 Form 477 submissions, revealing that 4G LTE was absent from, or only provided with support in, one-fifth of the area of the United States excluding Alaska.¹⁵⁴ Further, WTB made a conservative estimate that three-quarters of legacy support then currently distributed to mobile providers (\$300 million or more per year) was being directed to areas where it was not needed.¹⁵⁵

39. In 2017, when adopting rules to move forward with the MF Phase II auction, the Commission created the framework for a challenge process that would resolve disputes about areas found to be presumptively ineligible for support.¹⁵⁶ As an initial step, carriers submitted 4G LTE coverage data; soon thereafter, however, questions arose regarding the accuracy of that data, resulting in a Commission investigation and suspension of the challenge process.¹⁵⁷ In a December 4, 2019 staff report, the Rural Broadband Auctions Task Force (RBATF) announced the results of the investigation; among other things, it found that the maps submitted by certain carriers overstated actual coverage and did not reflect on-the-ground performance in many instances.¹⁵⁸ The report concluded that the coverage maps were not a sufficiently reliable or accurate basis upon which to complete the challenge process as designed and, accordingly, recommended that the Commission terminate the process.¹⁵⁹ In October 2020, the Commission terminated the planned MF Phase II auction and established the 5G Fund for Rural America, which will use multi-round reverse auctions to distribute up to \$9 billion in support to bring voice and 5G broadband service to rural areas that likely would not see unsubsidized deployment of 5G-capable networks.¹⁶⁰ The Commission stated that it would determine the areas eligible for support in the 5G Fund Phase I auction based upon where new mobile coverage data submitted in the Broadband Data Collection show a lack of unsubsidized 4G LTE and 5G broadband service by at least one service provider.¹⁶¹

40. The Commission also provided support to mobile carriers serving remote communities with unique demographic challenges. Specifically, in 2016, the Commission allowed mobile providers in Alaska to seek legacy support frozen at December 2014 levels for a 10-year period for the purpose of bringing 4G LTE services at speeds of at least 10/1 Mbps to unserved areas.¹⁶² In addition, as part of the

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¹⁵³ See *Connect America Fund et al.*, Report and Order, Declaratory Ruling, Order, Memorandum Opinion and Order, Seventh Order on Reconsideration, and Further Notice of Proposed Rulemaking, 29 FCC Rcd 7051, 7127-28, para. 239 (2014).

¹⁵⁴ See FCC, Wireless Telecommunications Bureau, Working Toward Mobility Fund II: Mobile Broadband Coverage Data and Analysis at 15, 16, 25, para. 28, Tables 3-i, 4b (2016), https://apps.fcc.gov/edocs_public/attachmatch/DOC-341539A1.pdf (last visited Aug. 12, 2022).

¹⁵⁵ See *id.*

¹⁵⁶ *Connect America Fund; Universal Service Reform — Mobility Fund*, Order on Reconsideration and Second Report and Order, 32 FCC Rcd 6282, 6282, 6296-314, paras. 1, 27-64 (2017); *Procedures for the Mobility Fund Phase II Challenge Process*, Public Notice, 33 FCC Rcd 1985, 1986, para. 2 (WCB/WTB 2018).

¹⁵⁷ See Press Release, FCC, FCC Launches Investigation into Potential Violations of Mobility Fund Phase II Mapping Rules (Dec. 7, 2018), <https://www.fcc.gov/document/fcc-investigate-potential-mobility-fund-mapping-rule-violations>.

¹⁵⁸ See Rural Broadband Auctions Task Force, Mobility Fund Phase II Coverage Maps Investigation Staff Report (2019), available at <https://docs.fcc.gov/public/attachments/DOC-361165A1.pdf> (last visited Aug. 12, 2022).

¹⁵⁹ See *id.* at 2, para. 6 (“The Mobility Fund Phase II Challenge Process “was designed to resolve coverage disputes regarding generally reliable maps; it was not designed to correct generally overstated maps.”).

¹⁶⁰ See *Establishing a 5G Fund for Rural America*, Report and Order, 35 FCC Rcd 12174, 12178, 17194-95, paras. 10, 47-40 (2020) (*5G Fund Report and Order*).

¹⁶¹ See *id.* at 12181, para. 17; *Establishing the Digital Opportunity Data Collection, Report and Order and Second Further Notice of Proposed Rulemaking*, 34 FCC Rcd 7505, 7509, para. 11 (2019); *Establishing the Digital Opportunity Data Collection*, Second Report and Order and Third Further Notice of Proposed Rulemaking, 35 FCC Rcd 7460 (2020).

Puerto Rico/USVI Stage 2 competitive bidding process, the Commission awarded support to certain mobile providers to restore, harden, and expand 4G LTE and 5G technology for voice and broadband service in the aftermath of Hurricane Irma and Hurricane Maria.¹⁶³ This support will be provided in a three-year support term from the date of authorization with the program ending for the final authorized recipient in November 2023.¹⁶⁴

b. Recommended High Cost Program Proceeding

41. We anticipate the BEAD Program will make substantial investments in broadband infrastructure and that such investments will impact how the Commission will define and meet its High Cost program goals. Consequently, we recommend that the Commission initiate a proceeding to consider the future support needs of networks serving high-cost and other hard to serve areas. The Commission should consider if, when, and under what circumstances continuing support is necessary to develop, sustain, and improve broadband operations and how best to determine which carriers may need such support and in what amounts. The Commission should also 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. Given two decades of experience developing, testing, and implementing pro-competitive, forward-looking funding mechanisms, the Commission is ideally positioned to begin the work of developing these universal service strategies. This proceeding could also examine potential competitive allocation mechanisms that could bridge any enduring deployment gaps after completion of USF High Cost and other federally funded projects.

42. We recommend, in parallel with the rollout and completion of BEAD-funded projects, that the Commission 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. For example, the Commission 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.¹⁶⁵ Such an approach is consistent with the universal service principles in section 254 of the Communications Act which requires that the Commission ensure continuing access to advanced telecommunications services that meet or exceed evolving consumer needs.¹⁶⁶

43. The Commission could consider developing a standard business case analysis that accounts for a provider's total costs and revenues, includes incoming funding from other government grants, and estimates the required level of support for the provider to continue operating profitably, or the Commission might consider the possible use of appropriate cost models. An updated cost model would need to set post-deployment support amounts for certain operating and/or future capital costs (e.g.,

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¹⁶² See *Alaska Plan Order*, 31 FCC Rcd at 10162-63, 10172-73, paras. 72, 86, 102; *Wireless Telecommunications Bureau Approves Performance Plans of the Eight Wireless Providers That Elected to Participate in the Alaska Plan*, WC Docket No. 16-271, Public Notice, 31 FCC Rcd 13317, 13320-23, Appx. A (WTB 2016).

¹⁶³ See *PR-USVI Stage 2 Order*, 34 FCC Rcd at 9163, para. 102.

¹⁶⁴ See *id.*; *Wireline Competition Bureau Authorizes Stage 2 Mobile Support for Viya in the U.S. Virgin Islands*, WC Docket Nos. 18-143 and 10-90, Public Notice, 35 FCC Rcd 11555 (WCB 2020) (authorized on October 16, 2020); *Wireline Competition Bureau Authorizes Stage 2 Mobile Support for T-Mobile in Puerto Rico*, Public Notice, 35 FCC Rcd 10303 (WCB 2020) (authorized on September 15, 2020); *Wireline Competition Bureau Authorizes Stage 2 Mobile Support for Certain Providers Participating in the Uniendo a Puerto Rico Fund and the Connect USVI Fund*, WC Docket Nos. 18-143 and 10-90, Public Notice, 35 FCC Rcd 6321 (WCB 2020) (authorized on June 15, 2020).

¹⁶⁵ See 47 U.S.C. § 254(b)(3).

¹⁶⁶ See *id.* § 254 (b), (c).

increase in speed or capacity), and the Commission would need to determine certain model inputs and outputs, such as projected costs, revenues, depreciation, useful life of certain equipment, and other factors. The Commission's current models already include some analysis of estimated operating costs during fiber deployment, and a recent Notice of Proposed Rulemaking seeks comment on the A-CAM II model's adequacy to predict these costs, particularly when certain quality of service standards, such as speed and latency, are raised to match requirements under the Infrastructure Act (100/20 Mbps).¹⁶⁷ The proceeding recommended here would take advantage of the work the Commission has already completed to prepare for universal service needs once deployment across the country is complete.

44. Many commenters favor the creation of a High Cost program to support some ongoing operating and maintenance costs.¹⁶⁸ Commenters contend that once the Commission's support for deployment and operating expenses under current processes ends, some providers will likely be unable to sustain operations at reasonably comparable prices and at the same public interest standards required by the Commission during the support term without additional funding for operating costs (including maintenance and repair).¹⁶⁹ NTTA, for example, asserts that "sustainability" funding, i.e., "funding for

¹⁶⁷ See *Connect America Fund et al.*, Notice of Proposed Rulemaking, WC Docket 10-90 et al., FCC 22-35, para. 40 (May 20, 2022) (*Enhanced A-CAM NPRM*).

¹⁶⁸ See, e.g., CETF Comments at 27 (asserting that the High Cost Program should support operating and maintenance costs for broadband networks that are built with [Infrastructure Act] BEAD funding); Cisco Comments at 2 ("[T]he Commission should ensure that its high-cost programs adequately support the ongoing operating expenses of existing infrastructure as well as the incremental cost of new infrastructure enabled by the [Infrastructure Act]."); ITI Comments at 3 ("[N]ew and existing infrastructure will still require ongoing maintenance This provides an important opportunity for Commission to shift the focus of its USF programs to emphasize the need for operational expenditures as service providers seek to maintain their new and existing infrastructure."); Lumen Comments at 9 (stating that because the Infrastructure Act will likely drastically reduce the number of unserved and underserved locations, the Commission should consider modernization of the High Cost program to provide funding for network upgrades, improvements, and maintenance costs of networks, regardless of whether they have been previously subsidized); NTTA Comments at 6 (stating that USF High Cost funding should focus on sustainability by supporting ongoing operations, maintenance, and upgrading of broadband networks necessary to ensure services are provided at rates that are reasonably comparable to those available in non-high cost (mostly urban) areas); NRECA Comments at 14 (with the new construction of broadband facilities becoming a reality, "the Commission's role should evolve to help ensure these newly-constructed facilities remain viable. . . . [T]he Commission should consider implementing a program to ensure these new broadband facilities in rural and high-cost areas are also well-maintained and affordable"); NTCA Comments at 32 (supporting funding for ongoing costs of operation, maintenance, and upgrades, depreciation of plant, and repayment of loans or recovery of other capital used to deploy the network); RBP Comments at 21-22 (stating that the High Cost program should be modified to comprehensively support ongoing operating and maintenance costs to ensure that rates remain reasonably comparable with urban areas); RWA Comments at 4 (stating that "the FCC is uniquely capable of directing USF support and oversight to fund ongoing support needed for operations of deployed networks in high cost areas"); USTelecom Comments at 15 (continued funding for operating expenses will be necessary because the BEAD program does not address shortfalls between maintenance and operating costs and revenues); Vantage Point Solutions Comments at 9 ("[T]he next logical step for USF is to ensure that the networks deployed are supported and maintained."); WISPA Comments at 25 (recommending that the Commission realign the High Cost program so that it supports only operating expenses); WTA Comments at 9 ("[C]ontinuing [High Cost] support will be needed to maintain and operate . . . existing broadband networks in High Cost rural areas and those upgraded or constructed with Infrastructure Act funds, as well as to address additional capital needs and costs that will arise during the useful lives of such networks.").

¹⁶⁹ See, e.g., Alaska Communications Comments at 17 (explaining that without continuing support, the costs of maintaining, repairing, and ultimately replacing the network equipment, as well as the costs of purchasing middle mile transport capacity, are too high); AT&T Comments at 35 (recommending that the Commission consider the creation of a broadband maintenance fund for "areas where a broadband business is not sustainable without ongoing support due to low population density"); Connected Nation Comments at 2 (stating that "support from the High Cost Program, or some similar program, will foreseeably be necessary to cover operational and maintenance expenses for networks in some areas where revenues fall short of meeting these needs"); Lumen Comments at 9 (recognizing that

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ongoing operations, maintenance, and upgrading of broadband networks to ensure services are provided at [reasonably comparable] rates,” is essential to continued operations post-deployment, particularly on Tribal Lands, where the Commission has recognized some comparably higher service costs.¹⁷⁰ Relatedly, some commenters assert that there are also certain capital expenses for which carriers may need support, including network upgrades to fulfill consumer needs and demands¹⁷¹ and to ensure network resiliency in the face of natural disasters or cybersecurity attacks.¹⁷² WTA, for example, asserts that “significant post-deployment capital and operating expense can arise from requirements to relocate fiber conduits or lines due to road or bridge repairs or a government or property owner’s modification or termination of a right-of-way or easement,” and that “post-construction capital expenses can also arise from a host of foreseeable but unpredictable causes such as severe storm damage, new business or residential developments or customer locations, and accidental or deliberate line cuts.”¹⁷³ Public Knowledge asserts that High Cost support should also facilitate the “hardening of networks” to increase resiliency and security by covering some related capital costs.¹⁷⁴ Certain commenters also specifically note that this type of operating and maintenance funding should be available to carriers that have received Infrastructure Act funding for deployment.¹⁷⁵

45. Other commenters are more skeptical of the need for such support and state that any such rulemaking would be premature until after the Commission properly assesses the impact of Infrastructure Act funding on deployment.¹⁷⁶ ACA Connects, differentiating between rate-of-return carriers and price-

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even after a carrier fully deploys, there is “no business case” that would allow the carrier to maintain or improve service in certain rural areas); RWA Comments at 2 (stating that “[i]n most high-cost areas, broadband networks will not be sustainable after initial deployment because available revenues will not cover the costs of ongoing operations and maintenance.”).

¹⁷⁰ NTTA Comments at 5-7.

¹⁷¹ See, e.g., TCA Comments at 3 (stating that “ever increasing demand requires upgrades to facilities and components, including electronics, and middle mile needs” necessitate additional support under the High Cost program for operating and maintenance expenses); NTCA Comments at 34 (recommending that the Commission focus on delivering services that meet certain levels of quality responsive to consumer needs); WISPA Comments at 25 (asserting that where funding for deployment with enforceable obligations already allocated, High Cost support should be used to upgrade networks and increase broadband speed).

¹⁷² See Broadband Connects America Comments at 6 (recommending that the Commission “expand eligible uses of the program to include network hardening and maintenance.”); Lumen Comments at 14 (stating that the Commission should set aside High Cost support for disaster relief to be awarded on a case-by-case basis now and in the future); Public Knowledge Comments at 10-11 (stating that the High Cost program should “address current needs, upgrading and maintaining networks and expanding the funding to include hardening networks to make them more resilient against the ever-increasing natural disasters.”).

¹⁷³ WTA Comments at 11.

¹⁷⁴ Public Knowledge Comments at 11 (recommending the initiation of a rulemaking “to determine how best to account for upgrading our communications networks through USF High Cost reforms to meet the requirements the Commission will likely adopt as part of the Resilient Networks proceeding”). The Commission recently took action to improve the reliability and resiliency of mobile wireless networks. *Resilient Networks; Amendments to Part 4 of the Commission’s Rules Concerning Disruptions to Communications; New Part 4 of the Commission’s Rules Concerning Disruptions to Communications*, PS Docket Nos. 21-346 and 15-80; ET Docket No. 04-35, Report and Order and Further Notice of Proposed Rulemaking, FCC 22-50 (July 6, 2022).

¹⁷⁵ See Cisco Comments at 4; California Emerging Technology Fund Comments at 27; TCA Comments at 5.

¹⁷⁶ See, e.g., USTelecom Comments at 15-17 (stating that the Commission should wait until six months prior to the final Infrastructure Act funding is spent, coordinate with the NTIA and RUS to identify locations that remain unserved with 100/20 Mbps, and then use that information to begin a proceeding to determine how much additional capital and operating support will be necessary); Verizon Comments at 8 (stating that it would be premature for the Commission to assess post-deployment needs at this time).

cap carriers, asserts that rate-of-return carriers have a demonstrated need for ongoing and immediate support for operations and maintenance (due to factors such as lower revenues) while price-cap carriers may not need support even after government-funded deployment is completed.¹⁷⁷ INCOMPAS submitted a report indicating that operational costs per location passed per year for fiber networks (including battery maintenance, power, customer churn, trouble calls, and truck rolls) are 50% less than the same costs for fiber coax and 63% less than for DSL over copper.¹⁷⁸ INCOMPAS therefore suggests that the Commission should approach the development of any new process to support operational costs with caution and only after rigorous analysis of operating costs arising after full deployment.¹⁷⁹ A Commission White Paper published in 2017 and analyzing data relating to 2015 deployment concluded that after full deployment of fiber to the premises (FTTP) to the then approximate 14% of residential and small businesses lacking 25/3 Mbps service, only 2% of such locations would require support to continue operations.¹⁸⁰ Considered as a whole, the record demonstrates that the Commission must evaluate the need for support for post-deployment,¹⁸¹ including how to take into account changes in costs with technologies funded through the BEAD program.¹⁸² We expect that any such evaluation would involve rigorous analysis and information gathering and that the Commission should be prepared to respond to consumers' needs.

46. The Commission is currently taking several steps to avoid duplicative funding of the same areas by multiple federal programs and to assist in identifying areas that are unserved and underserved. Through the BDC, the Commission is updating its coverage maps to include all locations where broadband service is available by first developing a Broadband Serviceable Location Fabric (the Fabric) to identify all served locations in the United States and its territories.¹⁸³ The Commission has also

¹⁷⁷ ACA Connects Reply Comments at 11-12.

¹⁷⁸ See Letter from Angie Kronenberg, Chief Advocate and General Counsel, INCOMPAS, to Marlene K. Dortch, Secretary, FCC at 1 (filed June 22, 2022) (INCOMPAS Ex Parte); Fiber Broadband Association, Access Network OPEX Analysis White Paper (June 2020) available at <https://www.fiberbroadband.org/page/fiber-research> (presenting evidence that operating costs for newly deployed fiber networks are much less than for existing copper or wireless networks).

¹⁷⁹ See INCOMPAS Reply Comments at 2-6.

¹⁸⁰ See Paul de Sa, Improving the Nation's Digital Infrastructure, FCC Office of Strategic Planning and Policy Analysis (2017) at 2, n.4, <https://docs.fcc.gov/public/attachments/DOC-343135A1.pdf> (2017 White Paper) (stating that the last 2% of the unserved locations in the United States will require material support after the network has been built because of limited subscriber revenues and suggesting an annual subsidy of approximately 2 billion to keep these networks operating).

¹⁸¹ See Cisco Comments at 4 (“Operator assessment of the risk of coming up short with respect to support for future operating expenses may limit the pool of broadband providers willing to build BEAD-funded networks. As a result, adequately addressing legitimate provider concerns about operating expenses is essential to maximizing participation in government supported high-cost programs, thereby achieving the goals of affordable, ubiquitous and sustainable broadband service”); Letter from Michael Romano, Senior Vice President, Industry Affairs and Business Development, NTCA, to Marlene K. Dortch, Secretary, FCC at 2-4 (June 27, 2022) (NTCA Ex Parte).

¹⁸² See INCOMPAS Ex Parte.

¹⁸³ The Broadband Data Act, Consolidated Appropriations Act, 2021, Sec. 906(1), requires the Commission to establish a semiannual collection of geographically granular broadband coverage data (Broadband Data Collection or BDC) for use in creating coverage maps, 47 U.S.C. §§ 642(a)(1)(A), (a)(2), processes for challenging the data, 47 U.S.C. § 642(a)(5), and processes for acceptance of crowdsourced information. 47 U.S.C. § 644(b). It also directs the Commission to create a comprehensive database of broadband serviceable locations, i.e., the Broadband Serviceable Location Fabric (Fabric). 47 U.S.C. § 642(b)(1). The Commission recently announced that facilities-based providers of fixed and mobile broadband Internet access service can begin to submit broadband availability data under the new rules and procedures for the BDC as of June 30, 2022, and must submit the data no later than September 1, 2022. See Broadband Data Task Force and Office of Economics and Analytics Announce Inaugural Broadband Data Collection Filing Dates et al., Public Notice, DA 22-18 (BDTF, OEA 2022).

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committed to interagency coordination efforts to coordinate High Cost support and Infrastructure Act support. Pursuant to terms of the Broadband DATA Act, the Commission must use BDC information “when making any new award of funding with respect to the deployment of broadband internet access intended for use by residential and mobile customers.”¹⁸⁴ This information will also help inform the distribution of funds under the Infrastructure Act, including the BEAD Program.¹⁸⁵ With development of the BDC and the Fabric, the Commission will have a better understanding of the competitive landscape and, in turn, will be well positioned at that time to identify areas where support for operating and capital costs may be warranted if projected revenues are insufficient to cover these costs.¹⁸⁶ Once this information is available, the initiation of the recommended proceeding will ensure adequate time to develop a robust record upon which to evaluate future funding needs of networks serving high-cost service areas. The Commission’s proceeding would run parallel to the efforts of BEAD program support recipients to deploy networks while ensuring that already completed and future networks will remain viable and responsive to consumer needs at reasonable costs.

47. *Support for Affordable Middle-Mile Access.* Some commenters recommend support for middle-mile development in areas where backhaul costs are substantial and growing.¹⁸⁷ They recommend that the Commission allocate High Cost support to middle-mile development to increase route diversity and competitive offerings.¹⁸⁸ Alaska-based commenters point to unique geographic features within Alaska that have placed significant constraints on the development of middle mile facilities, resulting in prices for this service that are 800 to 1000 times the price charged for similar service in the continental United States.¹⁸⁹ The Native Nations Communications Task Force has determined that “[m]ost of Tribal America lacks adequate middle-mile connectivity,” and asserts that the Commission must target high-cost cost support to developing sustainable middle-mile resources.¹⁹⁰

48. As explained in the *Future of the USF NOI*, section 60401 of the Infrastructure Act provides \$1 billion in funding to NTIA to establish a Middle Mile Infrastructure Grant Program to award “grants on a technologically-neutral, competitive basis to eligible entities for the construction, improvement, or acquisition of middle mile infrastructure,” and requires that grantees “share the location of all middle mile infrastructure constructed with grant funds.”¹⁹¹ Congress directed states to give priority

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¹⁸³ *Future of the USF NOI* at 4-5, para. 8 (citing 47 U.S.C. § 642(a)(1)(A), (a)(2)).

¹⁸⁴ 47 U.S.C. § 642(c)(2)(A)-(B).

¹⁸⁵ Infrastructure Act, § 60102(a)(1) (defining “unserved” and “underserved” location in relation to the Commission’s Broadband Data Map).

¹⁸⁶ In addition, the Commission will be able to identify any areas that may remain unserved after completion of the programs funded by the Infrastructure Act.

¹⁸⁷ See, e.g., NTTA Comments at 9 (stating that the Commission should revise current High Cost support rules to include support for high middle mile costs); Sacred Wind Communications Comments at 9 (urging Commission support for Middle Mile Infrastructure expansion); WTA Comments at 10 (“To the extent to which the MMBI Grant Program does not reduce or resolve middle mile problems in some states, the Commission will need to determine and provide an appropriate amount of continuing HCF support in areas that continue to be plagued by substantial and growing middle mile costs, or many RLECs will be forced to recover their middle mile costs via customer broadband rate increases that will adversely impact affordability and adoption.”).

¹⁸⁸ Alaska Communications Comments at i, 5-11, 15.

¹⁸⁹ See ARCC Comments at 3, 4-7 (explaining that in Alaska, remoteness of communities requires balancing of speed, oversubscription needs, and pricing constraint that cannot be solved with high-priced middle mile units); *id.* at 5, n.10 (stating that Alaska carriers pay 800-1000 times average cost for middle mile service in lower states).

¹⁹⁰ See Native Nations Communications Task Force, Improving and Increasing Broadband Deployment on Tribal Lands, Report to the Federal Communications Commission from the Tribal members of the Task Force (Nov. 5, 2019) at 23-23; see also NTTA Comments at 8.

to carriers that demonstrate one or more of the following: (1) a commitment to ensuring access to middle mile transport at fiscally sustainable rates, (2) non-discriminatory interconnection with multiple last mile broadband providers, (3) a capability to provide efficient deployment in areas where it is most needed; and (4) a commitment to protecting national security interests.¹⁹² Achieving each of these goals for middle mile facilities (sustainable rates, non-discriminatory interconnection, efficient deployment and protected security interests) on a long-term and national basis, however, will require significant evaluation of middle mile market conditions in high-cost areas over time (particularly in the most remote areas, such as Alaska) as well as an understanding of market conditions. The Commission should engage with NTIA on this program, and then study its results and implications for High Cost and the other universal service programs.

c. Existing and Future Planned High Cost Programs

49. The Commission should continue to administer High Cost support already committed and consider potential enhancements to these programs to ensure better quality service. As explained in the *Enhanced A-CAM NPRM*, where the Commission has already been supporting the deployment and ongoing provision of some level of broadband service in rural areas for several years, adjustment of deployment goals and associated support, in accordance with the Broadband DATA Act and relying on the new fixed deployment maps, may be an efficient and complementary way to bolster federal and state efforts.¹⁹³

50. Several commenters support this approach and assert that continued High Cost funding for deployment is essential.¹⁹⁴ For example, Broadband Connects states that the Commission should continue funding deployment because the Infrastructure Act only provides “approximately half” of the \$80 billion cost of deploying FTTP that a Commission white paper has estimated is needed.¹⁹⁵ The New York Public Services Commission points out that the RDOF Phase II Auction will not progress until after the Commission completes detailed mapping that would guide grants and future support under both the Infrastructure Act and the High Cost program, thus minimizing any possibility of duplicative funding.¹⁹⁶

51. Some commenters disagree, suggesting that the Commission pause existing funding for deployment in high-cost areas because BEAD and other programs may, or already have, rendered High Cost funding unnecessary.¹⁹⁷ Most of the commenters that argue against continuing High Cost funding,

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¹⁹¹ Infrastructure Act, § 60401(c), (h); *Id.* § 60401(e)(3)(B)(ii)(II).

¹⁹² *Id.* § 60401(d)(2).

¹⁹³ See *Enhanced A-CAM NPRM*, FCC 22-35, para. 1 (“Given that A-CAM is already supporting the deployment and ongoing provision of some level of broadband service in rural areas through 2028 for most A-CAM carriers, 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.”).

¹⁹⁴ See, e.g., USTelecom Comments at 14 (stating that the Commission must meet its obligations to support existing mechanisms).

¹⁹⁵ See Broadband Connects Comments at 5-6 (citing 2017 White Paper at 2). More specifically, the cited White Paper states that as of December 2015, approximately 14% of the approximate 160 million U.S. residential and small-and-medium business locations lack access to 25/3 Mbps-capable FTTP and/or cable service, that the total upfront capital support required to deploy FTTP to this 14% of locations would be approximately \$80 billion, and that, because of the shape of the cost curve, approximately 98% coverage could be attained for approximately \$40 billion. See 2017 White Paper at 2.

¹⁹⁶ See NYPSC Reply Comments at 2-3.

¹⁹⁷ See, e.g., AT&T Comments at 34 (the Commission should “pause” funding for fixed broadband deployment until all other sources of federal funding for deployment is distributed and evaluated); NCTA Comments at 8 (urging the Commission to “pause any planned additional high-cost support funding, such as new or additional rounds of funding, to give time for it to assess the effects of the new broadband programs”).

however, would not immediately halt programs where funding has already been committed. They instead argue that the RDOF Phase II Auction and any other future support processes should be halted pending completion of Infrastructure Act projects.¹⁹⁸ Verizon goes further by advocating for the immediate cancellation of the RDOF Phase II Auction, stating that areas that would have been eligible for RDOF Phase II support will be eligible for Infrastructure Act funding and that cancellation of RDOF Phase II Auction would “meet Congress’s expectation that the Commission and other agencies will coordinate and align their programs, and would free up support that could be used to meet other universal service goals or to reduce the contribution factor and the resulting burden on consumers”¹⁹⁹ Others state the Infrastructure Act makes the High Cost program obsolete and recommend that the program be discontinued.²⁰⁰ However, one of these commenters, Free State Foundation, acknowledges that the program cannot be terminated immediately without causing disruption to service and operations.²⁰¹

52. We note that NTIA, in administering the BEAD Program, has prohibited states from treating as unserved or underserved areas already subject to enforceable federal, state, or local commitments to deploy qualifying broadband.²⁰² Moreover, preventing duplication is a primary goal of the Commission’s interagency coordination efforts. As support terms end for its existing programs, the Commission will consider whether these kinds of support mechanisms are still necessary. The Commission should consider how and/or whether future planned processes, such as RDOF Phase II, remain necessary after the Commission’s creation of the Fabric and deployment commitments under BEAD and/or other Infrastructure Act programs are made. If at this time there are still areas lacking broadband service meeting the speed and latency standards required by Congress in the Infrastructure

¹⁹⁸ See, e.g., ACA Connects Reply Comments at 11 (stating that the “the Commission and Congress should refrain from initiating new High Cost programs in price cap carrier territories until the results of all of these efforts can be evaluated to determine whether additional government support is required – and, if it is required, how best to target and distribute such support.”); Connected Nation Comments at 2 (recommending pausing RDOF Phase II pending evaluation of the effectiveness of the BEAD program); CTIA Comments at 7-8 (recommending that the Commission “refrain from allocating additional universal service funding for fixed broadband deployment efforts, including commencing the second phase of RDOF”); INCOMPAS Comments at 7-8, 9 (stating that the Commission should refrain from allocating additional High Cost support funds for deployment in areas without first analyzing how much funding is necessary to fill in gaps); T-Mobile Reply Comments at 6 (“Given this unprecedented funding for broadband deployment, there is no basis for the Commission to proceed with new, overlapping deployment programs through the USF. Instead, the Commission should consider new programs only after it can assess accurately where deployment subsidies are needed, and therefore, only after it receives data showing where Infrastructure Act-funded projects have been built.”); Verizon Comments at 6 (stating that the Commission should defer consideration of any new fixed broadband support until all appropriated funds have been fully awarded and the Commission assesses whether there are any deployment gaps).

¹⁹⁹ Verizon Comments at 6-7.

²⁰⁰ Free State Foundation Comments at 8-9 (recommending that the Commission reduce and then, within a 10-year time frame, sunset the High Cost program); ITIF Comments at 3 (stating that the new federal funding makes the High Cost program “superfluous” and recommends that the Commission sunset this program because “[o]nly a culpable mismanagement of [new federal broadband funds] could fail to end the need for the High Cost program”); Citizens Against Government Waste Comments at 6 (stating that it would be “worthwhile to consider whether the High Cost program should be eliminated or drastically reduced in scope with other federal programs having adequate resources to ensure that High Cost unserved areas of the country can be connected”).

²⁰¹ See Free State Foundation Comments at 8-9.

²⁰² See Broadband Equity, Access, and Deployment (BEAD) Program Notice of Funding Opportunity (May 13, 2022), <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEADNOFO.pdf> (BEAD Program NOFO) (last visited Aug. 12, 2022). 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.

Act, the Commission should initiate a rulemaking to determine how to most efficiently bring broadband service to those areas and reevaluate whether additional support processes are needed.²⁰³

d. Support for Mobile Broadband

53. Funding for deployment under the Infrastructure Act focuses on fixed services, not mobile services.²⁰⁴ The Commission has a unique role to play in supporting the deployment of mobile broadband to maintain connectivity wherever people live, work, or travel. In support of that role, the Commission's new mobile broadband deployment maps will provide the most granular and standardized mobile deployment maps ever developed.²⁰⁵ The Commission should 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.²⁰⁶

54. AT&T and Verizon assert that the Commission should temporarily defer the 5G Fund auction until after the Commission has had the opportunity to evaluate the impact of Infrastructure Act funding on the mobile wireless deployment.²⁰⁷ However, the BEAD Program will not fund mobile broadband deployment. While the Commission's development of new wireless maps that must precede a reallocation of mobile support is a complex and time-intensive process, pausing the process would have detrimental impacts on consumers' access to advanced mobile wireless service. We do recommend, however, 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.

2. Lifeline and the Affordable Connectivity Program

55. The Lifeline program was established in 1985 to help low-income consumers afford voice service²⁰⁸ and has evolved to include support for broadband internet access service.²⁰⁹ In the *2016 Lifeline Order*, the Commission made changes to shift the focus of Lifeline toward enabling low-income consumers to obtain and use broadband.²¹⁰ The Commission allowed Lifeline support to be used for standalone fixed and mobile broadband and established minimum service standards to ensure those services would meet consumer needs.²¹¹ As of March 2022, approximately 94% of Lifeline consumers

²⁰³ Infrastructure Act, § 60102(h)(1)(A).

²⁰⁴ See *BEAD Program NOFO* at 15 n.10 (May 13, 2022), <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEADNOFO.pdf> (stating that the Assistant Secretary, pursuant to authority in Infrastructure Act, § 60102(a)(2)(L), adopts the criteria that Reliable Broadband Service must be, among other things, a fixed broadband service) (last visited Aug. 12, 2022).

²⁰⁵ In August 2019, the Commission began a new process for collecting more granular data on the availability of fixed and mobile broadband service. See *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, WC Docket Nos. 19-195, 11-10, Report and Order and Second Further Notice of Proposed Rulemaking, 34 FCC Rcd 7505 (2019). The first collection, of data as of June 30, 2022, is due on September 1, 2022. *Broadband Data Task Force and Office of Economics and Analytics Announce Inaugural Broadband Data Collection Filing Dates*, Public Notice, DA 22-182 (BDTF/OEA Feb. 22, 2022). The system will include some automated validations to help ensure that data are submitted in the proper format and conform to the required specifications. *Establishing the Digital Opportunity Data Collection*, Order, WC Docket No. 19-195, DA 22-241 (WCB 2022). However, only after the coverage maps are published will the challenge and verification processes begin, which will further improve and refine the data.

²⁰⁶ See *5G Order*, 35 FCC Rcd at 12179, para. 11.

²⁰⁷ See AT&T Comments at 37; Verizon Comments at 7.

²⁰⁸ See *2012 Lifeline Order*, 27 FCC Rcd at 6662-63, para. 12.

²⁰⁹ See *2016 Lifeline Order*, 31 FCC Rcd at 3972, para. 30.

²¹⁰ *Id.* at 3964, para. 6.

subscribe to a rate plan that includes broadband service.²¹² Presently, Lifeline offers a monthly discount of up to \$5.25 for voice and up to \$9.25 for broadband that meet the relevant minimum standards.²¹³ In addition, in Tribal lands, an additional discount of up to \$25.00 per month is available.²¹⁴

56. In 2020, Congress appropriated \$3.2 billion to make broadband more affordable to low-income consumers during the COVID-19 pandemic and directed the Commission to establish the Emergency Broadband Benefit (EBB) Program.²¹⁵ More recently, as part of the Infrastructure Act, Congress appropriated an additional \$14.2 billion for the longer term Affordable Connectivity Program, which extends the temporary EBB Program and makes a number of changes.²¹⁶ The Affordable Connectivity Program was officially launched on December 31, 2021, and the Commission released final rules on January 21, 2022.²¹⁷ Over twelve million households have enrolled.²¹⁸ Under the Affordable Connectivity Program, the available support amount is up to \$30 per month, with an enhanced benefit of up to \$75 per month discount available for eligible consumers on qualifying Tribal lands. The Affordable Connectivity Program provides a one-time discount of up to \$100 for a laptop, desktop, or tablet per household provided that the household contributes more than \$10 but less than \$50 toward the cost of the device.²¹⁹

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²¹¹ See *id.* Lifeline minimum service standards can be found at <https://www.usac.org/lifeline/rules-and-requirements/minimum-service-standards/#Minimum> (last visited Aug. 12, 2022). In November 2021, the Bureau paused the increase in the minimum service standard requirements for mobile broadband data capacity for one year in order, "... to gather more relevant data and to consider whether a different long-term approach is warranted." *Lifeline and Link Up Reform and Modernization et al.*, Docket Nos. 11-42 et al., Order, DA 21-1389, at 8, para. 19 (WCB Nov. 5, 2021) (*Lifeline MSS/Voice Extension Order*). The Bureau recently extended the waiver pausing the increase of the Lifeline mobile broadband data capacity minimum service standards for an additional year. See *Lifeline and Link Up Reform and Modernization, Telecommunications Carriers Eligible for Universal Service Support, Connect America Fund*, Order, WC Docket Nos. 11-42, 09-197, 10-90 (WCB July 1, 2022) (*Second Lifeline MSS/Voice Extension Order*).

²¹² USAC, Board materials for April 2022, *High Cost & Low Income Committee Briefing Book* at 53, <https://www.usac.org/wp-content/uploads/about/documents/leadership/materials/hcli/2022/2022.04.25-HCLI-Open-Session-Briefing-Book.pdf> (last visited Aug. 12, 2022).

²¹³ For bundled plans, a discount of up to \$5.25 is available where the plan meets the voice minimum service standards only and a discount of up to \$9.25 is available where the plan meets the broadband minimum service standards. 47 CFR § 54.403(a)(1), (a)(2). While the support amount of \$5.25 for plans that meet the voice minimum service standards only was scheduled to end on December 1, 2021, this phase down was suspended by the Bureau in the *Lifeline MSS/Voice Extension Order* issued in November 2021, and this suspension was extended further by the *Second Lifeline MSS/Voice Extension Order* issued in July 2022. See *Lifeline MSS/Voice Extension Order*, at 1, para. 1 and *Second Lifeline MSS/Voice Extension Order*, at 1, para. 1.

²¹⁴ 47 CFR § 54.403(a)(3).

²¹⁵ Consolidated Appropriations Act, 2021, div. N, tit. IX, § 904(b)(1). Section 904 of Division N – Additional Coronavirus Response and Relief, Title IX – Broadband Internet Access Service, in the Consolidated Appropriations Act, 2021, established an Emergency Broadband Connectivity Fund of \$3.2 billion. *Id.* § 904(h)(2).

²¹⁶ Infrastructure Act, § 60502(a); div. J, title IV.

²¹⁷ *Affordable Connectivity Program Broadband Benefit Program*, WC Docket Nos. 21-450, 20-445, Report and Order and Further Notice of Proposed Rulemaking, FCC 22-2 (Jan. 21, 2022) (*Affordable Connectivity Program Order*).

²¹⁸ USAC, *ACP Enrollment and Claims Tracker*, <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#total-enrolled> (last visited Aug. 12, 2022).

²¹⁹ 47 U.S.C. § 1752(b)(5); *Affordable Connectivity Program Order*, FCC 22-2 at 65, para. 136.

57. As discussed in the *Future of the USF NOI*, the Lifeline program and the Affordable Connectivity Program are similar in some respects but fundamentally different in others.²²⁰ Notable differences include: the Affordable Connectivity Program is primarily designed to support broadband service and, unlike Lifeline, cannot be used for standalone voice services; the Affordable Connectivity Program offers a more substantial discount than the standard Lifeline discount; the Affordable Connectivity Program provides a discount for qualifying connected devices, whereas the Lifeline program does not offer any support for device purchases; and Affordable Connectivity Program benefits can also be applied toward services offered by service providers that have not been designated as Eligible Telecommunications Carriers (ETCs), whereas in Lifeline, the service provider must be a designated ETC. The Affordable Connectivity Program also has more expansive eligibility criteria than the Lifeline program.

a. Aligning the Lifeline and Affordable Connectivity Programs

58. We recommend that the Commission initiate a rulemaking to evaluate how the Lifeline program can best operate with the Affordable Connectivity Program and examine lessons learned from implementation of the EBB Program and the Affordable Connectivity Program that may be able to be applied to Lifeline. Numerous commenters suggest that certain aspects of the Affordable Connectivity Program and Lifeline program can be aligned.²²¹ Some commenters suggest that the Lifeline program and Affordable Connectivity Program should be merged or that the programs should be more clearly delineated to focus support based on different service types.²²² Other commenters, however, support retaining two separate programs.²²³ We acknowledge comments supporting the continuation of two separate programs but also recognize that it is appropriate to evaluate the two programs to assess the

²²⁰ *Future of the USF NOI* at 15-16, para. 35.

²²¹ See, e.g., ACA Connects Reply Comments at n.35; Benton Comments at 24; Microsoft Reply Comments at 7-8; NTTA Comments at 13-14; Verizon Comments at 10.

²²² AT&T Comments at 33 (recommending that the Commission consider folding the Lifeline program into the Affordable Connectivity Program or vice versa); CPUC comments at 10 (recommending that the Lifeline program focus on wireless broadband while the Affordable Connectivity Program focuses on fixed broadband); Digital Progress Institute Comments at 3 (arguing in favor of repurposing Lifeline to ensure access to affordable voice communications); NCTA Comments at 12-13 (recommending that the Commission could consider whether Lifeline should support mobile-only services, and use other programs to fund fixed services); NEK Community Broadband Comments at 1 (stating, “The FCC should end the Lifeline program and roll the funds into the ACP, increasing the benefit amount to \$60/month.”); US Chamber of Commerce Reply Comments at 3-4 (recommending that the, “Commission include in its Report a recommendation for Congress to reconcile the ACP and Lifeline into a single, long-term program.”); Vermont Public Service Commission Comments at 10 (recommending the Commission consider folding all broadband subsidies into the Affordable Connectivity Program, while maintaining the Lifeline program for standalone voice service).

²²³ ACA Connects Reply Comments at 15-16 (arguing against AT&T’s comments that the programs be combined and arguing that, “the co-existence of the two programs allows households eligible for both programs the opportunity to receive a mobile service through Lifeline and more robust “home broadband” service through ACP, including from providers that are not ETCs.”); CETF Comments at 18 (arguing in favor of retaining a separate Lifeline program and stating that, “The main reason is that the ACP is subject to the whims of Congressional appropriations, and it is simply too risky to have the critically important Lifeline program for broadband and voice service for the poor to rely on the appropriations process.”); NaLA Reply Comments at 4, (asserting that the Commission cannot merge Lifeline with the ACP program or change the focus of the services supported by the Lifeline program without new Congressional authority); NYPSC Reply Comments at 2 (disagreeing with AT&T’s suggestion that the Lifeline program and Affordable Connectivity Program should be consolidated into one program and stating, “separate programs allow for greater consumer choice for low-income customers who choose to remain on voice-only service.”); Verizon Comments at 9 (arguing there is a continuing need for Lifeline to remain in place as a separate program to provide a baseline benefit even if the Affordable Connectivity Program is not extended and to provide an additional benefit to households receiving Affordable Connectivity Program support).

continuing need for both and to ensure they are appropriately aligned and can operate successfully, in tandem, to support the connectivity needs of low-income consumers.

59. Unlike the Lifeline program, the Affordable Connectivity Program allows consumers to qualify if they or members of their household participate in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the National School Lunch Program or School Breakfast Program (including Community Eligibility Provision schools), or if they received a Federal Pell Grant during the current award year.²²⁴ The Affordable Connectivity Program also allows consumers to qualify if they meet the eligibility criteria for a participating provider's existing low-income internet program or if the household income is at or below 200% of the Federal Poverty Guidelines.²²⁵ A number of commenters support aligning the eligibility criteria for Lifeline and the Affordable Connectivity Program,²²⁶ and we recommend that, as part of a rulemaking proceeding, the Commission consider aligning some or all of the two programs' differing eligibility requirements. Congress amended the eligibility criteria for the EBB Program as it transitioned to the Affordable Connectivity Program and the changes enacted reflect the fact that, unlike the EBB Program, the Affordable Connectivity Program is not an emergency program with the limited purpose of addressing connectivity needs during a public health crisis. Because Congress has recognized that the eligibility criteria for the Affordable Connectivity Program are appropriate to apply to a longer-term, non-emergency program, we think it appropriate to consider reconciling any differences that exist when it comes to eligibility for the Lifeline program.

60. The Infrastructure Act established that the Commission may conduct outreach to encourage eligible households to enroll in the Affordable Connectivity Program, including paid media campaigns, focus groups, consumer research, and grants to outreach partners.²²⁷ In this proceeding, some commenters have discussed the need to engage in similar outreach activities to raise awareness regarding the USF programs.²²⁸ We recommend that the Commission consider how it could facilitate and fund further outreach efforts by the Commission and external stakeholders for purposes of the Lifeline program. To the extent the Commission determines Congressional action would be necessary to facilitate and fund such outreach program efforts, we recommend the Commission consider making a referral to Congress to consider such action.

61. Some commenters have suggested that the Affordable Connectivity Program and Lifeline program should be focused on different service types. For example, the California Public Utilities Commission (CPUC) recommends that the Lifeline program focus on mobile broadband while the Affordable Connectivity Program focus on fixed broadband;²²⁹ NCTA recommends that the Commission could consider whether Lifeline should support mobile-only services and use other programs to fund fixed services;²³⁰ and the Vermont Public Service Commission recommends that the Commission consider folding all broadband subsidies into the Affordable Connectivity Program while maintaining the Lifeline program for standalone voice service.²³¹ Additionally, the Benton Institute for Broadband & Society (Benton) has highlighted that a majority of households have two types of subscriptions to the Internet—

²²⁴ Infrastructure Act, § 60502(b)(1); 47 U.S.C. § 1752(a)(6); 47 CFR §54.1800(j).

²²⁵ *Id.*

²²⁶ CPUC Comments at 8-9; Benton Comments at 24; NaLA Comments at 14-15; NTTA Comments at 14; Public Knowledge Comments at 8.

²²⁷ *See* 47 U.S.C. §§ 1752(b)(10)(C)(i)-(ii).

²²⁸ *See, e.g.,* Hawaii Broadband and Digital Equity Office Comments at 2; *see also* CETF Comments at 21 (urging the Commission to “fund Digital Literacy programs targeted to the unconnected population”).

²²⁹ CPUC Comments at 10.

²³⁰ NCTA Comments at 12-13.

²³¹ Vermont Public Service Commission Comments at 10.

mobile data and fixed wireline service.²³² At the same time, there are statutory restrictions on the Commission's ability to restrict the types of broadband services supported by the Affordable Connectivity Program.²³³ In light of the comments in the record, we recommend that the Commission consider the role of both affordability programs and ways each program can maximize the different benefits for eligible households. To the extent the Commission determines Congressional action would be necessary to provide additional flexibility for each program, we recommend the Commission consider making a referral to Congress to consider such action.

62. Similarly, eligible households can currently apply their ACP and Lifeline program discounts to the same service plan. The Commission should consider evaluating whether to change the existing approach that allows for the benefits from the two programs to be combined. In doing so, the Commission should also consider how changing the approach to the types of services supported by the two programs would impact consumers' ability to obtain both mobile and fixed services. Any such consideration would have to be limited to the Lifeline program, given the statutory limitations placed on the Affordable Connectivity Program,²³⁴ but the Commission may wish to recommend to Congress flexibility in that statute should it determine that such flexibility in the ways in which the ACP benefit is applied would be helpful.

63. We also recommend that the Commission consider whether the Affordable Connectivity Program's consumer protection provisions should be adopted for the Lifeline program, as suggested by commenters.²³⁵ In particular, the Infrastructure Act prohibits providers from requiring an eligible household to submit to a credit check in order to apply the ACP benefit²³⁶ and specifies that a participating provider may terminate broadband Internet access service to a subscriber after 90 days of nonpayment.²³⁷ The Infrastructure Act also required the Commission to establish a dedicated complaint process for the Affordable Connectivity Program.²³⁸ In connection with the complaint process, service providers must provide ACP participants with information on the dedicated complaint process²³⁹ and the Commission is required to regularly issue public reports regarding consumer complaints alleging provider non-compliance with the ACP rules.²⁴⁰ Congress also directed the Commission to prohibit inappropriate

²³² Benton Comments at 14; *See also* John B. Horrigan, PhD, The Benton Institute for Broadband & Society at 23-24 (2022), https://www.benton.org/sites/default/files/reimagininglifeline_final1_0.pdf.

²³³ According to the Infrastructure Act, a participating provider "shall allow an eligible household to apply the affordable connectivity benefit to any internet service offering of the participating provider, at the same terms available to households that are not eligible households." 47 CFR § 1752(b)(7). *See also* NaLA Reply Comments at 4 and 8-11.

²³⁴ 47 USC § 1752(b)(7). NaLA points to the statutory limitations established for the Affordable Connectivity Program and argues in favor of retaining the existing approach that allows for both discounts to be applied to the same service plan. *See* NaLA Reply Comments at 8-11.

²³⁵ Minnesota Department of Commerce Comments at 2; CETF Comments at 20 (arguing the Commission should consider applying the restrictions on "upselling" and "downselling" adopted for the Affordable Connectivity Program to the Lifeline program).

²³⁶ 47 U.S.C. § 1752(b)(7)(A)(ii).

²³⁷ 47 U.S.C. § 1752(b)(7)(A)(ii).

²³⁸ 47 U.S.C. § 1752(b)(9)(A).

²³⁹ 47 U.S.C. § 1752(b)(9)(B).

²⁴⁰ 47 U.S.C. § 1752(b)(9)(D). The Infrastructure Act also requires the Commission to act expeditiously to investigate potential violations of program rules and requirements and to enforce compliance. 47 U.S.C. § 1752(b)(9)(C)(i).

upselling or downselling by a participating provider,²⁴¹ requirements that a consumer opt-in to an extended service contract as a condition of participation,²⁴² restrictions on the consumer's ability to switch internet service offerings,²⁴³ and other unjust and unreasonable acts or practices.²⁴⁴

64. The Commission adopted consumer protection rules to accomplish the directives set forth in the Infrastructure Act in January of this year.²⁴⁵ The Commission also adopted rules consistent with those that were in place for the EBB Program that specify consumer disclosures and consent requirements that providers participating in the Affordable Connectivity Program must follow before enrolling eligible consumers.²⁴⁶ Based on the similarities between the Affordable Connectivity Program and the Lifeline program, and the fact that both programs are designed to benefit low-income consumers, we recommend that the Commission consider adopting consumer protection provisions similar to those adopted for the Affordable Connectivity Program for the Lifeline program.

65. We next recommend that the Commission consider whether there are actions that could be taken to further combat waste, fraud, and abuse in the Lifeline program and the Affordable Connectivity Program. Both programs use automated databases through the National Verifier to check consumer eligibility and require service provider agents to register in the Representative Accountability Database.²⁴⁷ Consumers who cannot have their eligibility confirmed via these automated databases have their information confirmed by a manual review performed by USAC. Citizens Against Government Waste acknowledges that the National Verifier has helped in reducing waste, fraud, and abuse in the Lifeline program but states it has not been "foolproof" and urges the Commission to maximize the use of tools such as the National Verifier to minimize waste, fraud, and abuse in the Affordable Connectivity Program before benefits are issued.²⁴⁸ In the *Affordable Connectivity Program Order*, the Commission evaluated and adopted several safeguards similar to those in place for the Lifeline program, such as restrictions on commission-based compensation and implementing non-usage tracking and de-enrollment

²⁴¹ 47 U.S.C. § 1752(b)(11)(A)(i). The *Affordable Connectivity Program Order* clarified that, "[i]nappropriate upselling in the context of the Affordable Connectivity Program is any business practice that pressures a prospective or existing subscriber to purchase a service plan or bundled plan in addition to or that is more expensive than what the subscriber initially sought." *Affordable Connectivity Program Order*, FCC 22-2 at 77, para. 161. The *Affordable Connectivity Program Order* also explained that, "[i]nappropriate downselling in the context of the Affordable Connectivity Program is any business practice that pressures a subscriber to lower the quality of broadband service (such as reducing bandwidth or speed, or adding or lowering data caps that would not meet the participating household's needs) to the benefit of the provider rather than the consumer." *Id.* at 78, para. 163.

²⁴² 47 U.S.C. § 1752(b)(11)(A)(i).

²⁴³ 47 U.S.C. § 1752(b)(11)(A)(iv).

²⁴⁴ 47 U.S.C. § 1752(b)(11)(A)(v).

²⁴⁵ *Affordable Connectivity Program Order* at 66-83, paras. 138-173.

²⁴⁶ *Id.* at 82-87, paras. 174-189.

²⁴⁷ See 47 CFR §§ 54.1807(a), 54.406(a).

²⁴⁸ Citizens Against Government Waste Comments at 3. Citizens Against Government Waste also points to a recent inquiry by members of Congress related to an Office of Inspector General (OIG) finding that some providers falsely claimed some households had children attending schools participating in the National School Lunch Program's Community Eligibility Provision to obtain EBB funds. *Id.* As noted in the *Affordable Connectivity Program Order*, "[i]n November 2021, the Bureau adopted additional documentation requirements for enrollment based on attendance at a CEP school or school district as an additional safeguard against potential waste, fraud and abuse in response to USAC's program integrity reviews and an FCC Office of Inspector General advisory." *Affordable Connectivity Program Order*, at 29, para. 55 (citing *Advisory Regarding Fraudulent EBB Enrollments Based on USDA National School Lunch Program Community Eligibility Provision* (FCC OIG Nov. 22, 2021), https://www.fcc.gov/document/fcc-inspector-general-advisory-regarding-ebb-enrollment-fraud_at_2).

requirements.²⁴⁹ We recommend that the Commission evaluate whether there are other tools that could be implemented to further strengthen efforts to prevent waste, fraud, and abuse in both Lifeline and the Affordable Connectivity Program.

66. As part of any Lifeline rulemaking effort, we recommend that the Commission consider collecting additional Lifeline program data. USAC and the Commission do not currently collect data on Lifeline service plan characteristics or subscriber usage. Without data on what providers offer and what subscribers use, it is difficult to set appropriate minimum service standards, usage criteria, or to determine if the current support amounts are adequate for meeting Lifeline's goals.²⁵⁰ In the *Affordable Connectivity Program Order*, the Commission determined that collecting data on service plan characteristics could inform whether the Affordable Connectivity Program meets the broadband needs of households,²⁵¹ and we recently sought comment on whether to collect plan characteristics as part of the ACP Transparency Data Collection mandated by Congress.²⁵² The collection of Lifeline service plan data would similarly inform Commission decision-making on the future of Lifeline and provide an opportunity to apply lessons learned from the Affordable Connectivity Program to Lifeline. We also recommend that the Commission consider conducting surveys to better understand households' broadband needs, households' awareness of the Lifeline program, and their interactions with providers.

b. Other Changes to Lifeline Program

67. We recommend that, as part of a rulemaking, the Commission consider continuing Lifeline support for voice-only service based on strong support in the record of this proceeding as well as the record and analysis associated with the State of the Lifeline Marketplace Report released in 2021.²⁵³ Numerous commenters describe a continued need for Lifeline program support for voice-only service.²⁵⁴ Broadband Connects America observes, "Americans still rely on traditional phone service for reliable access to emergency services like 911, for work, to receive healthcare and customer support, and to connect with friends and family."²⁵⁵ According to the Massachusetts Department of Telecommunications and Cable (MDTC), voice-only subscribers still account for 1 in every 5 Lifeline subscribers in the state of Massachusetts.²⁵⁶ The New York Department of Public Service (NYDPS) reports that, "[w]hen the

²⁴⁹ *Affordable Connectivity Program Order*, FCC 22-2 at 14, 39-40, para. 24, 75.

²⁵⁰ For example, usage information may be necessary to address program waste by determining whether subscribers take full advantage of their plan allowances and whether providers are over-reimbursed for current usage levels.

²⁵¹ *Affordable Connectivity Program Order*, FCC 22-2 at 50, para. 100. The Infrastructure Act also instructed the Commission to conduct an annual collection of data relating to the price and subscription rates of each internet service offering of a provider participating in the Affordable Connectivity Program.

²⁵² *Affordable Connectivity Program*, WC Docket No. 21-450, Notice of Proposed Rulemaking, FCC 22-44, at 4, para. 8 (June 8, 2022).

²⁵³ *Report on the State of the Lifeline Marketplace*, WC Docket Nos. 09-197 et al. (WCB 2021) (*2021 State of the Lifeline Marketplace Report*), available at <https://www.fcc.gov/document/bureau-releases-report-state-lifeline-marketplace>.

²⁵⁴ Broadband Connects America Comments at 7; CTIA Comments at 6; DCPSC Reply Comments at 2 (arguing that, "Not only should the USF continue to support voice service, but the Commission should also restore the \$9.25 per month federal funding for voice-only Lifeline service, as the NYPSC and MDTC have recommended."); Digital Progress Institute Comments at 3; MDTC Comments at 3-4; Next Century Cities et al. Comments at 5-9; NTCA Comments at 38; NYPSC Comments at 2; Verizon Comments at 9-10 (recommending the Commission continue to pause the phase down to allow more time to evaluate the ACP's impact).

²⁵⁵ Broadband Connects America Comments at 7.

²⁵⁶ MDTC Comments at 3-4. MDTC notes that, "Although broadband is rightfully the focus of the Infrastructure Act and the Notice of Inquiry, it bears reiterating that a focus on broadband should not completely eclipse the low-income population's continued need for voice-only service." MDTC Comments at 4.

2016 Order discussing the voice phase down was adopted, [New York] had 102,000 voice-only wireline Lifeline customers and as of November 2021, NY still had 54,000 voice-only Lifeline customers even after broadband expansion.”²⁵⁷

68. While many comments filed in response to the Lifeline Marketplace Notice favor continued support for voice-only service,²⁵⁸ at least one commenter in this proceeding argues the Commission should consider whether it is still necessary to support voice-only service.²⁵⁹ In the State of the Lifeline Marketplace Report, the Bureau concluded that, “the Commission may wish to consider some modification to the current phase-down in support for voice-only Lifeline services.”²⁶⁰ In November 2021, the Bureau paused the phase-down of support for voice-only service for one year, finding that good cause existed, “to further analyze the future role of Lifeline support for voice-only services, given the creation of the EBB program; the apparent ongoing importance of voice-only service to a significant minority of Lifeline subscribers, particularly during the COVID-19 pandemic; and the lack of data regarding the options for affordable service that will be available to low-income consumers if voice-only support is eliminated.”²⁶¹ On July 1, 2022, the Bureau issued an Order extending, for an additional year, the waiver pausing the phase-down of support for voice-only services.²⁶² Given the support in the record, analysis in the State of the Lifeline Marketplace proceeding, and the need to take further action once the pause of the voice-only phase-down ends, we recommend that the Commission consider halting the further phase-down of support for voice-only service.

69. We also recommend that the Commission consider how best to revisit the minimum service standards prescribed by the *2016 Lifeline Order*.²⁶³ In the *Lifeline MSS/Voice Extension Order*, the Commission paused the increase of the Lifeline mobile broadband data capacity minimum service standards,²⁶⁴ and the Bureau has recently extended the waiver pausing the increase of the Lifeline mobile broadband data capacity minimum service standards for an additional year.²⁶⁵ A number of commenters argue in favor of the Commission re-evaluating the minimum service standards for the Lifeline program.²⁶⁶ With the pause of the increase in the mobile broadband capacity minimum service standards scheduled to end in December 2023, it is appropriate that the Commission consider the issue. As

²⁵⁷ NYPSC Comments at 2.

²⁵⁸ See, e.g., Asian Americans Advancing Justice et al. Comments, WC Docket Nos. 09-197 et al., at 2-3 (arguing that not all communities have the digital literacy necessary to access Internet services and that voice-only support remains a critical tool for such consumers); CTIA Comments, WC Docket Nos. 09-197 et al., at 9; MDTC Comments, WC Docket Nos. 09-197 et al., at 2-4 (arguing that the voice-only services are often the only reliable option in rural areas and should continue to be supported by the Lifeline program); NARUC Reply Comments, WC Docket Nos. 09-197 et al., at 3; Next Century Cities Comments, WC Docket Nos. 09-197 et al., at 5; Open Technology Institute Comments, WC Docket Nos. 09-197 et al., at 6; Public Knowledge Comments, WC Docket Nos. 09-197 et al., at 4; DCPSC Comments, WC Docket Nos. 09-197 et al., at 1-3; USTelecom Comments, WC Docket Nos. 09-197 et al., at 2; Free Press Comments, WC Docket Nos. 09-197 et al., at 8; Michigan Public Service Commission Comments, WC Docket Nos. 09-197 et al., at 6-7; NaLA Reply Comments, WC Docket Nos. 09-197 et al., at 15-16.

²⁵⁹ AT&T Comments at 33-34.

²⁶⁰ *2021 State of the Lifeline Marketplace Report* at 24.

²⁶¹ *Lifeline MSS/Voice Extension Order*, DA 21-1398, at para. 19.

²⁶² *Second Lifeline MSS/Voice Extension Order*.

²⁶³ See 47 CFR § 54.408(c); *2016 Lifeline Order*, 31 FCC Rcd at 3992, 3995 paras. 85-87, 93.

²⁶⁴ *Lifeline MSS/Voice Extension Order*, 2021 WL 5182893 at *1, para. 1.

²⁶⁵ *Second Lifeline MSS/Voice Extension Order* at 1, para. 1.

²⁶⁶ See, e.g., CWA Comments at 3; Digital Progress Institute Reply Comments at 4; NaLA Comments at 13-14; Verizon Comments at 9-10.

mentioned in the previous subsection, the Commission does not collect data on subscriber usage. We recommend that any rulemaking regarding minimum service standards consider a collection of this data. In addition, as one commenter observes, the Commission declined to adopt similar minimum service standards for the Affordable Connectivity Program.²⁶⁷ The Commission may want to consider factors that led to that decision for the Affordable Connectivity Program when revisiting the Lifeline minimum service standards. In addition, the Commission may want to further evaluate comments regarding this issue in the State of the Lifeline Marketplace proceeding and the Bureau's discussion in that report.²⁶⁸

70. We also recommend that the Commission consider evaluating ways to encourage provider participation in the Lifeline program, including ways to improve the application and enrollment process for service providers and whether to revise the ETC requirements that are established by Commission's rules. Commenters have pointed to the need to broaden provider participation in the Lifeline program as a way to increase consumer choice.²⁶⁹ Comments were mixed on whether the Commission should retain the ETC requirement for Lifeline. Several commenters argue that the Commission should eliminate the ETC requirement for Lifeline as a way to increase service provider participation.²⁷⁰ T-Mobile argues, for example, that, "[t]o encourage broader provider participation, for example, Lifeline should follow the Affordable Connectivity Program's streamlined federal application process, as the Affordable Connectivity Program's lack of an [ETC] designation requirement encourages broader participation and a broader range of service offerings."²⁷¹ Other commenters, however, point to the continued need for the ETC requirement in the Lifeline program.²⁷² For example, the Public Service Commission of the District of Columbia (DCPSC) opposes eliminating the ETC requirement, arguing that the requirement allows state commissions or the FCC to ensure that a provider seeking USF funding has adequate resources and capacity and allows state commissions or the FCC to regulate the quality of service and ensure that the ETC complies with federal and state guidelines for receiving universal service.²⁷³ Some regulatory agencies argue that, with an ETC requirement, state agencies have more visibility into provider compliance issues and can more easily intervene when there is a consumer complaint. According to the Minnesota Department of Commerce, the lack of an ETC requirement means that state regulators do not have the same degree of awareness of whether companies are meeting program requirements including advertising.²⁷⁴ Similarly, the MDTC observes that because providers

²⁶⁷ NaLA Comments at 13.

²⁶⁸ In the *2021 State of the Lifeline Marketplace Report*, the Bureau presented several options for the Commission's consideration for ways to address the minimum service standards for mobile broadband including: taking no action and allowing the minimum service standard for mobile broadband data capacity to increase in accordance with the current formula; pausing, for some period of time, any future increases and seeking further comment on this specific issue; and revising the current formula for calculating increases in the minimum service standards for mobile broadband data capacity. With respect to fixed broadband, the Bureau discussed the fact that "the structure of the rule may create a situation where a consumer could be forced into a higher-priced plan in order to receive Lifeline service" and stated that the Commission may wish to revisit this approach in the future. *2021 State of the Lifeline Marketplace Report* at 18.

²⁶⁹ See, e.g., Free State Foundation Reply Comments at 6 (arguing that the Affordable Connectivity Program is more "soundly structured" than the Lifeline program because broad provider participation and the lack of minimum service requirements foster consumer choice).

²⁷⁰ See, e.g., AT&T Comments at 32-33 (pointing to the lack of an ETC requirement for the Affordable Connectivity Program as a reason for broader participation in that program); Internet Innovation Alliance Comments at 6-7; NCTA Comments at 13 (arguing the Commission should forbear from this requirement and recommend to Congress that the ETC requirement be eliminated); Microsoft Reply Comments at 7; T-Mobile Reply Comments at 18-19.

²⁷¹ T-Mobile Reply Comments at 19.

²⁷² See, e.g., DCPSC Reply Comments at 4; NaLA Reply Comments at 12-14.

²⁷³ DCPSC Reply Comments at 4.

²⁷⁴ Minnesota Department of Commerce Comments at 2-3.

participating in the Affordable Connectivity Program are not required to be ETCs, the state commission may not have a working relationship with the provider and may not have a way of contacting the appropriate parties within the provider's organization to resolve consumer issues.²⁷⁵ As some commenters acknowledge, the ETC requirement is statutory for Lifeline program participation and modifying this requirement could only be accomplished by forbearance²⁷⁶ or a change to 47 U.S.C. § 214(e).²⁷⁷ As a result, this issue will require further evaluation by the Commission, and the Commission may want to consider whether to include such further evaluation as part of a rulemaking proceeding.

71. Commenters make a broad range of other suggestions on how to improve the Lifeline program.²⁷⁸ Suggestions also include improving affordability by increasing monthly Lifeline support,²⁷⁹ expanding Lifeline support to devices,²⁸⁰ increasing targeted consumer outreach,²⁸¹ moving to a different model of reimbursement,²⁸² and revising application and enrollment processes.²⁸³ For a number of the

²⁷⁵ MDTC Comments at 3. MDTC also states that “more coordination and collaboration with state agencies, or at the least, a requirement for participating providers to provide state agencies contact information for executive consumer teams rather than simply a general line, would help to alleviate this discrepancy and protect the interests of these vulnerable subscribers.” MDTC Comments at 3.

²⁷⁶ The forbearance standard is outlined in Section 10 of the Communications Act, 47 U.S.C. § 160.

²⁷⁷ NaLA Reply Comments at 13-14; NCTA Comments at 13; T-Mobile Reply Comments at 19.

²⁷⁸ NaLA, for example, makes numerous recommendations for actions the Commission should take to improve the Lifeline program including: requiring USAC to improve the National Verifier service provider application programming interface (API) by implementing document transmission functionality; limiting benefit transfers to one per month consistent with approach taken for ACP; allowing Lifeline providers the same “safe harbor” that applies to Affordable Connectivity Program providers; making more information regarding the Lifeline program, NLAD and National Verifier performance available to the public and service providers; and not imposing any additional data collection requirements on Lifeline service providers. *See* NaLA Comments at 15-23. CETF recommends the Commission consider creating a new program through which public housing agencies would receive grants to provide free wireless Internet service to every resident and also suggests modifying eligibility criteria for some individuals including foster youth, the unhoused, and migrant farm workers. CETF Comments at 22.

²⁷⁹ Benton Comments at 29; CETF Comments at 10 (arguing that the federal Lifeline discount should be larger so the price to the subscriber would be priced at \$20/month or less or that voluntary affordable offers should be provided that result in a monthly cost of \$20/month to a subscriber, with no hidden fees); NaLA Comments at 3 (arguing, “the insufficient Lifeline support amount is a primary underlying barrier to providing affordable broadband service that meets the needs of low-income consumers.”); CPUC Comments at 10 (arguing that, “[t]he FCC, in the long run, should increase the Lifeline support amount to a level that is sufficient to solve the mobile broadband affordability problem on its own, without expecting consumers to combine their Lifeline discount with their ACP discount” and that, “[t]he current \$9.25/month provided by federal Lifeline is not enough support to enable widespread participation in the program by eligible consumers.”); NTTA Comments at 13 (recommending that, “the Commission increase the credits available for broadband service through the Lifeline program to levels consistent with the ACP - \$30/month for non-Tribal areas and \$75 per month for Tribal areas.”).

²⁸⁰ CETF Comments at 9-11, 22; Broadband Connects America Comments at 8-9; NaLA Reply Comments at 6-7; Microsoft Reply Comments at 6.

²⁸¹ CWA Comments at 3; DCPSC Reply Comments at 4-5; Hawaii Broadband and Digital Equity Office Comments at 2; MDTC Comments at 3; Microsoft Reply Comments at 7-8; Next Century Cities et al. Comments at 14 (arguing that none of the USF programs specifically addresses the affordability needs of those in the disabled community and recommending that the Commission consider ways to coordinate outreach so that low-income households using Video Relay Service and those participating in the Commission's National Deaf-Blind Equipment Distribution Program can be made aware of Lifeline and the ACP); Public Knowledge Comments at 12 (recommending that the Commission use its existing Office of Communications Business Opportunities (OCBO), “to perform outreach to minority communities to hear firsthand about the varying needs of these communities, bring that insight back to the Commission to help inform policies and then follow up with these communities to inform them of the work the Commission is undertaking to address their needs.”).

recommendations made, there is a limited record that does not support taking action at this time. As a result, we decline to make specific recommendations for future Commission action in this Report. For other recommendations—such as whether to increase the rate of support, provide support for devices, or move to a different model of reimbursement—we conclude it is premature to take action at this time because we will need to collect significant data to engage in a complex economic analysis and we believe waiting until the Affordable Connectivity Program has been operational for a longer period of time would help to inform this analysis.

c. Other Lifeline/Affordable Connectivity Program Considerations

72. Two commenters argue that the Commission should evaluate whether to adopt a partial reimbursement approach for the Affordable Connectivity Program.²⁸⁴ Under such an approach, service providers would be reimbursed for providing Lifeline service on a pro-rated or weighted average basis instead of based on the first-of-the-month snapshot. In the *Affordable Connectivity Program Order*, the Commission contemplated partial reimbursement and declined to permit such an approach at the time given the complexity of standing up a system for allowing partial reimbursements.²⁸⁵ The Commission stated, however, “we delegate the authority to the Bureau and OMD to determine, in consultation with USAC, whether partial reimbursement can be accomplished consistent with government-wide federal financial statutory requirements and Treasury procedures and provide additional guidance if partial reimbursement can be adopted.”²⁸⁶ Given the direction provided in the *Affordable Connectivity Order*, we decline to recommend revisiting the question of partial reimbursements in the Affordable Connectivity Program in a future proceeding. However, we recommend the Commission consider whether it would be appropriate to evaluate the issue of partial reimbursement for Lifeline as part of a rulemaking proceeding.

73. One commenter has also pointed to the fact that the Affordable Connectivity Program is uniquely suited to addressing the “homework gap.”²⁸⁷ We recommend the Commission consider seeking comment on whether there are specific ways the Affordable Connectivity Program could be leveraged to address the homework gap.

74. A number of commenters urge the Commission to recommend to Congress that the Affordable Connectivity Program be extended further through additional appropriations or be made permanent.²⁸⁸ Based on the record, we recommend that the Commission and Congress closely monitor

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²⁸² AT&T Comments at 26-29; Internet Innovation Alliance Comments at 7-8; USTelecom Comments at 21-22; U.S. Chamber of Commerce Reply Comments at 4 (arguing in favor of the affordability program being a direct-to-the-end-user benefit, “distributed to consumers via debit card accounts, that consumers can use to help pay for the broadband service of their choice from the provider of their choice.”).

²⁸³ For example, Benton proposes integrating Lifeline’s application process into program applications run by other federal agencies. Benton Comments at 25. The Minnesota Department of Commerce suggests that consumers should be able to use one application to apply for both the Lifeline and Affordable Connectivity Program at the same time and argues that, “[i]n instances when a customer’s eligibility for both programs is based on the same criteria, such as participation in SNAP, Medicaid, etc., instructions for enrollment in the ACP should direct service providers to automatically enroll the customer in Lifeline without the need for a separate application.” Minnesota Department of Commerce Comments at 2.

²⁸⁴ NaLA Comments at 16-17 (recommending the Commission consider adopting such an approach for both Lifeline and the Affordable Connectivity Program); WISPA Comments at 27.

²⁸⁵ *Affordable Connectivity Program Order*, FCC 22-2 at 58-59, para. 120.

²⁸⁶ *Id.*

²⁸⁷ ACA Connects Comments at 20-21.

²⁸⁸ *See, e.g.*, ACA Connects Comments at 22; ACA Connects Reply Comments at 16-17; CPUC Comments at 8; Free Press Comments at 29; John Staurulakis LLC Comments at 19; Verizon Comments at 11-12.

the program and consider measures to ensure there is no lapse in support for connectivity for low-income households.²⁸⁹

3. E-Rate and Emergency Connectivity Fund Programs

75. The E-Rate program has provided connectivity to, and within, eligible schools and libraries, and it has been instrumental in providing students and library patrons access to essential communication services. Eligible schools, libraries, and consortia (comprised of eligible schools and libraries) may request universal service support for what are called “category one” services (which provide connectivity *to* schools and libraries) and “category two” services (which provide connectivity *within* schools and libraries).²⁹⁰ In 2014, the Commission focused the E-Rate program to provide funding for high-speed broadband connectivity and set as its first goal to ensure “affordable access to high-speed broadband sufficient to support digital learning in schools and robust connectivity for all libraries.”²⁹¹ Since 2014, the Commission has succeeded in connecting many schools and libraries with much-needed broadband connectivity through the E-Rate program, however, not all schools and libraries have access to gigabit-level broadband connectivity and some remain insufficiently connected.²⁹²

76. On March 10, 2021, the President signed the American Rescue Plan Act which established the \$7.171 billion Emergency Connectivity Fund (ECF) to allow eligible schools and libraries to purchase eligible equipment and/or advanced telecommunications or information services for use by students, school staff, and library patrons at locations other than a school or library.²⁹³ On May 10, 2021, the Commission adopted rules and established the ECF program to reimburse eligible schools and libraries for the reasonable costs of providing broadband connectivity and/or connected devices to students, school staff, and library patrons who would otherwise be unable to engage in remote learning during the COVID-19 emergency period.²⁹⁴ The Commission has opened and closed three ECF application filing windows and to date, has committed over \$5.3 billion in ECF program support to connect over 12.7 million students in all 50 states, American Samoa, the District of Columbia, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.²⁹⁵ In the *Future of the USF NOI*, we sought comment on the impact of the Infrastructure Act on both the E-Rate and ECF programs.²⁹⁶

²⁸⁹ Infrastructure Act, Div. J.

²⁹⁰ 47 CFR §§ 54.501, 54.502.

²⁹¹ See, e.g., *First E-Rate Modernization Order*, 29 FCC Rcd at 8880, para. 22; *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket Nos. 13-184, 10-90, Second Report and Order and Order on Reconsideration, 29 FCC Rcd 15538, 15543-44, para. 6 (2014) (*Second 2014 E-Rate Report and Order*).

²⁹² See *Fourteenth Broadband Deployment Report*, 36 FCC Rcd at 868, para. 48 (finding 47% of school districts meeting the long-term goals of 1 Gbps per 1,000 students and staff set out in the *First E-Rate Modernization Order*, including 35% of the largest 1,000 school districts and 78% of the 1,000 smallest school districts).

²⁹³ American Rescue Plan Act, 2021, H.R. 1319, Pub. L. No. 117-2, 117th Cong., tit. VII, § 7402 (2021) (enacted), available at <https://www.congress.gov/bill/117th-congress/house-bill/1319/text> (American Rescue Plan) (enrolled bill). Support provided under the ECF Program is provided through amounts made available from the Emergency Connectivity Fund and not from contributions under section 254(d) of the Communications Act of 1934. *Id.* § 7402(c)(4).

²⁹⁴ *Establishing Emergency Connectivity Fund to Close the Homework Gap*, WC Docket No. 21-93, Report and Order, 36 FCC Rcd 8696, 8697-98, paras. 3-4 (2021) (*ECF Report and Order*).

²⁹⁵ See Press Release, FCC, FCC Commits \$50 Million in Emergency Connectivity Funding to Schools and Libraries to Help Close the Homework Gap (May 17, 2022), <https://www.fcc.gov/document/fcc-commits-50-million-emergency-connectivity-funding> (highlighting that commitments have been issued to all fifty states, territories, and the District of Columbia); Press Release, FCC, FCC Announces Nearly \$159 Million in Emergency Connectivity Funding for Schools and Libraries (June 30, 2022), <https://docs.fcc.gov/public/attachments/DOC-384802A1.pdf>.

77. The Infrastructure Act provides that community anchor institutions, such as schools, libraries, and health clinics, that lack access to gigabit-level broadband service are eligible recipients for broadband funding.²⁹⁷ Accordingly, in the May 13, 2022, Notice of Funding Opportunity for the BEAD Program, NTIA noted its “strong preference that Eligible Entities also ensure deployment of gigabit connections to community anchor institutions such as libraries and community centers that lack such connectivity.”²⁹⁸ It is expected that funding for community anchor institutions through the Infrastructure Act may complement funding available under the E-Rate and ECF programs for special construction funding requests. Special construction costs are the upfront, non-recurring costs of deploying new or upgraded network facilities to eligible schools and libraries,²⁹⁹ and special construction is eligible for funding in the E-Rate program and in limited circumstances, through the ECF program.³⁰⁰ In the ECF program, applicants have one year from the date of the funding commitment decision letter (FCDL) to complete any approved network construction projects.³⁰¹ Because deployment of broadband networks to community anchor institutions through the Infrastructure Act is still years away, it is too early for the Commission to assess the effect this funding will have on existing efforts to use E-Rate, and in some cases ECF funding, to deploy gigabit-level broadband service to eligible schools and libraries, as well as the impact this additional funding will have on demand for E-Rate category one services. It is possible, however, that an influx of network construction funding may increase demand for E-Rate support for the recurring services provided over these newly constructed high-speed networks. As such, the Commission will continue to work with its federal partners to monitor the progress of deployment of gigabit-level networks for use by eligible schools and libraries through the Infrastructure Act.

78. As discussed above, the ECF program is an emergency program that provides connectivity and/or connected devices to students, school staff, and library patrons with unmet needs during the COVID-19 emergency period. As demand in the third application filing window exceeded the remaining \$1.5 billion in appropriated funding, there will not be any additional application filing windows for the ECF program.³⁰² USAC and the Commission are in the process of committing and disbursing ECF funds for the requests that are approved for funding. The Commission should continue to evaluate the results of ECF and consider how to continue to support the connectivity for students and library patrons that has been provided by the program.

79. Any analysis of the impact of the E-Rate and ECF funding on network construction will need to wait until these networks are built and the Commission has an opportunity to analyze the effects of the E-Rate and ECF programs through these projects. Likewise, the Commission will need time to analyze the impact of Infrastructure Act funding regarding the deployment of broadband connectivity to community anchor institutions. Commenters offered a number of suggestions that will be helpful in future proceedings, such as giving equal priority to category one and category two services,³⁰³ amending

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²⁹⁶ *Future of the USF NOI* at 17, para. 39.

²⁹⁷ Infrastructure Act, § 60102(a)(1)(E), 60102(a)(2)(E).

²⁹⁸ *BEAD Program NOFO* at 7.

²⁹⁹ See *Second 2014 E-Rate Report and Order*, 29 FCC Rcd at 15556, para. 43; see also USAC, *Fiber – Summary Overview*, <https://www.usac.org/e-rate/applicant-process/before-you-begin/fiber-summary-overview/> (last visited Aug. 12, 2022).

³⁰⁰ See *ECF Report and Order*, 36 FCC Rcd at 8717-8719, paras. 40-41; 47 CFR § 54.1702(b)(2); see also FCC, *Emergency Connectivity Fund*, <https://www.fcc.gov/emergency-connectivity-fund> (last visited Aug. 12, 2022).

³⁰¹ *ECF Report and Order*, 36 FCC Rcd at 8718, para. 41.

³⁰² Press Release, FCC, *FCC Announces Over \$2.8 Billion in Funding Requests for Final Window in Ongoing Work to Close the Homework Gap* (May 25, 2022) at <https://docs.fcc.gov/public/attachments/DOC-383685A1.pdf> (explaining that applications received during the third window will be prioritized to those with greatest need and with a preference to schools and libraries located in rural areas as demand exceeded available funds).

the competitive bidding rules,³⁰⁴ adding new eligible services,³⁰⁵ and adding certain goals of the ECF program to the E-Rate program.³⁰⁶ The Commission should analyze the impact of Infrastructure Act program-funded network construction projects after such funding has been allocated and consider the implications for the E-Rate program.

4. Health Care Equipment and the Rural Health Care Program

80. In this section, we discuss the Rural Health Care (RHC) Program and other Commission programs that support broadband for health care providers, summarize recent developments in those programs, and discuss the record on future USF support for broadband for health care providers.

81. The COVID-19 pandemic drew increased attention to the need for reliable high speed broadband connectivity for health care providers. The pandemic also accelerated the already-rapid growth of telehealth, which has assumed an increasingly critical role in rural America in particular as technology and improved broadband connectivity have enabled patients to access health care services without needing to visit a health care provider's physical location. The Commission has supported telecommunications and broadband services for health care providers through both the USF and recent programs funded through Congressional appropriations.

82. The RHC Program consists of two component programs: (1) the Telecommunications (Telecom) Program and (2) the Healthcare Connect Fund (HCF) Program. The Commission established the Telecom Program in 1997 to subsidize the difference between urban and rural rates for telecommunications services.³⁰⁷ Under the Telecom Program, eligible rural health care providers can obtain rates on telecommunications services in rural areas that are reasonably comparable to rates charged for similar services in corresponding urban areas.³⁰⁸ The level of support in the Telecom Program is the difference between the rural rate and the urban rate.³⁰⁹ In 2012, the Commission established the HCF Program to promote the use of broadband services and facilitate the formation of health care provider consortia that include both rural and urban health care providers.³¹⁰ The HCF Program provides a flat 65% discount on an array of advanced telecommunications and information services such as Internet access, dark fiber, business data, traditional DSL, and private carriage services.³¹¹

83. Earlier this year, the Commission adopted a Further Notice of Proposed Rulemaking seeking comment on several proposed changes to RHC Program rules intended to ensure that rural healthcare providers receive sufficient funding to access the broadband and telecommunications services necessary to provide vital healthcare services by improving the accuracy and fairness of RHC Program

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³⁰³ Aruba Comments at 2, 7-8.

³⁰⁴ NTCA Comments at 41.

³⁰⁵ Aruba Comments at 7; AT&T Comments at 30; CDT Comments at 6-8; ITI Comments at 5; Microsoft Comments at 5; NCTA Comments at 13; SHLB Comments at 5; T-Mobile Comments at 19-20.

³⁰⁶ CETF Comments at 11; CTIA Reply at 8; INCOMPAS Comments at 11.

³⁰⁷ See 47 U.S.C. § 254(h)(1)(A); see also *Universal Service First Report and Order*, 12 FCC Rcd at 9093-9161, paras. 608-749.

³⁰⁸ See 47 U.S.C. § 254(h)(1)(A).

³⁰⁹ See *id.*

³¹⁰ See 47 U.S.C. § 254(h)(2)(A); *HCF Order*, 27 FCC Rcd 16678. The HCF Program replaced the existing Internet Access Program, also enacted pursuant to section 254(h)(2)(A), which provided healthcare providers with a 25% discount for Internet access service. See *HCF Order*, 27 FCC Rcd at 16681 n.9.

³¹¹ See 47 U.S.C. § 254(h)(2)(A); 47 CFR § 54.611;(b); see also *HCF Order*, 27 FCC Rcd at 16680, 16861, 16733, paras. 1, 48, 118.

support and increasing the efficiency of program administration.³¹² In the *RHC FNPRM*, the Commission examined options for determining support for the Telecom Program, first seeking comment on the rurality and service technology categories used to determine rural rates and then seeking comment on the rate determination.³¹³ Additionally, the *RHC FNPRM* sought comment on limiting the application of the internal cap on multiyear commitments and upfront payments in the HCF Program to funding years where overall demand exceeds available funding and, in those years when the cap applies, targeting funding for equipment and services needed in that funding year.³¹⁴ The *RHC FNPRM* also sought comment on fully harmonizing the invoicing process between the Telecom Program and the HCF Program and general comment on additional measures that the Commission and USAC could take to improve application processing, funding commitments, and appeal decisions.³¹⁵ Commission staff is currently evaluating the record submitted in response to the *RHC FNPRM*.

84. The Commission has also supported telemedicine and the emergency connectivity and connected device needs of healthcare providers responding to the COVID-19 pandemic through the Connected Care Pilot Program and the COVID-19 Telehealth Program. The Connected Care Pilot Program is a \$100 million, three-year program that funds selected pilot projects' qualifying purchases necessary to provide connected care services, with a particular emphasis on low-income and veteran patients, and will also study how the USF can help support the continuing trend toward wider adoption of connected care services by patients and health care providers.³¹⁶ The Commission announced the final set of pilot projects selected for the Connected Care Pilot program on March 17, 2022.³¹⁷ The COVID-19 Telehealth Program committed a total of \$449.95 million appropriated by Congress over two rounds of funding for telecommunications services, information services, and devices necessary to provide telehealth and connected care services for eligible health care providers.³¹⁸

85. Commission staff is currently reviewing the record submitted in response to the *RHC FNPRM* and should proceed with that rulemaking in a timely manner. The Connected Care Pilot Program and COVID-19 Telehealth Program have concluded the application review and selection phases. Invoicing and reimbursements for both programs are ongoing as of the date of this Report, and both programs are required to complete reports analyzing their effectiveness. The Bureau will issue a final report on the Connected Care Pilot Program at the conclusion of the program.³¹⁹ For the COVID-19 Telehealth Program, USAC will provide a report to the Commission on the program's effectiveness on "health outcomes, patient treatment, healthcare facility administration, benefits from services and connected devices on patient's treatments and outcomes, administration, and healthcare providers overall

³¹² See generally *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Further Notice of Proposed Rulemaking, FCC 22-15 (Feb. 18, 2022) (*RHC FNPRM*).

³¹³ *Id.* at 8-23, paras. 16-63.

³¹⁴ *Id.* at 23-27, paras. 64-71.

³¹⁵ *Id.* at 27-29, paras. 72-78.

³¹⁶ See *Promoting Telehealth for Low-Income Consumers, COVID-19 Telehealth Program*, WC Docket No. 18-213, Report and Order, 35 FCC Rcd 3366, 3384, paras. 37-38 (2020) (*Connected Care Pilot Program/COVID-19 Telehealth Program Order*). The Pilot Program defines "connected care" as a subset of telehealth that uses broadband Internet access service-enabled technologies to deliver directly to patients remote medical, diagnostic, and treatment-related services outside of traditional brick and mortar medical facilities—specifically to patients at their mobile location or residence. *Id.* at 3385, para. 39.

³¹⁷ *Federal Communications Commission Announces Final Set of Projects Selected for the Connected Care Pilot Program*, WC Docket No. 18-213, Public Notice, FCC 22-23 (Mar. 17, 2022).

³¹⁸ See *Wireline Competition Bureau Approves Sixth and Final Group of Funding Awards in Round 2 of COVID-19 Telehealth Program*, WC Docket No. 20-89, Public Notice, DA 22-88 (WCB Jan. 26, 2022).

³¹⁹ *Connected Care Pilot Program/COVID-19 Telehealth Program Order*, 35 FCC Rcd at 3414, para. 80.

expanded telehealth, and any other relevant aspects of the COVID-19 pandemic.³²⁰ These reports will inform future Commission action in these areas.

a. Recommended Congressional Action

86. For the RHC Program, the Act defines health care providers as: (1) post-secondary educational institutions offering health care instruction, teaching hospitals, and medical schools; (2) community health centers or health centers providing health care to migrants; (3) local health departments or agencies; (4) community mental health centers; (5) not-for-profit hospitals; (6) rural health clinics; (7) skilled nursing facilities; or (8) consortia of health care providers consisting of one or more entities falling into the first seven categories.³²¹ The Telecom Program entitles non-profit or public health care providers in rural areas to telecommunications services at rates reasonably comparable to rates charged in urban areas of a state.³²² HCF Program rules permit eligible rural health care providers to apply for support through consortia.³²³ Eligible non-rural health care provider sites may receive funding as part of a consortium if more than 50% of sites in the consortia are eligible rural health care providers.³²⁴

87. We recommend that Congress consider revisiting the list of entities defined as health care providers in section 254(h)(7)(B)(vi). The provision of health care has evolved rapidly in recent years, in large part due to advances in telehealth services enabled by the high speed connectivity supported by the RHC Program. This evolution has resulted in not only new providers and methods of health care services, but also changes in the way that health care providers purchase and use technology and configure data networks. However, the Commission may only provide RHC Program support to the eligible entities listed in section 254(h)(7)(B)(vi). For example, under the current statutory definitions, non-rural health clinics are uniquely ineligible to receive support under the HCF Program, even if they join consortia with RHC Program-eligible health care providers to share resources and expertise. A reexamination of the statutorily eligible health care providers could improve the RHC Program and the quality of telehealth services in rural America. Alternatively, Congress could direct the Commission to evaluate the current list of eligible entities in light of developments in the health care field and experience with RHC Program administration and report its findings to Congress.

5. Universal Service Fund Contributions

88. Section 254(d) of the Communications Act, as amended, directs that every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service.³²⁵ To this end, the Commission has determined that any entity that provides interstate telecommunications services to the public for a fee must contribute to the Fund.³²⁶ Section 254(d) also vests the Commission with permissive authority to

³²⁰ *Promoting Telehealth for Low-Income Consumers, COVID-19 Telehealth Program*, WC Docket Nos. 18-213, 20-89, Report and Order and Order on Reconsideration, 36 FCC Rcd 7141, 7176, para. 78 (2020).

³²¹ 47 U.S.C. § 254(h)(7)(B)(vi).

³²² 47 U.S.C. § 254(h)(1)(A); 47 CFR § 54.601(a).

³²³ 47 CFR § 54.607(a).

³²⁴ *See Id.* § 54.607(b). Ineligible entities are permitted to participate as members of a consortium but cannot receive support from the HCF Program and must pay their “fair share” of expenses. *Id.* § 54.617(d)(1).

³²⁵ 47 U.S.C. § 254(d).

³²⁶ *See Universal Service First Report and Order*, 12 FCC Rcd at 9179, para. 787. The Commission also requires certain other providers of interstate telecommunications to contribute to the USF. *See, e.g., Universal Service Contribution Methodology et al.*, WC Docket Nos. 06-122, 94-36, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, Report and Order and Notice of Proposed Rulemaking, 21 FCC Rcd 7518 (2006) (*2006 Contribution Methodology Order*) (requiring interconnected voice over Internet protocol providers to contribute to the universal service fund because they are providers of interstate telecommunications). The Communications Act

(continued....)

assess contributions such that “[a]ny other provider of interstate telecommunications may be required to contribute to the preservation and advancement of universal service if the public interest so requires.”³²⁷

89. Contributions from telecommunications service providers and certain other providers of telecommunications to the USF are determined using a quarterly contribution factor that is calculated based on the ratio of total projected quarterly costs of the universal service support mechanisms to contributors’ projected end-user interstate and international telecommunications revenue.³²⁸ In 2006, the Commission exercised its permissive authority to require interconnected Voice over Internet Protocol (VoIP) providers to contribute as a means of ensuring a level playing field among direct competitors.³²⁹ The Commission has exempted common carriers whose contributions would be *de minimis*³³⁰ as well as those carriers with only international revenue,³³¹ and declined to exercise permissive authority over various providers of interstate telecommunications that generally do not compete directly with common carriers.³³²

90. Providers may pass through the USF contribution cost to end-users in the form of a line item that is calculated by applying the contribution factor to the portion of the consumer’s bill attributable

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and the Commission’s rules do, however, exempt certain carriers from the USF contribution requirement. For example, carriers are not required to contribute directly to the universal service fund in a given year if their contribution for that year would be less than \$10,000. 47 CFR § 54.708. Likewise, carriers with purely intrastate or international revenues are not required to contribute. *Universal Service First Report and Order*, 12 FCC Rcd at 9174, para. 779; *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Sixteenth Order on Reconsideration, 15 FCC Rcd 1679, 1685, para. 15 (1999). Certain government entities, broadcasters, schools, libraries, systems integrators, and self-providers are also exempt from the USF contribution requirement. See 2022 Form 499-A Instructions at 8-9; *Universal Service First Report and Order*, 12 FCC Rcd at 9187, para. 800; *Federal-State Joint Board on Universal Service; Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing, End User Common Line Charge*, CC Docket No. 96-45 *et al.*, Fourth Order on Reconsideration & Report and Order, 13 FCC Rcd 5318, 5472-75, paras. 278-282 (1997) (*Universal Service Fourth Order on Reconsideration*).

³²⁷ 47 U.S.C. § 254(d).

³²⁸ See, e.g., *Proposed Third Quarter 2022 Universal Service Contribution Factor*, CC Docket No. 96-45, Public Notice, DA 22-623 (OMD June 9, 2022) (*2022 Third Quarter Contribution Factor Public Notice*); 47 CFR § 54.709.

³²⁹ See *2006 Contribution Methodology Order*, 21 FCC Rcd at 7541, para. 44 (2006) (extending contribution obligations to interconnected VoIP service providers). Although the Commission has not addressed the regulatory classification of interconnected VoIP services under the Act, the Commission has concluded that interconnected VoIP providers are “providers of interstate telecommunications” for purposes of universal service. *Id.* at 7537, para. 35 (citing 47 U.S.C. § 254(d)).

³³⁰ 47 CFR § 54.708 (“If a contributor’s contribution to universal service in any given year is less than \$10,000 that contributor will not be required to submit a contribution . . .”)

³³¹ *Universal Service First Report and Order*, 12 FCC Rcd at 9174, para. 779; see also 47 CFR § 54.706(c) (if a contributor’s projected collected interstate end-user telecommunications revenues comprise less than 12% of its combined projected collected interstate and international end-user telecommunications revenue, a contributor need not contribute on its projected collected international end-user telecommunications revenue).

³³² 47 CFR § 54.706(d) (“The following entities will not be required to contribute to universal service: non-profit health care providers; broadcasters; systems integrators that derive less than five percent of their systems integration revenues from the resale of telecommunications.”); *Universal Service First Report and Order*, 12 FCC Rcd at 9186, para. 800 (holding that “government entities that purchase telecommunications services in bulk on behalf of themselves,” entities that offer “interstate telecommunications to public safety or government entities” but not to others, and “public safety and local governmental entities licensed under Subpart B of Part 90 of our rules” are not required to contribute to universal service); *Universal Service Fourth Order on Reconsideration*, 13 FCC Rcd at 5476, para. 284 (1997) (non-profit schools, colleges, universities, and libraries “should not be made subject to universal service contribution requirements.”).

to interstate telecommunications services.³³³ Approximately 82% of USF contributors pass through the costs to their end-users.³³⁴ Providers are increasingly offering packages of bundled services that include both assessable telecommunications services and services that are not currently assessable. These revenues must be apportioned between assessable and non-assessable services for contribution purposes. The Commission’s apportionment rules for bundled services give providers the latitude to determine assessable revenues within bundled services, permitting them to apportion revenues based upon one of three methods established in the *CPE Bundling Order*.³³⁵

Table 2: Monthly Universal Service Contributions per Household³³⁶
(Inflation Adjusted 2021 Dollars)

	Total (residential plus business) Contributions					Residential Contributions ³³⁷	
	High-Cost Support	Low-Income Support	Rural Health Care	Schools and Libraries	Total	Low Estimate	High Estimate
2011	\$3.80	\$1.42	\$0.08	\$1.99	\$7.29	\$3.28	\$4.01
2012	\$3.73	\$1.98	\$0.10	\$1.98	\$7.80	\$3.51	\$4.29
2013	\$3.55	\$1.28	\$0.14	\$1.84	\$6.81	\$3.06	\$3.74
2014	\$3.47	\$1.28	\$0.19	\$1.82	\$6.76	\$3.04	\$3.72
2015	\$3.40	\$1.12	\$0.20	\$1.83	\$6.55	\$2.95	\$3.60
2016	\$3.36	\$1.16	\$0.28	\$1.69	\$6.49	\$2.92	\$3.57
2017	\$3.27	\$0.94	\$0.22	\$1.31	\$5.74	\$2.58	\$3.16
2021	\$3.30	\$0.66	\$0.41	\$1.54	\$5.91	\$2.07	\$2.66

91. The contribution burden on households has been relatively stable in recent years, as indicated by the table. The contribution factor, however, has increased in recent years, from 16.7% in the first quarter of 2017,³³⁸ to 25.2% in the first quarter of 2022,³³⁹ 23.8% in the second quarter of 2022,³⁴⁰ and

³³³ 47 CFR § 54.712.

³³⁴ USAC, 2022 FCC Form 499-A Revenue Reporting (Calendar Year 2021).

³³⁵ *Policy and Rules Concerning the Interstate, Interexchange Marketplace et al.*, CC Docket Nos. 96-61, 98-183, Report and Order, 16 FCC Rcd 7418, 7447-48, paras. 50-53 (2001) (*CPE Bundling Order*) (First, a provider could apportion its revenues based on “unbundled service offering prices, with no discount from the bundled offering being apportioned to telecommunications service; second, a provider could treat all bundled revenues as telecommunications revenues; third, a provider could apportion its bundled revenues using “any reasonable alternative method” as long as the provider does not apply discounts to telecommunications services in a manner that attempts to circumvent its obligation to contribute to the Fund).

³³⁶ Data compiled by Commission staff from 2011-2017 Universal Service Monitoring Reports, available at <https://www.fcc.gov/general/federal-state-joint-board-monitoring-reports> (last visited Aug. 12, 2022), and data compiled and analyzed by Commission staff for 2021 using the same methodology as 2011-2017 Monitoring Reports. Monetary values are adjusted to 2021 dollars using CPI values reported Table 7.3. Household data are reported in Table 6.1.

³³⁷ Commission staff, using data from FCC Forms 477, 499 and Access filings with the Commission, estimates residential share of interstate and international end user revenues. From 2011 to 2017, Commission staff estimates that the residential portion of the total contribution is between 45% (low estimate) and 55% (high estimate). In 2021, Commission estimates believe that the residential portion of the total contribution is between 35% (low estimate) and 45% (high estimate). The Connected Care Pilot Program is included in Rural Health.

³³⁸ *Proposed First Quarter 2017 Universal Service Contribution Factor*, CC Docket No. 96-45, Public Notice, 31 FCC Rcd 12918 (OMD 2016).

33.0% in the third quarter of 2022.³⁴¹ These increases are due in large part to a decline in the contributions revenue base, i.e., reported revenues from interstate telecommunications services, which decreased from \$65.9 billion in 2011 to \$41.4 billion in 2020.³⁴² The decline does not generally appear to be a result of service providers reclassifying telecommunications revenues from interstate to intrastate; rather, providers are reporting a declining share of telecommunications revenues and an increasing share of non-telecommunications revenues.³⁴³ Specifically, in 2011, total revenues were \$475.6 billion, with telecommunications revenues amounting to \$261.0 billion and non-telecommunications revenues amounting to \$214.5 billion.³⁴⁴ In 2020, total revenues increased to \$512.5 billion, with telecommunications revenues dropping to \$133.0 billion and non-telecommunications revenue increasing to \$379.5 billion.³⁴⁵ Much of the decline was driven by decreasing revenues in subscriber line charges, mobile telecommunications, and non-operator switched toll services.³⁴⁶

92. USF program disbursements and demand, however, have remained relatively stable over the past decade; in 2012, USF disbursements were \$8.71 billion, and in 2020 disbursements were \$8.27 billion.³⁴⁷ Given that the size of the Fund has been relatively stable, it is apparent that the eroding contribution base is the primary driver of the increased contribution factor. Nevertheless, while the revenue shares reported for telecommunications services have decreased as subscribers have shifted usage patterns, contribution amounts collected from end-users to fund the USF programs since 2011 have remained relatively stable.³⁴⁸ Stated differently, in order to collect the same amounts to fund the USF, a higher contribution factor must be applied to the smaller revenue base.

93. Potential revisions to the USF contributions system was one of the most intensively discussed topics in the record. Several commenters advocated for a wholesale examination of USF contributions, primarily through broadening the contribution base beyond telecommunications services.³⁴⁹ ACA Connects recommends a comprehensive reassessment of which entities should contribute, determining contribution amounts based on a company's ability to pay, and raising the de minimis threshold.³⁵⁰ USTelecom supports a broad reexamination and expansion of the contribution base that could potentially make the impact on any individual contributor insignificant.³⁵¹ Other commenters

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³³⁹ *Proposed First Quarter 2022 Universal Service Contribution Factor*, CC Docket No. 96-45, Public Notice, DA 21-1550 (OMD Dec. 13, 2021).

³⁴⁰ *Proposed Second Quarter 2022 Universal Service Contribution Factor*, CC Docket No. 96-45, Public Notice, DA 22-268 (OMD Mar. 14, 2022).

³⁴¹ *Proposed Third Quarter 2022 Universal Service Contribution Factor*, CC Docket No. 96-45, Public Notice, DA 22-623 (OMD June 9, 2022).

³⁴² *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 17, Table 1.5 (Jan. 14, 2022) (*2021 Universal Service Monitoring Report*).

³⁴³ *2021 Universal Service Monitoring Report*, at 9, Table 1.1.

³⁴⁴ *Id.*

³⁴⁵ *Id.*

³⁴⁶ *2021 Universal Service Monitoring Report, Supplementary Material, Section 1, Revenue Details – Historical*, Table S.1.2.

³⁴⁷ *2021 Universal Service Monitoring Report*, at 23, Table 1.10.

³⁴⁸ In 2011, Universal Service Surcharges were \$9.0 billion and in 2020 they amounted to \$8.1 billion. *2021 Universal Service Monitoring Report*, at 11, Table 1.2.

³⁴⁹ *See ADS Reply Comments at 2; CTIA Comments at 14; MMTTC et al. Reply Comments at 2; RWA Comments at 9-11; US Chamber of Commerce Reply Comments at 7-8.*

³⁵⁰ ACA Connects Comments at 27-28.

caution against expansion of the contributions base or other major reforms at this time, arguing that USF contributions function as a regressive tax on consumers³⁵² and that the Fund is financially stable.³⁵³

94. *Assessing Broadband.* Several commenters specifically support expanding the contribution base to include revenues from broadband Internet access service (BIAS).³⁵⁴ Many of these commenters endorsed the report submitted by USForward entitled *FCC Must Reform USF Contributions Now: An Analysis of the Options (USForward Report)* that analyzes the shrinking contribution base and recommends assessing BIAS revenues.³⁵⁵ The *USForward Report* estimates that expanding the contributions base to include BIAS revenues would reduce the contribution factor to 3.4 – 3.8%.³⁵⁶ According to the *2022 Urban Rate Survey*, the national benchmark monthly rate for a 100/20 Mbps broadband service with no usage cap is \$105.67 per month.³⁵⁷ Assessing a 3.4 – 3.8% USF contribution would increase that monthly broadband bill by \$3.59 - \$4.02 per month.³⁵⁸ One study estimated that expanding the contributions base to include BIAS revenues would result in a contribution factor between 5 – 17%, which would increase that monthly broadband bill by \$5.28 – \$17.96 per month.³⁵⁹

95. Alaska Communications, INCOMPAS, and others emphasize that the Commission has sufficient legal authority to assess BIAS revenues without further Congressional action.³⁶⁰ The *USForward Report* argues that this existing legal authority means that the Commission could move to assess BIAS revenues more rapidly than alternative ideas to reduce the contribution factor that would require Congressional action.³⁶¹ NTCA and USTelecom contend that assessing BIAS would not likely

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³⁵¹ USTelecom Comments at 6-9; USTelecom Reply Comments at 5.

³⁵² Free State Foundation Reply Comments at 7; TechFreedom Comments at 9

³⁵³ Free Press Comments at 30; T-Mobile Reply Comments at 4.

³⁵⁴ Alaska Communications Comments at 24-25; DCPSC Reply Comments at 3; ITI Comments at 7; Lumen Comments at 7-8; NRECA Comments at 9-10; NYPSC Comments at 3; Twilio Reply Comments at 2-4; Vermont Department of Public Service Comments at 2-3.

³⁵⁵ CETF Comments at 25-26; SHLB Comments at 4; Letter from Carol E. Matthey, Matthey Consulting, to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket Nos. 21-476 et al, at 1-2 (filed Feb. 14, 2022) (Matthey Consulting *ex parte*). See also Matthey Consulting *ex parte*, Attach. 2., Matthey Consulting, *FCC Must Reform USF Contributions Now: An Analysis of the Options* (Sept. 2021) (*USForward Report*),

³⁵⁶ *USForward Report* at 16; see also EconOne Comments at 2 (estimating that if broadband were the source of USF funding, the contribution factor would range from five to 17% in 2029, depending on the participation rate and the size of the monthly subsidy).

³⁵⁷ *Wireline Competition Bureau and Office of Economics and Analytics Announce Results of 2022 Urban Rate Survey for Fixed Voice and Broadband Service, Posting of Survey Data and Explanatory Notes, and Required Minimum Usage Allowance for Eligible Telecommunications Carriers*, Public Notice, WC Docket No. 10-90, DA 21-1588 (WCB Dec. 16, 2021) (*2022 Urban Rate Survey*).

³⁵⁸ If this reform were adopted, however, according to USForward, current consumers contributions on interstate voice service would be reduced from the current 33% assessment to 3.4 – 3.8%. See *USForward Report* at 16 (concluding that assessing BIAS would reduce the contribution factor for all assessed services to under 4%).

³⁵⁹ EconOne Comments at 2.

³⁶⁰ Alaska Communications Comments at 26; INCOMPAS Comments at 14; NTCA Comments at 51-60

³⁶¹ Matthey Consulting *ex parte*, Attach. 1, *Repairing The FCC's Universal Service Fund Contribution Mechanism, A Call To Action*, at 1; see also *USForward Report* at 22.

harm adoption or consumer demand for broadband because the fee would be relatively small in the near-term.³⁶²

96. Many other commenters oppose expanding the contributions base to include BIAS revenues. Opponents argue that assessing BIAS is effectively a fee on broadband that runs counter to the Commission's work to increase broadband adoption by increasing the fee that could potentially be passed on to consumers, thus impacting the affordability of the service.³⁶³ CTIA contends that assessing mobile and fixed broadband without other reforms "would likely shift a greater proportion of the funding burden from enterprises to customers, which could negatively impact adoption."³⁶⁴ NCTA agrees, noting that assessing broadband could place downward pressure on broadband demand and potentially depress adoption.³⁶⁵ NCTA also argues that assessing mass market BIAS would result in new passed-through fees to consumers and without assessing enterprise services would shift the contribution burden toward residential consumers.³⁶⁶ EconOne estimates that assessing broadband could, via pass-through, result in nearly ten million broadband customers dropping out of the broadband market.³⁶⁷ Free Press makes a related argument that the decline in interstate telecommunications revenues has significantly shifted the USF contributions burden from consumers to large businesses due to reductions in interstate retail mobile revenues coupled with an increase in contributions from interconnected VoIP, local private line/special access service, and long distance private line service.³⁶⁸ Free Press argues that residential interconnected VoIP revenues are in decline and that local and long private lines are purchased exclusively by business customers, and therefore asserts that assessing BIAS would wrongly shift more of the burden of regressive USF fees to residential consumers.³⁶⁹ Free Press estimates that the shift of the USF contribution burden away from businesses and towards consumers "will impart disproportionate harm on low-income households" and could result in a "massive \$4 billion annual wealth transfer from consumers to giant companies."³⁷⁰

97. Several commenters, including many that support assessing BIAS, discuss the tension between affordability goals and subjecting BIAS to USF contributions. They also argue that assessing BIAS without taking further action will not permanently resolve concerns about the contribution factor due to the potential future demand on the Fund from the Affordable Connectivity Program and other future funding requirements. Verizon argues that it will not be feasible to fund the Affordable Connectivity Program or similar affordability programs, which Verizon supports, without substantial expansion of contributions beyond BIAS.³⁷¹ USTelecom and Alaska Communications both describe assessing BIAS as only a short-term solution, and USTelecom cites evidence that BIAS revenues may be

³⁶² NTCA Comments at 49-50; *see also* USTelecom Reply Comments at 7 (noting, however, that assessing BIAS alone would "only be an incremental, short-term fix and would miss the opportunity for creating a long-term, stable foundation").

³⁶³ Alaska Communications Comments at 25; AT&T Comments at 25-26; Digital Progress Institution Reply Comments at 3; EconOne Comments at 54; Roslyn Layton et al. Reply Comments at 14; Sonic Telecom Reply Comments at 1-3; Internet Innovation Alliance Comments at 4; CTIA Comments at 39; NCTA Comments at 18-19; Free Press Comments at 35.

³⁶⁴ CTIA Comments at 14-15.

³⁶⁵ NCTA Comments at 19.

³⁶⁶ NCTA Comments at 18.

³⁶⁷ EconOne Comments at 2.

³⁶⁸ Free Press Comments at 31-33.

³⁶⁹ *Id.* at 31-33, 35 (estimating that assessing BIAS could result in a \$4 billion shift in the contribution burden towards consumers).

³⁷⁰ Free Press Comments at 35.

³⁷¹ Verizon Comments at 14.

declining.³⁷² AT&T agrees that BIAS prices will continue to fall with increased competition and that assessing BIAS alone will not sustain the Fund longer term.³⁷³ The Rural Wireless Association also agrees that assessing BIAS alone will not be sufficient to sustain the Fund in the long run and suggests studying the feasibility of assessing small fees on transactions conducted using broadband connections.³⁷⁴

98. *Assessing a Broader Base of Entities Including Edge Providers.* A diverse and wide-ranging group of commenters supported a second idea related to USF contributions: further broadening the USF contribution base to include entities including “edge providers” such as streaming video providers, digital advertising firms, and cloud services companies rather than relying solely on the end-users—or consumers and enterprises—that have historically paid the line item fees passed through by providers.³⁷⁵ Commenters offer a wide range of proposals centered in the notion that online companies that are profiting from the ubiquitous broadband services provided through the USF program should start contributing towards universal service. Many focused on edge provider digital advertising revenues.³⁷⁶ Roslyn Layton proposes fees on streaming service revenues, either assessed by the FCC or through a cost recovery fee to broadband providers.³⁷⁷ The Digital Progress Institute proposes contributions based on traffic load pushed onto end-user networks, with any fee pass throughs to the cost-causing business rather than the consumer.³⁷⁸

99. Proponents of assessing edge providers cite the volume of network traffic attributable to these companies.³⁷⁹ Some studies estimate that the five largest streaming companies account for 75 percent of total network traffic in rural areas.³⁸⁰ The Digital Progress Institute argues that cost-causation principles suggest that streaming companies and other edge providers are not incentivized to reduce the costs created by their network traffic because they are not incurring those costs, and accordingly should directly or indirectly contribute to the USF.³⁸¹ Roslyn Layton argues that broadband provider costs for transporting rapidly increasing traffic from streaming services are concentrated in the middle mile due to “the need to purchase routers, servers, fiber, electricity, manual labor for construction and maintenance, data transportation costs from redundant middle mile providers, and other inputs.”³⁸² WTA states that “the advent of video streaming has required expensive upgrades to many broadband networks.”³⁸³ Commenters also argue that these companies benefit significantly from Internet infrastructure without contributing to the network.³⁸⁴ EconOne argues that assessing the digital advertising revenues of just the

³⁷² Alaska Communications Comments at 25; USTelecom Comments at 8-9; USTelecom Reply Comments at 7.

³⁷³ AT&T Comments at 24.

³⁷⁴ RWA Comments at 9-11.

³⁷⁵ Digital Progress Institution Reply Comments at 1-2; Letter from Chickasaw Telephone Company et al., to the Honorable Jessica Rosenworcel, Chairwoman, FCC, WC Docket No. 21-476 (Mar. 16, 2022); TCA Comments at 7-8; AT&T Comments at 14; Vantage Point Solutions Reply Comments at 9; MMTTC et al Reply Comments at 2; ACA Connects Reply Comments at 4; USTelecom Comments at 12-13; EconOne Comments at 1; Free Press Reply Comments at 8-10.

³⁷⁶ Alaska Communications Comments at 26; Coalition of Rural Wireless Carriers Comments at 30; CWA Comments at 5; EconOne Reply Comments at 2; USTelecom Comments at 12-13.

³⁷⁷ Roslyn Layton Reply Comments at 21-23.

³⁷⁸ Digital Progress Institute Reply Comments at 3.

³⁷⁹ Communications Coalition of Kansas Comments at 1; Roslyn Layton et al. Comments at 1; RBP Comments at 6,7; Sacred Wind Comments at 10.

³⁸⁰ Roslyn Layton et al. Comments at 33.

³⁸¹ Digital Progress Institute Comments at 8.

³⁸² Roslyn Layton et al. Comments at 20.

³⁸³ WTA Comments at 18.

largest edge providers would put the Fund on “secure financial footing” and would result in a contribution factor of approximately 7% by 2029, which is less than one quarter of the existing contribution factor.³⁸⁵

100. Proponents of assessing some services offered by edge providers, such as digital advertising, argue it would be difficult for the contributions to be passed through to consumers. According to a study prepared by EconOne Managing Director Hal Singer and Economist Ted Tatos, there is a very low likelihood that a fee on digital advertising platforms would be passed through to consumers via advertisers because prices for digital advertisements are set via auction and thus are not under direct control of the advertising platforms.³⁸⁶ Thus, not only would the contribution factor be significantly lower as described above, but the amount that consumers would pay would also be significantly lower than today—and potentially eliminated entirely if the Commission were to look solely to those revenues for contributions.

101. The long-term prospect of assessing digital advertising revenues is another advantage touted by proponents. According to the EconOne study, digital advertising has the highest expected revenue growth of the options studied, including assessing BIAS, indicating that the contribution factor would only continue to decrease over time.³⁸⁷

102. Commenters also advocated for assessing private networks owned by edge providers and other entities. AT&T argues that some private network operators avoid USF contributions because they do not offer telecommunications services but then offer information services, particularly to enterprise customers, that compete directly with offerings from telecommunications carriers.³⁸⁸ The Communications Workers of America recommends that the Commission open a proceeding to determine its authority to assess revenues of entities whose services rely on telecommunications and broadband infrastructure, including cloud services and self-provisioned networks.³⁸⁹

103. There are a handful of opponents in the record to expanding the contributions base to assess edge providers.³⁹⁰ INCOMPAS argues that investments by edge providers in their products and networks benefit the broader broadband ecosystem and that network costs are driven by deployment, not traffic delivery.³⁹¹ The Entertainment Software Alliance argues that USF contributions should align with companies that receive USF support, i.e. broadband providers, and that the online marketplace has thrived in part because of the low cost of entry, which would be jeopardized by USF assessments.³⁹²

104. Commenters are divided on whether assessing other entities including edge providers would require additional Congressional action. Some conclude that Congressional action would be required,³⁹³ while others contend that the Commission has permissive authority under section 254(d) to

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³⁸⁴ Hawaii Broadband and Digital Equity Office at 1-2; IIA Comments at 5; T-Mobile Reply Comments at 11; USTelecom Comments at 7.

³⁸⁵ EconOne Comments at 1, 46-47.

³⁸⁶ EconOne Comments at 1, 37-40.

³⁸⁷ EconOne Comments at 5-7, 17.

³⁸⁸ AT&T Reply Comments at 5; *see also* Digital Progress Institute Comments at 6-7.

³⁸⁹ CWA Comments at 4.

³⁹⁰ Citizens Against Government Waste Comments at 7; ITI Comments at 7; Motion Picture Association Reply Comments at 7-8.

³⁹¹ INCOMPAS Comments at 13-14, 21; *see also* Motion Picture Association Reply Comments at 5.

³⁹² Entertainment Software Alliance Reply Comments at 5, 7.

³⁹³ NRECA Comments at 12; NTCA Comments at 61-64; TCA Comments at 7; USTelecom Comments at 12-13; Verizon Comments at 15; INCOMPAS Comments at 19-20; Motion Picture Association Reply Comments at 3; TechFreedom Comments at 7-8.

assess at least some types of services offered by edge providers.³⁹⁴ The Commission has never analyzed its authority to regulate edge providers, which broadly defined, encompass a wide variety of different entities that provide Internet content, applications, and services. Before the Commission could require contributions under its permissive authority for any type of edge provider, it would need to conduct a rulemaking proceeding and establish a record that analyzed and applied the definition of “telecommunications” to edge providers and demonstrated that the public interest supports requiring contributions.

105. The Commission last exercised its permissive authority in 2006.³⁹⁵ The Commission has explained that the threshold issue in exercising permissive authority is whether an entity is “providing” interstate “telecommunications” as defined in the Act.³⁹⁶ In exercising permissive authority, the Commission must determine whether an entity is a “provider” of interstate telecommunications as specified in section 254(d).³⁹⁷ In addition, the Commission must make a finding that the public interest would be served.³⁹⁸ In the past, the Commission has stated that the principle of competitive neutrality dictates that it should assess contributions from entities that are not mandatory contributors, but benefit from the PSTN.³⁹⁹ Since that time, however, the USF has shifted to funding broadband networks rather than the PSTN.

106. As discussed throughout this Report, new federal programs funded by the Infrastructure Act and other recent legislation will significantly alter the national broadband landscape in the coming years. We will continue to evaluate developments concerning the burden of contributions on households and businesses, the USF contribution factor, and contribution base, as well as the scope of the Commission’s authority under section 254(d), and consider further actions if necessary. We are mindful that a full evaluation of the state of the record developed in this Report will be essential in any future Commission effort to make changes to the contributions methodology. In any future effort, the Commission should consider the weight of the record, and the concerns raised in the record about any change in the contribution base affecting the cost paid by consumers for broadband service, as well as the long-term viability of any reforms to the contributions base. We recommend that in considering changes to the contributions base, the Commission should closely evaluate this record and take efforts to avoid raising the cost of broadband service and shifting the financial burden from corporations to consumers at a point in time when the federal government is working to address affordability challenges contributing to the digital divide.

a. Recommended Congressional Action

107. The record varied widely with respect to recommendations to Congress regarding USF contributions. A wide variety of commenters called for legislation to expand the Commission’s authority so it could assess contributions on the broadest range of service revenues, including from digital advertising and other online edge services that benefit from broadband networks.⁴⁰⁰ A few commenters

³⁹⁴ Digital Progress Institute Comments at 8; Free State Foundation Comments at 9.

³⁹⁵ See, *supra* para 89.

³⁹⁶ *Universal Service Contribution Methodology; A National Broadband Plan For Our Future*, WC Docket No. 06-122, GN Docket No. 09-51, Further Notice of Proposed Rulemaking, 27 FCC Rcd 5357, 5376, para. 32 (2012).

³⁹⁷ The Act defines the term “telecommunications” as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received. 47 U.S.C. § 153(50). Although Congress has not defined the terms “provide,” “provider,” or “provision,” the Commission has addressed these terms in several orders. See, e.g., *2006 Contribution Methodology Order*, 21 FCC Rcd 7518, 7539, para. 40.

³⁹⁸ 47 U.S.C. § 254(d).

³⁹⁹ *Universal Service First Report and Order*, 12 FCC Rcd at 9173-74, para. 796; *2006 Contribution Methodology Order*, 21 FCC Rcd 7518, 7541, para. 44.

also suggested Congress should confirm the Commission’s authority to assess contributions based on BIAS revenues.⁴⁰¹

108. A Congressional mandate would clarify the Commission’s authority with regard to both proposals. Section 254(d) provides that any provider of interstate telecommunications may be required to contribute to the preservation and advancement of universal service if the public interest so requires.⁴⁰² The Commission has explained that the threshold issue in exercising permissive authority is whether an entity is “providing” interstate “telecommunications” as defined in the Act.⁴⁰³ In exercising permissive authority, we must determine whether an entity is a “provider” of interstate telecommunications as specified in section 254(d).⁴⁰⁴ Accordingly, absent congressional action to provide the Commission mandatory authority to assess edge providers, in order to exercise our permissive authority, the Commission would need to make a finding that these services meet the statutory definition of “telecommunications” and demonstrate that the public interest supports requiring contributions.

109. Still others suggested that Congress fund the USF through the regular Congressional appropriations process.⁴⁰⁵ Commenters argue that the benefits of broadband extend to nearly all individuals and businesses and such matters of broad societal import should be funded by Congress.⁴⁰⁶ Others note that appropriated funds would reduce burdens on consumers.⁴⁰⁷ The Georgetown Center for Business and Public Policy and USTelecom both describe appropriations as the broadest possible base for funding USF.⁴⁰⁸ AT&T reasons that Congress effectively recognized that the current approach to funding the USF is insufficient when it appropriated tens of billions of dollars for broadband deployment through recent legislation.⁴⁰⁹

110. Opponents of shifting to appropriated funds express concerns that the appropriations process is unpredictable and that USF programs require stable support.⁴¹⁰ The Coalition of Rural Wireless Carriers argues that section 254(d) requires that USF support be predictable and that USF recipients rely on that predictability to make long-term investment decisions.⁴¹¹

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⁴⁰⁰ NTCA Comments at 61-64; TCA Comments at 7; USTelecom Comments at 12-13; Verizon Comments at 15; Free State Foundation Comments at 17; CWA Comments at 5; EconOne Reply Comments generally.

⁴⁰¹ Lumen Comments at 14; NRECA Comments at 12.

⁴⁰² 47 U.S.C. § 254(d).

⁴⁰³ *Universal Service Contribution Methodology - A National Broadband Plan for Our Future*, WC Docket No. 06-122, Further Notice of Proposed Rulemaking, 27 FCC Rcd 5357, 5376-77, paras. 32-34 (2012).

⁴⁰⁴ *Id.*

⁴⁰⁵ AAPI Groups Comments at 1-2; AEI Comments at 1-2; CTIA Comments at 15; Digital Progress Institute Comments at 8; Free State Foundation Comments at 15; Hughes Comments at 6; IIA Comments at 5; Lumen Comments at 14; National Grange Reply Comments at 1; NCTA Comments at 22; MMTC et al. Comments at 2; SBE Council Reply Comments at 2; Sonic Telecom Reply Comments at 5; T-Mobile Reply Comments at 8-9; USTelecom Comments at 5; US Chamber of Commerce Reply Comments at 5-7; Verizon Comments at 14; Indiana Rural Broadband Association Comments at 4;

⁴⁰⁶ US Chamber of Commerce Comments at 2

⁴⁰⁷ Citizens Against Government Waste Comments at 4; Indiana Rural Broadband Association. Comments at 4.

⁴⁰⁸ Georgetown Center for Business and Public Policy Reply Comments at 3; USTelecom Comments at 5.

⁴⁰⁹ AT&T Comments at 13.

⁴¹⁰ ADS Reply Comments at 2; CETF Comments at 18; NRECA Comments at 19; Next Century Cities et al. Comments at 12; WTA Comments at 19.

⁴¹¹ CRW Comments at 26-28; *see also* Benton Comments at 30.

111. On review, there is significant ambiguity in the record regarding the scope of the Commission's existing authority to broaden the base of contributors. As such, we recommend Congress provide the Commission with the legislative tools needed to make changes to the contributions methodology and base in order to reduce the financial burden on consumers, to provide additional certainty for entities that will be required to make contributions, and to sustain the Fund and its programs over the long term.

D. Arguments Concerning the Lawfulness of the Universal Service Fund Under Section 254

112. In the *Future of the USF NOI*, we sought comment on the joint filing by Consumers' Research and several others (collectively, "Consumers' Research") with respect to the universal service contribution factors for the fourth quarter of 2021 and the first quarter of 2022.⁴¹² Specifically, we requested comment on the assertions by Consumers' Research that (1) section 254 of the Communications Act unconstitutionally delegates Congress's legislative and taxing power to the Commission; (2) the Commission violated the Constitution by subdelegating Congress's legislative and taxing power to USAC; (3) the appointment of USAC's directors by the FCC Chair violates the Constitution's appointments clause or (in the alternative) exceeds the Commission's statutory authority; and (4) the Commission violated the APA and the Federal Register Act by adopting a new contribution factor for each quarter without conducting a notice-and-comment rulemaking proceeding or publishing the contribution factor in the Federal Register.⁴¹³

113. In response to the *Future of the USF NOI*, USTelecom, NTCA, and the Competitive Carriers Association (CCA) jointly filed comments contending that Consumers' Research's claims lack merit.⁴¹⁴ We agree. For the reasons discussed below, we are not persuaded by any of the arguments made by Consumers' Research that the USF is unconstitutional or otherwise unlawful.

114. *Congressional Delegation.* Consumers' Research maintains that section 254 unconstitutionally delegates Congress's legislative and taxing power to the Commission.⁴¹⁵ Under longstanding Supreme Court precedent, a congressional delegation of authority to an administrative agency is constitutional so long as Congress has provided "an intelligible principle" to which the agency "is directed to conform."⁴¹⁶ The delegation of authority to the Commission under section 254 easily satisfies this test. Multiple provisions of section 254 limit the Commission's discretion to implement the universal service program. Section 254(b) requires the Commission to "base policies for the preservation

⁴¹² *Future of the USF NOI* at 18, 19, para. 45 & n.124 (citing Comments and Objections of Consumers' Research et al., CC Docket No. 96-45 (filed Sept. 23, 2021) (Consumers' Research September 2021 Comments); Comments and Objections of Consumers' Research et al., CC Docket No. 96-45 (filed Nov. 19, 2021) (Consumers' Research November 2021 Comments)).

⁴¹³ *Id.* at 19, para. 45 n.124; see Consumers' Research September 2021 Comments at 31-51; Consumers' Research November 2021 Comments at 32-51.

⁴¹⁴ See generally USTelecom Joint Comments.

⁴¹⁵ Consumers' Research September 2021 Comments at 31-44; Consumers' Research November 2021 Comments at 32-44.

⁴¹⁶ *J.W. Hampton, Jr., & Co. v. United States*, 276 U.S. 394, 409 (1928). The Supreme Court recently reaffirmed that this "intelligible principle" test remains the standard for reviewing the constitutionality of congressional delegations. See *Gundy v. United States*, 139 S. Ct. 2116 (2019). Although Consumers' Research contends that the delegation at issue here violates "the original understanding of nondelegation," it bases that argument on the dissent in *Gundy*. See Consumers' Research September 2021 Comments at 31-32 (citing *Gundy*, 139 S. Ct. at 2135-37 (Gorsuch, J., dissenting)); see also Consumers' Research November 2021 Comments at 32-33. The majority in *Gundy* declined to adopt the "original understanding" test proposed by the dissent. See *Gundy*, 139 S. Ct. at 2129 (plurality opinion); *id.* at 2130-31 (Alito, J., concurring in the judgment).

and advancement of universal service” on several specified principles.⁴¹⁷ Section 254(c) directs the Commission to consider certain factors when defining the services that will receive universal service support.⁴¹⁸ Section 254(d) constrains the Commission’s authority to assess universal service fees by requiring that carriers contribute to universal service “on an equitable and nondiscriminatory basis.”⁴¹⁹ Section 254(e) mandates that universal service support be “sufficient to achieve the purposes of” section 254.⁴²⁰ The Commission and the courts have construed this sufficiency requirement to prohibit excessive funding of universal service.⁴²¹ Finally, section 254(h) provides detailed instructions to the Commission concerning the establishment and funding of the universal service support mechanisms for rural health care providers, schools, and libraries.⁴²² Whether considered separately or in combination, these provisions intelligibly limit the Commission’s authority to increase the size and scope of the USF and the fees that carriers must pay to support universal service.⁴²³

115. Consumers’ Research’s assertion that universal service contributions are “taxes”⁴²⁴ does not alter our analysis. Contrary to that assertion, courts have held that universal service contributions are fees, not taxes, because universal service confers special benefits on contributing carriers by expanding the network they can serve.⁴²⁵ In any event, in this context, it makes no difference whether universal service contributions are fees or taxes. Even assuming that those payments are a form of taxation, the Supreme Court has held that “the delegation of . . . authority under Congress’ taxing power is subject to no constitutional scrutiny greater than that . . . applied to other nondelegation challenges.”⁴²⁶

116. *Subdelegation to USAC.* Consumers’ Research argues that the Commission has unlawfully re-delegated its authority under section 254 to USAC, a private entity.⁴²⁷ We reject that argument for two reasons. First, USAC does not exercise government power.⁴²⁸ It merely provides

⁴¹⁷ 47 U.S.C. § 254(b); *see id.* § 254(b)(1)-(6) (listing the principles on which the Commission must base its universal service policies).

⁴¹⁸ 47 U.S.C. § 254(c)(1); *see id.* § 254(c)(1)(A)-(D) (listing the factors that the Commission must consider when defining the services eligible for universal service support).

⁴¹⁹ 47 U.S.C. § 254(d). *See Texas Office of Public Utility Counsel v. FCC*, 183 F.3d 393, 433-35 (5th Cir. 1999) (*TOPUC I*) (holding that the Commission violated section 254(d) by imposing contribution obligations that were inequitable and discriminatory toward certain carriers).

⁴²⁰ 47 U.S.C. § 254(e).

⁴²¹ *See Alenco Commc’ns, Inc. v. FCC*, 201 F.3d 608, 620 (5th Cir. 2000); *Rural Cellular Ass’n v. FCC*, 588 F.3d 1095, 1102-03, 1108 (D.C. Cir. 2009) (*Rural Cellular I*).

⁴²² 47 U.S.C. § 254(h)(1), (2).

⁴²³ *See* Brief for Respondents, *Consumers’ Research v. FCC*, 5th Cir. No. 22-60008, at 32-48 (filed June 10, 2022); USTelecom Comments at 6-10.

⁴²⁴ *See* Consumers’ Research September 2021 Comments at 36-44; Consumers’ Research November 2021 Comments at 36-44.

⁴²⁵ *See Rural Cellular Ass’n v. FCC*, 685 F.3d 1083, 1090-91 (D.C. Cir. 2012) (*Rural Cellular II*); *TOPUC I*, 183 F.3d at 427 n.52, 428. State courts have reached similar conclusions regarding contributions to state universal service funds. *Voicestream GSM I Operating Co. v. La. Pub. Serv. Comm’n*, 943 So. 2d 349, 359-62 (La. 2006); *Schumacher v. Johanns*, 272 Neb. 346, 358-63, 722 N.W.2d 37, 47-51 (Neb. 2006); *Citizens’ Util. Ratepayer Bd. v. State Corp. Comm’n*, 264 Kan. 363, 396-400, 956 P.2d 685, 708-10 (Kan. 1998). *See also* USTelecom Joint Comments at 11-14.

⁴²⁶ *Skinner v. Mid-America Pipeline Co.*, 490 U.S. 212, 223 (1989); *see also Rural Cellular II*, 685 F.3d at 1091; Brief for Respondents, *Consumers’ Research v. FCC*, 5th Cir. No. 22-60008, at 50-52.

⁴²⁷ *See* Consumers’ Research September 2021 Comments at 44-47; Consumers’ Research November 2021 Comments at 44-47.

ministerial support to the Commission: “billing” contributing carriers, “collecting” universal service contributions, and “disbursing” universal service funds.⁴²⁹ It also assists the Commission by gathering the information used to calculate the quarterly contribution factor.⁴³⁰ In performing these ministerial tasks, USAC is subordinate to, and closely supervised by, the Commission. USAC action is reviewable by the Commission,⁴³¹ and relief is often granted.⁴³² Moreover, our rules make clear that USAC “may not make policy, interpret unclear provisions of the statute or rules, or interpret the intent of Congress. Where the Act or the Commission’s rules are unclear, or do not address a particular situation,” USAC is required to “seek guidance from the Commission.”⁴³³ Second, even if USAC’s role were more substantial, the delegation to USAC is permissible because the Commission retains final decision-making authority.⁴³⁴ In particular, the Commission—not USAC—has the final say in establishing the contribution factor for each quarter. In setting the contribution factor, the Commission “reserves the right to set projections of demand and administrative expenses at amounts that” differ from USAC’s projections.⁴³⁵

117. *Appointment of USAC’s Board of Directors.* USAC’s board of directors includes representatives of private industry, recipients of universal service funding, and consumer groups, as well as USAC’s Chief Executive Officer.⁴³⁶ Except for the Chief Executive Officer, USAC’s directors are appointed to the board for three-year terms by the FCC Chair, who selects new directors after reviewing nominations submitted by the groups represented on the board.⁴³⁷ Consumers’ Research asserts that if USAC is considered to be a “public” (or government) entity, the appointment of USAC’s directors by the FCC Chair violates the Constitution’s Appointments Clause.⁴³⁸ But USAC is a private corporation, not a public entity,⁴³⁹ and neither Consumers’ Research nor other commenters in the record here argue to the contrary. Furthermore, USAC’s board members are not officers of the United States under the Constitution because, given the Commission’s close supervision of USAC, USAC’s board members are

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⁴²⁸ See Brief for Respondents, *Consumers’ Research v. FCC*, 5th Cir. No. 22-60008, at 53-56; USTelecom Joint Comments at 14-18.

⁴²⁹ See 47 CFR § 54.702(b).

⁴³⁰ See 47 CFR § 54.709(a). The courts have recognized that this sort of “fact gathering” is “legitimate outside party input into agency decision-making processes.” See *U.S. Telecom Ass’n v. FCC*, 359 F.3d 554, 566 (D.C. Cir. 2004); see also *State of Tex. v. Rettig*, 987 F.3d 518, 531 (5th Cir. 2021).

⁴³¹ See 47 CFR § 54.719(b).

⁴³² See, e.g., *Streamlined Resolution of Requests Related to Actions by the Universal Service Administrative Company*, DA 22-448, 2022 WL 1302467 (WCB rel. April 29, 2022) (granting, dismissing, or denying numerous requests for review); *Alpaugh Unified Sch. Dist.*, 22 FCC Rcd 6035 (2007) (granting 78 appeals of USAC decisions).

⁴³³ 47 CFR § 54.702(c).

⁴³⁴ See Brief for Respondents, *Consumers’ Research v. FCC*, 5th Cir. No. 22-60008, at 56-62.

⁴³⁵ See 47 CFR § 54.709(a)(3).

⁴³⁶ See 47 CFR § 54.703(b).

⁴³⁷ See 47 CFR § 54.703(c)-(d).

⁴³⁸ See Consumers’ Research September 2021 Comments at 47-48 (citing U.S. CONST, art. II, § 2, cl. 2); Consumers’ Research November 2021 Comments at 47-48.

⁴³⁹ See, e.g., *Blanca Tel. Co. v. FCC*, 991 F.3d 1097, 1105 (10th Cir. 2021) (USAC “is an independent, non-profit corporation”); *United States ex rel. Heath v. Wis. Bell, Inc.*, 760 F.3d 688, 689 (7th Cir. 2014) (USAC is “a private non-profit corporation”); *United States ex rel. Shupe v. Cisco Sys.*, 759 F.3d 379, 387 (5th Cir. 2014) (USAC is “a private corporation”); *In re LAN Tamers, Inc.*, 329 F.3d 204, 206 (1st Cir. 2003) (USAC is “a private nonprofit corporation, subject to regulation”).

not “exercising significant authority pursuant to the laws of the United States.”⁴⁴⁰ Therefore, the Appointments Clause does not govern the appointment of USAC’s directors, who are not officers of the United States.⁴⁴¹

118. Alternatively, Consumers’ Research asserts that if USAC is a private entity, Congress did not authorize the FCC Chair to appoint USAC’s directors.⁴⁴² In making this claim, Consumers’ Research ignores the relevant historical backdrop and the authority granted to the Commission by sections 4(i) and 254 of the Communications Act. Section 4(i) empowers the Commission to “perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with [the Communications Act], as may be necessary in the execution of its functions.”⁴⁴³ Even before Congress amended the Communications Act in 1996 by adding a provision specifically addressing universal service, the Commission relied on section 4(i), in conjunction with other provisions of the Communications Act, to adopt rules promoting the overarching statutory goal of universal service, including by relying on a private party to serve in an administrator role.⁴⁴⁴ “[I]n enacting section 254, Congress specifically contemplated that the Commission would create federal universal service support mechanisms,” and Congress also recognized that an independent private entity, NECA, “had been administering the high cost support mechanism for more than a decade” before the 1996 Act was passed.⁴⁴⁵ Thus, when Congress enacted section 254, it “implicitly affirmed the Commission’s authority to employ an independent entity” such as USAC “to administer universal service.”⁴⁴⁶ When establishing universal service support mechanisms under section 254, the Commission not only reasonably chose to rely on USAC as an administrator, but also reasonably chose to rely on directors of USAC appointed by the Commission to ensure they reflected a balance of the interests in universal service contributions, distributions, and oversight reflected in the policy principles of section 254 itself.⁴⁴⁷ At a minimum, section 4(i) permitted the Commission to adopt a rule providing for the appointment of USAC’s directors by the FCC Chair.⁴⁴⁸ Such a rule is necessary to ensure the proper administration of the “mechanisms” that the Commission establishes under section 254 “to preserve and advance universal service.”⁴⁴⁹

119. *APA Claim.* Consumers’ Research contends that the Commission violated the Administrative Procedure Act⁴⁵⁰ by failing to conduct a notice-and-comment rulemaking before

⁴⁴⁰ *United States v. Arthrex, Inc.*, 141 S. Ct. 1970, 1980 (2021).

⁴⁴¹ See USTelecom Joint Comments at 18-19; Brief for Respondents, *Consumers’ Research v. FCC*, 5th Cir. No. 22-60008, at 58 n.27.

⁴⁴² See Consumers’ Research September 2021 Comments at 48; Consumers’ Research November 2021 Comments at 48.

⁴⁴³ See 47 U.S.C. § 154(i); see also USTelecom Joint Comments at 19-20.

⁴⁴⁴ See, e.g., *MTS and WATS Market Structure*, Third Report and Order, 93 FCC 2d 241, 254-56, 259, 333-34, paras. 37-44, 53-54, 340-43 (1983); *Rural Tel. Coal. v. FCC*, 838 F.2d 1307, 1315 (D.C. Cir. 1988).

⁴⁴⁵ *Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, 13 FCC Rcd 25058, 25065-66 para. 14 (1998) (citing H.R. Rep. No. 103-560 (1994)).

⁴⁴⁶ *Id.* at 25066, para. 14.

⁴⁴⁷ See, e.g., *Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, 12 FCC Rcd 18400, 18422, para. 37 (1997). The FCC Chair has delegated authority to make these appointments in the first instance. *Id.* at 18449, para. 49 (pursuant to section 5(c) of the [Communications] Act, delegating authority to the FCC Chair “to review nominations to the USAC Board and select USAC Board members”).

⁴⁴⁸ See 47 CFR § 54.703(c)(3).

⁴⁴⁹ See 47 U.S.C. § 254(b)(5).

⁴⁵⁰ 5 U.S.C. § 553(b).

approving each quarterly contribution factor.⁴⁵¹ Consumers' Research also argues that the Commission violated the Federal Register Act⁴⁵² by failing to publish its quarterly contribution factors in the Federal Register.⁴⁵³ These claims are based on the erroneous premise that each quarterly contribution factor is a legislative rule subject to the APA's rulemaking requirements. The Commission fully satisfied its rulemaking obligations under the APA in 1997 when it adopted its rule prescribing the methodology for calculating carriers' universal service contributions. Before adopting that rule, the Commission provided interested parties with notice and an opportunity for comment.⁴⁵⁴ When it applies that rule to a specific set of facts in order to set a contribution factor for a particular quarter, the Commission engages in adjudication, not rulemaking. Consequently, the APA's notice and comment requirements do not apply to the Commission's adoption of each quarterly contribution factor. Likewise, because the adoption of a contribution factor is an adjudication, not a rulemaking, the Commission has no obligation under either the APA or the Federal Register Act to publish each new contribution factor in the Federal Register.⁴⁵⁵

IV. CONCLUSION

120. The Universal Service Fund has played a vital role in delivering advanced telecommunications services for twenty-five years. This Report details the role that each of the USF programs has played in the Commission's ongoing work toward achieving its universal service goals for broadband and makes specific recommendations for steps that the Commission and Congress can take to more effectively pursue those goals. By adopting this Report, we reaffirm our commitment to working with Congress and federal agency partners to achieve universal deployment, affordability, adoption, availability, and equitable access to broadband throughout the United States.

V. ORDERING CLAUSES

121. Accordingly, IT IS ORDERED, that pursuant to Section 60104(c) of the Infrastructure Investment and Jobs Act, this Report IS ADOPTED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

⁴⁵¹ See Consumers' Research September 2021 Comments at 48-51; Consumers' Research November 2021 Comments at 48-51.

⁴⁵² 44 U.S.C. § 1505.

⁴⁵³ See Consumers' Research September 2021 Comments at 50-51; Consumers' Research November 2021 Comments at 51.

⁴⁵⁴ See *Changes to the Board of Directors of the National Exchange Carrier Association, Inc.*, 12 FCC Rcd 18400, 18424-428, paras. 42-50 (1997).

⁴⁵⁵ Nonetheless, each proposed quarterly contribution factor is "announced by the Commission in a public notice" and "made available on the Commission's website." 47 CFR § 54.709(a)(3).

APPENDIX A
Commenters and Reply Commenters

AAPI Groups

National Asian/Pacific Islander American Chamber of Commerce and Entrepreneurship;
Asian Americans Advancing Justice (AAJC);
Asian Pacific American Public Affairs;
Asian & Pacific Islander American Health Forum;
Center for Asian Pacific American Women;
Council for Native Hawaiian Advancement;
Filipina Women's Network;
International Leadership Foundation;
Japanese American Citizens League;
National Council of Asian Pacific Americans;
National Association of Asian American Professionals;
National Federation of Filipino American Associations;
National Queer Asian Pacific Islander Alliance;
OCA-Asian Pacific American Advocates;
Sikh American Legal Defense and Education Fund

ACA Connects

ACAM Broadband Coalition

Ad Hoc Telecom Users Committee (Ad Hoc Users)

Advanced Data Services (ADS)

Alaska Communications

Alaska Remote Carrier Coalition (ARCC)

ALLvanza; MMTIC; LGBTTech; Asian Am Tech Table

American Enterprise Institute (AEI)

Aruba, A Hewlett Packard Enterprise Company (Aruba)

Association of Teleservices International

AT&T Services, Inc. (AT&T)

Benton Institute for Broadband & Society (Benton)

Broadband Connects America

California Emerging Technology Fund (CETF)

California Public Utilities Commission (CPUC)

Carol E. Matthey (Matthey Consulting)

Center for Democracy and Technology (CDT)

Cisco Systems, Inc. (Cisco)

Citizens Against Government Waste

Coalition of Rural Wireless Carriers (CRW)

Bristol Bay Cellular Partnership; Carolina West Wireless, Inc.;

Cellular South Licenses, LLC d/b/a C Spire;

East Kentucky Network, LLC, dba Appalachian Wireless;

NE Colorado Cellular, Inc. d/b/a Viaero Wireless;

Nex-Tech Wireless, LLC; Smith Bagley, Inc.;

Union Telephone Company dba Union Wireless;

United States Cellular Corporation;

United Wireless Communications, Inc.

Communications Coalition of Kansas

Competitive Carriers Association (CCA)

Connected Nation, Inc. (Connected Nation)

Consumers' Research et al.

Cause Based Commerce, Inc.;

Kersten Conway;
Suzanne Bettac;
Robert Kull;
Kwang Ja Kirby;
Tom Kirby;
Joseph Bayly;
Jeremy Roth;
Deanna Roth;
Lynn Gibbs;
Paul Gibbs;
Rhonda Thomas
CTIA – The Wireless Association (CTIA)
Communications Workers of America (CWA)
Digital Progress Institute
District of Columbia Public Service Commission (DCPSC)
EconOne
Entertainment Software Association
Free Press
Free State Foundation
GCI Communication Corp. (GCI)
Georgetown Center for Business and Public Policy
Hawaii Broadband & Digital Equity Office
Heartland Telecommunications Company of Iowa d/b/a Premier Communications
Hughes Network Systems (Hughes)
INCOMPAS
Indiana Rural Broadband Association
Information Technology & Innovation Foundation (ITIF)
Information Technology Industry Council (ITI)
Internet Innovation Alliance
Jeffrey Westling
John Staurulakis LLC
Latino Coalition, ALLvanza, United States Hispanic Chamber of Commerce
Leadership Conference on Civil and Human Rights
Los Angeles County Office of Education and Los Angeles County Library
Lumen
Massachusetts Department of Telecommunications & Cable (MDTC)
Mercatus Center
Microsoft
Minnesota Department of Commerce
Multicultural Media Telecom and Internet Council, National Action Network, National Association for
the Advancement of Colored People (MMTC et al)
Motion Picture Association
National Association of Regulatory Utility Commissioners (NARUC)
National Association of State Utility Consumer Advocates (NASUCA)
National Grange
National Lifeline Association (NaLa)
National Rural Electric Cooperative Association (NRECA)
National Tribal Telecom Association (NTTA)
NCTA– The Internet & Television Association (NCTA)
NCIC Inmate Communications (NCIC)
NEK Community Broadband
Next Century Cities, National Consumer Law Center, Common Sense Media (Next Century Cities et al.)

NTCA – The Rural Broadband Association (NTCA)
NY State Public Service Commission (NYPSC)
Ochsner Health System
Oklahoma Rural Broadband Association
Phoenix Center for Advanced Legal & Economic Public Policy Studies
Prison Policy Initiative
Public Knowledge
Roslyn Layton et al.
 Roslyn Layton, PhD;
 Sally Broughton Micova, PhD;
 Silvia Elaluf Calderwood, PhD;
 Bronwyn Howell, PhD;
 Petrus Potgieter, PhD;
 James Prieger;
 Joel Thayer;
 William Webb
Rural Broadband Providers (RBP)
 Chickasaw Telephone Company;
 REV Broadband;
 Rural Telephone Service Co., Inc. (d/b/a Nex-Tech);
 Smithville Communications;
 Silver Star Communications;
 Totah Communications
Rural Wireless Association (RWA)
Sacred Wind Communications
Schools, Health & Libraries Broadband (SHLB) Coalition (SHLB)
Small Business and Entrepreneurship Council (SBE Council)
Small Company Coalition
Sonic Telecom, LLC
Starry, Inc. (Starry)
Telecom Consulting Associates Inc. (TCA)
TechFreedom
T-Mobile USA, Inc. (T-Mobile)
Texas Telephone Association
Twilio
US Chamber of Commerce
USTelecom
USTelecom, NCTA – The Internet & Television Association, Competitive Carriers Association Joint
 Comments (USTelecom Joint Comments)
Vantage Point Solutions
Verizon
Vermont Department of Public Service
Wireless Internet Service Providers Association (WISPA)
Wisconsin Department of Public Instruction
Women’s Groups Coalition
WTA – Advocates for Rural Broadband

**STATEMENT OF
COMMISSIONER BRENDAN CARR**

Re: *Report on the Future of the Universal Service Fund*, Report, WC Docket No. 21-476.

While there has been a lot of focus recently on the one-time dollars that Congress has appropriated for broadband over the past two years—and rightly so—the FCC’s \$9 billion a year Universal Service Fund (USF) provides the sole source of funding for so many of the FCC’s programs that are aimed at ending the digital divide. The FCC’s USF supports Internet infrastructure builds in rural communities. It ensures that low-income Americans can obtain an affordable connection. It aids schools and libraries in their purchase of communications services. And it connects patients with health care providers that offer life-saving care.

Yet the FCC’s funding mechanism for this vital program is stuck in a death spiral. The USF program is funded through a mechanism that made sense back in the dial up and screeching modem days of the 1990s—back when you were far more likely to have a long-distance calling card in your wallet than an email address in your name. Generally speaking, the FCC funds USF through a line-item charge that carriers add to consumers’ monthly bills for telephone service. Those traditional phone revenues have declined sharply from a high of around \$80 billion in the 2000s to less than \$30 billion today. So the percentage charge or contribution factor that consumers pay has been on the rise—steadily increasing from only 6% in 2001 to roughly 30% today.

When it comes to USF contributions reform, kicking the can down the road is no longer an option. Indeed, if left on autopilot, the percentage charge that consumers pay could hit 75% in just four years, according to a [study](#) cited by the Commission today. That would have wildly distorting and unsustainable effects that would undermine all of the FCC’s USF programs. That is not an acceptable outcome to me. And that is why I offered up my own thoughts on a sustainable path forward last year in an [op-ed](#)—it’s a plan that would require large technology companies to start contributing a fair share to the USF.

So I was very pleased that Congress charged the Commission with preparing a report on the future of the Universal Service Fund. After all, the billions of dollars Congress recently appropriated outside of the Universal Service Fund do nothing to address the USF program’s long-term challenges. So today’s report could not come at a better time. I want to express my thanks to Chairwoman Rosenworcel for bringing this report forward for a vote as well as all of my colleagues for finding common ground on important issues. And I want to emphasize three points from the Commission’s report.

First, both the record and the Commission’s report throw cold water on the idea that the FCC should just start assessing broadband Internet access service or BIAS. And rightly so. As the Commission’s report notes, expanding the contribution base to include BIAS would necessarily raise the cost of broadband for consumers. Indeed, the Commission’s report cites to a study finding that assessing BIAS could increase consumers’ monthly broadband bills by as much as \$17.96 a month—or almost \$200 annually. The Commission’s report also points to record evidence that this price hike could result in nearly ten million broadband customers forgoing Internet service altogether at a time when the Commission is working hard to increase broadband adoption. But don’t forget about the winners. Large corporations would certainly benefit by funding USF entirely through a broadband assessment. In fact, the Commission’s report emphasizes research showing that assessing broadband would result in a “massive \$4 billion annual wealth transfer from consumers to giant companies” with a “disproportionate harm on low-income households” too. The Commission’s report also rightly concludes that these outcomes would run directly contrary to the agency’s universal service goals.

Put simply, the squeeze is not worth the juice when it comes to replacing the existing telecommunications assessment with one on broadband, as the Commission’s report makes clear. Indeed, imposing all of these costs on broadband consumers in contravention of the federal government’s work to promote affordability would not even offer the upside of providing a long-term, sustainable funding

model for the Universal Service Fund. Even the backers of assessing broadband concede that it is a short-term play. Moreover, this is exactly the wrong time to entertain calls for artificially hiking the price of consumers' broadband bills through a USF assessment given the sky-high inflation numbers that Americans are already feeling. Indeed, the Commission's report concludes its discussion in this section by recommending that, in considering changes to the contribution base in the future, the Commission "take efforts to avoid raising the cost of broadband service and shifting the financial burden from corporations to consumers"—an effort that would require the Commission to refrain from assessing broadband. So it is time for those groups that have focused solely on pressing the FCC to assess broadband to head back to the drawing board and return with ideas that do not increase consumers' monthly bills for broadband as their current proposal would.

Second, I am very pleased that both the record and the Commission's report provide such broad-based support for requiring large technology companies to start contributing into the USF. Indeed, I think it is important to note that this report represents the first time that the full Commission has recognized the support that has been building for this idea. As the Commission's report determines, a diverse and wide-ranging group of commenters—including large and small industry stakeholders, consumer groups, public officials, state associations, and economists—have all determined that assessing the services offered by large technology companies would allow the FCC to broaden the contributions base in a fair and equitable manner, without harming consumers. It also tracks the proposal I laid out in my op-ed last year to boot.

The record and the Commission's report show that assessing edge provider services would drastically reduce costs for consumers. For one, the Commission's report points to a study showing that it would eliminate entirely the roughly 30% charge that consumers pay on their telecommunications bills today simply by assessing a far lower, 7% charge on Google's and Facebook's digital advertising revenues. Further, the Commission's report points to evidence in the record that it would be difficult for the assessment on these services to be passed through to consumers since prices for digital advertisements are set via auction—this is unlike the current assessment on telecommunications, which is passed through easily onto consumers' bills. Indeed, the Commission's report concludes that "not only would the contribution factor be significantly lower as described above, but the amount that consumers would pay would also be significantly lower than today—and potentially eliminated entirely if the Commission were to look solely to those revenues for contributions."

This approach would also better align with the historic construct that entities that benefit from the USF program should contribute. On this score, the Commission's report points to evidence in the record that the five largest streaming companies account for 75% of total network traffic in rural areas. Commenters argued that these companies that benefit significantly from our country's USF-supported Internet infrastructure should be required to contribute to the network.

The Commission's report rightly notes the long-term sustainability of assessing large technology companies as another important benefit of this approach. It points to a study showing that the revenue growth of digital advertising is significantly higher than that of BIAS, indicating that the contribution factor would only continue to decrease over time.

The record here is consistent with what we are hearing from policymakers on both sides of the aisle, as there is bipartisan support in Congress for assessing tech companies. For example, Senator Lujan called on Congress and the FCC to explore this concept further last year, noting that big tech companies, not consumers, should be footing the bill since big tech companies are the entities that benefit the most when more Americans are connected. Legislation has been introduced in both the House and Senate to require the FCC to study the demands on networks associated with the services offered by edge providers, with Senator Wicker stating that the FCC should consider the feasibility of assessing big tech as online platforms continue to dominate the internet landscape. And there is growing global recognition—across Europe, Asia, and South America—that big tech companies should be required to contribute a fair share to support the networks and digital divide efforts that allow them to realize unprecedented revenues.

Third and finally, to ensure we can assess a full range of services offered by large technology companies and do so on a truly fair and equitable basis, we will likely need Congress to grant the FCC

additional authority. To that end, I am pleased the Commission's report includes a recommendation that Congress provide the FCC with the legislative tools needed to make changes to the contributions methodology and base in order to reduce the financial burden on consumers, to provide additional certainty for entities that will be required to make contributions, and to sustain the universal service fund and its programs over the long term. This type of additional authority would allow the Commission to start assessing the revenues of large technology companies, and I want to add my own two cents in urging Congress to pass a law that does just that. I also want to encourage all stakeholders that are interested in the long-term sustainability of the USF and its invaluable programs to echo this call for Congress to grant the Commission additional authority.

In the end, I am very pleased with the momentum that has built around the idea of requiring large technology companies to start contributing a fair share. As the Commission's report recognizes, there are a number of different ways the FCC can implement this idea in an equitable manner. And I would welcome the chance to do so.

In closing, I want to recognize the staff and leadership of Wireline Competition Bureau for their hard work on this report. You have my thanks and the report has my support.

**STATEMENT OF
COMMISSIONER NATHAN SIMINGTON**

Re: *Report on the Future of the Universal Service Fund*, Report, WC Docket No. 21-476.

I am pleased to support the Commission's statutorily-required report, which thoroughly surveys all aspects of the future of the Universal Service Fund (USF). I also agree with Commissioner Carr's sentiments, particularly his emphasis on relating funding for connectivity spending to the network effects enjoyed by companies that depend on universal connectivity—network effects far larger and more scalable than last-mile charges made by home internet service providers. Another challenge for the USF program is to ensure that, as satellite internet service continues to rapidly improve, USF programs are able to harness its transformative power to ensure that every American, even those in the most remote areas, is able to benefit from access to broadband internet service wherever they live and work. At a time when Americans look to Congress and the Commission for leadership on modernizing the USF, we must continue to consider what measures will best sustain the system for another generation and avoid expedient but ineffective short-term measures.