



Updated November 13, 2023

5G Fund for Rural America: Current Status and Issues

On October 27, 2020, the Federal Communications Commission (FCC) created the 5G Fund for Rural America (5G Fund). The FCC directed that \$9 billion over the next 10 years from the Universal Service Fund (USF) be used for the 5G Fund to expand fifth-generation (5G) wireless service. This included \$8 billion to bring voice and high-speed mobile broadband services to rural areas unlikely to see 5G cellular deployments without subsidies and \$1 billion for networks that can support precision agriculture.

The FCC decided to wait to initiate 5G Fund activities until it could collect more granular data to show mobile broadband service availability in the United States. The FCC acknowledged that waiting for data “will not be the fastest possible path” to award funds, but would allow it to “identify with greater precision those areas of the country where support is most needed.” The FCC proceeded with its new data collection effort in early 2021, and released a mobile coverage map in August 2021 and a fixed (e.g., fiber) map in November 2022. The FCC accepted challenges to the coverage maps, refined the maps to ensure accuracy, and has continued to do so with each iteration. In May 2023, the FCC released a second, updated map (Ver. 2), and announced another update (Ver. 3) to be released in November 2023. The FCC adopted a Further Notice of Proposed Rulemaking (FNPRM) on September 21, 2023, stating that, with the “new, granular, and improved mobile coverage data” reflected in the new map, it would continue implementation of the 5G Fund. In the FNPRM, the FCC sought comment on several aspects of the 5G Fund, including eligible areas, funding levels, and use of funds.

During the 118th Congress, some Members questioned whether 5G Fund amounts allocated by the FCC are sufficient to meet rural mobile coverage needs. Others raised questions concerning the FCC’s discretion over USF funds—a fund that collects and redistributes fees from service providers to fulfill universal service goals. Still others proposed new (non-USF) programs to expand fixed and wireless service in rural areas (e.g., S. 2542).

Universal Service as a Concept

The concept of universal service—that all Americans should have access to telecommunications services—was established as national policy in the Communications Act of 1934. The Telecommunications Act of 1996 (P.L. 104-104) directed the FCC to establish the USF to promote universal service, and led to the establishment of the Universal Service Administrative Company (USAC), an independent not-for-profit corporation, to be the USF administrator. The act required telecommunications providers to contribute a percentage (currently about 30%) of their interstate and international revenue to the USF—a cost they typically pass along to consumers. The USAC collects and manages these contributions as directed by the FCC.

P.L. 104-104 also expanded universal service beyond telephone service to include high-speed internet services (e.g., broadband). Section 254 provides that consumers across the nation, including in rural areas, should have access to telecommunications and information services at rates “reasonably comparable” to those in urban areas.

Universal Service Fund (USF) Programs

The FCC directs USF funding through four major programs—High-Cost, Lifeline, Rural Health Care, and Schools and Libraries. The FCC sets program rules, and the USAC disburses USF funds through each program. USAC annual reports indicate that about \$8 billion is made available through the USF annually.

The FCC has changed USF programs to fulfill its universal service mandate. In 2011, the FCC reformed the High-Cost program to create the Connect America Fund (CAF), which provides about \$4.5 billion annually to eligible providers to deploy high-speed internet in rural areas. The FCC also created the Mobility Fund, a program under the CAF that provided \$300 million in one-time funding for mobile services in unserved and underserved areas, and the Mobility Fund Phase II program, to provide recurring funding to providers in areas unlikely to receive unsubsidized 4G Long Term Evolution (LTE) services. In April 2020, the FCC proposed to replace the Mobility Fund Phase II with the 5G Fund to spur deployment of 5G networks, expand mobile coverage, increase internet access, and enhance economic opportunities in rural areas. Eligible areas would be those not served by a subsidized 4G LTE or 5G provider. The FCC would hold a reverse auction, a process in which companies submit proposals to provide 5G services in eligible areas and funds go to the lowest bidder.

Identifying Areas Eligible for 5G Funds

To identify unserved areas, the FCC considered using existing data, such as mobile coverage data submitted to the FCC by providers (e.g., Form 477). In its October 2020 Report and Order, however, the FCC stated that its existing mobile coverage data was inaccurate and opted to use data from the Digital Opportunity Data Collection—a 2019 FCC initiative to collect coverage data from providers, allow public challenges to the data, and map mobile service nationwide. The FCC stated that waiting for this initiative to be completed could add 18-24 months to the 5G Fund timeline, but reasoned that it would result in more accurate coverage data and reflect new 5G deployments. This includes deployments from T-Mobile, which committed as a condition of its 2020 merger with Sprint to cover 90% of households in U.S. rural areas within six years.

Congress Mandates Data Collection and Mapping

The FCC established the Digital Opportunity Data Collection in August 2019; however, the effort was not

authorized or funded by Congress. In March 2020, the Broadband Deployment Accuracy and Technological Availability Act (Broadband DATA Act, P.L. 116-130) was enacted. It required the FCC to change the way broadband data is collected, verified, and reported. It directed the FCC to collect and disseminate granular broadband service availability data from wired, fixed-wireless, satellite, and mobile broadband providers. In December 2020, Congress appropriated \$65 million for the effort in the Consolidated Appropriations Act, 2021 (P.L. 116-260). In August 2021, pursuant to the Broadband DATA Act, the FCC released the National Broadband Map showing mobile broadband coverage data. In November 2022, it released the first version of a fixed broadband map. Consumers, states, localities, tribes, and others could challenge the map to improve the data. In May 2023, the FCC released an updated version (Ver. 2) of the map to reflect this input, and it accepts challenges on an ongoing basis with each version that is released (approximately every six months).

Further Notice of Proposed Rulemaking

On September 21, 2023, the FCC adopted a FNPRM stating that with improved data gathered as part of its Broadband Data Collection effort and incorporated into the National Broadband Map it would continue to implement the 5G Fund. In the FNPRM, the FCC sought comment on 5G Fund eligible areas, funding levels, and use of funds. In its previous proceeding, the FCC assumed that in specific areas where private providers offered 4G LTE service, there would eventually be 5G deployment and thus excluded these areas from 5G Fund eligibility. Petitioners argued that this may be an inaccurate assumption, given the lack of a business case for 5G in some rural regions (e.g., insufficient projected return on investment due to a small potential customer base). They asked the FCC to define areas that lack unsubsidized 5G service as eligible for support.

The FCC asked whether the 5G Fund should promote new technologies, including Open Radio Access Networks (ORAN)—a network deployment approach that promotes open networks with interoperable equipment and virtualized network operations. Proponents claim that ORAN may shift telecommunications away from single-vendor, proprietary solutions and reduce deployment and operations costs. The FCC also sought input on the adequacy of eligibility and performance requirements, as well as on funding levels—whether they are sufficient to support implementation and whether budget modifications are necessary.

5G Fund Issues for Congress

Eligibility and Support to Legacy Providers

Organizations representing providers that receive recurring high-cost support from the Mobility Fund II expressed concern about its replacement by the 5G Fund, arguing if legacy providers did not win the 5G Fund auction their networks could be stranded, affecting service. In response, Congress included Section 624 in the Consolidated Appropriations Act, 2023 (P.L. 117-238), which states that none of the funds appropriated by the act may be used by the FCC to modify, amend, or change the rules or regulations for universal service high-cost support. Nothing prohibits the FCC from considering, developing, or

adopting other mechanisms as an alternative to Mobility Fund Phase II, but any alternative must maintain support to eligible telecommunications carriers until other support commences. In the September 2023 FNPRM, the FCC proposed to treat the release of the public notice announcing the close of the 5G Fund Phase I auction as the point at which support under the 5G Fund commences (and legacy support ends).

Funding Levels for the 5G Fund

The Competitive Carriers Association, citing a study it commissioned, stated that \$36 billion in government and private investment is needed to ensure ubiquitous 5G coverage. It urged the FCC to increase the 5G Fund to \$20 billion. In H.Rept. 118-145, accompanying a version of the Financial Services and General Government Appropriations Bill, 2024, the House Appropriations Committee expressed concern that \$9 billion for the 5G Fund is not sufficient to support nationwide 5G services, and directed the FCC to allocate sufficient USF resources to expand 5G services. While the FCC could increase USF funding to the program, such a policy could require increased USF contributions from providers, which could increase costs for consumers.

FCC Discretion over USF

USF funds give the FCC flexibility to meet universal service goals, expand deployment of new technologies and services, and restore communications after disasters. As USF is funded by contributions from telecommunication providers, it is not appropriated funding; thus, the FCC manages and maintains discretion over these funds. In the 118th Congress, some Members have addressed USF issues. S. 856 would require the FCC to study and report on the feasibility of requiring edge providers (e.g., online content providers) to contribute to the USF. In a May 2023 Senate Commerce, Science, and Transportation Committee, Subcommittee on Communications, Media, and Broadband hearing, some Members raised issues with the contribution rate, consumer costs, program effectiveness, and Congress' limited input on USF operations. In May 2023, Senators Luján and Thune formed a Senate working group to evaluate USF reforms, which could affect the 5G Fund.

Supporting New Technologies

In H.Rept. 118-145, the House Appropriations Committee directed the FCC to update the 5G Fund framework to reflect technology changes. In its 2020 rules, the FCC did not exclude technologies from 5G Fund support, so long as they meet 5G standards and performance requirements (e.g., speed, latency). In its September 2023 FNPRM, the FCC sought comment on whether the 5G Fund should be used to support ORAN deployments. ORAN advocates, the FCC Chair, and some policymakers say the 5G Fund could help to develop the ORAN approach, and open the network equipment market to more U.S. equipment makers and software developers. ORAN—a relatively new approach—could add complexity and time to projects, increasing the 5G Fund support needed.

Jill C. Gallagher, Analyst in Telecommunications Policy

IF12465

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.