Testimony

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BROADBAND

A National Strategy Needed to Coordinate Fragmented, Overlapping Federal Programs

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Why GAO Did This Study

Broadband internet has become critical to daily life. It provides a digital lifeline to education, work, and healthcare. The federal government continues to invest billions of dollars to close the digital divide, and the President set a goal for universal broadband access by 2030.

This statement discusses: 1) fragmentation and overlap among federal broadband programs, and 2) the lack of a national strategy for broadband, among other objectives.

This statement is based primarily on GAO's May 2022 report on federal broadband programs (GAO-22-104611). In addition, this statement provides an update on the actions that the National Telecommunications and Information Administration and the Executive Office of the President have taken in response to GAO's recommendations.

What GAO Recommends

GAO made three recommendations in its May 2022 report, including that (1) the National Telecommunications and Information Administration should identify key statutory limitations to broadband program alignment, develop legislative proposals as appropriate, and provide a report on these topics to Congress; and (2) the Executive Office of the President should develop and implement a national broadband strategy. As of May 2023, these recommendations have not been implemented.

What GAO Found

Federal broadband efforts are fragmented and overlapping, with more than 133 funding programs administered by 15 agencies. Among these programs, 25 have broadband as their main purpose, and 13 of those programs overlap because they can each be used for the purpose of broadband deployment (see fig.). Having numerous broadband programs can be helpful to address a multifaceted issue like broadband access, but this fragmentation and overlap can lead to the risk of duplicative support. However, determining whether program overlap results in duplicative support can be challenging.

The Mosaic of 25 Federal Programs with Broadband as a Main Purpose, as of November 2021, by Purpose Category
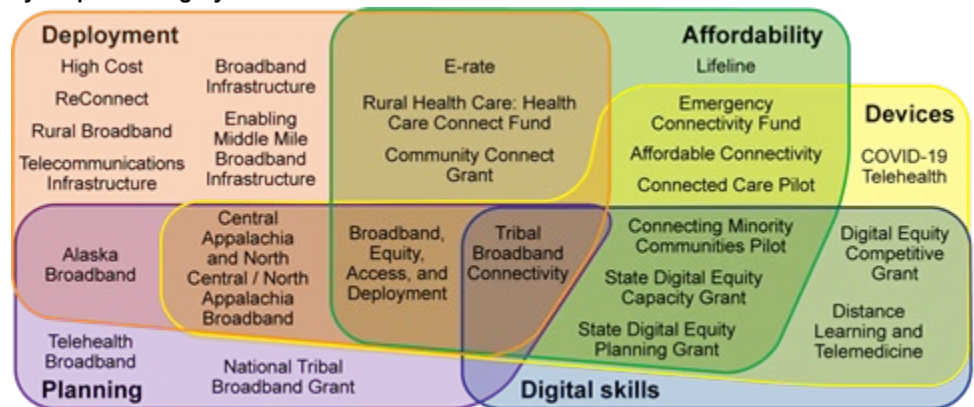
Source: GAO analysis. | GAO-23-106818

Stakeholders identified several challenges associated with using fragmented, overlapping broadband programs—such as administrative complexities–that can make participating difficult for the communities most in need. Effective coordination can help, but programmatic differences have limited agencies' ability to better align programs, according to agency officials. Without identifying the key areas where statutory provisions limit beneficial program alignment—and developing legislative proposals as appropriate—Congress may lack insight into potential beneficial legislative changes and agencies may continue to face challenges in collaborating to help people access broadband.

The federal government has used mechanisms to coordinate federal broadband programs, but no current national strategy exists with clear roles, goals, objectives, and performance measures. The Executive Office of the President, through the National Economic Council, and numerous agencies have increasingly worked to coordinate fragmented and overlapping federal broadband programs. GAO has reported that strategies to coordinate programs that address cross-cutting issues of broad national need can help prevent the potential negative effects of fragmented and overlapping federal programs. A national broadband strategy, led by the Executive Office of the President, could help coordination across the federal agencies overseeing broadband programs. Without such a strategy, federal broadband efforts continue to risk overlap and duplication of effort.

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United States Government Accountability Office

Chairman Griffith, Ranking Member Castor, and Members of the Subcommittee:

I am pleased to be here today to discuss our May 2022 report examining federal broadband programs.[1] Broadband internet has become critical for daily life as, increasingly, everyday activities occur online, including job applications, work, school and homework, health care appointments, and shopping. Broadband that is widely accessible, affordable, and high quality is also essential for the competitiveness of the U.S. economy. However, we have previously reported that the Federal Communication Commission's (FCC) broadband deployment data overstate real access to broadband. A private sector report from 2021 found that as many as 42 million Americans (about 13 percent) lack access to fixed broadband, which is broadband provided to a single location such as a home or business.[2] Our recent work has also shown that broadband access issues are particularly challenging on tribal lands.[3] Even when broadband is available, broadband adoption is not universal as the cost of service, possession of a device to access the internet, and the digital skills to use the internet can also present barriers.

Over the years, the federal government has subsidized broadband access in high-cost and rural areas where the return on investment has not attracted private enterprise. Our prior work found that federal investments from 2009 through 2017 totaled nearly $50 billion for broadband infrastructure in unserved or underserved areas. Starting in 2020, COVID-19 relief laws, along with regular appropriations, have provided an infusion of funding for broadband, including for many new broadband programs. Most recently, the Infrastructure Investment and Jobs Act appropriated nearly $65 billion for new and existing broadband programs. Further, the President has set a goal of universal American access to broadband by 2030.

This testimony is based on our May 2022 report that examined the federal programs supporting broadband. Similar to the report, my statement will

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[1] GAO, *Broadband: National Strategy Needed to Guide Federal Efforts to Reduce Digital Divide*, GAO-22-104611 (Washington, D.C.: May 31, 2022).
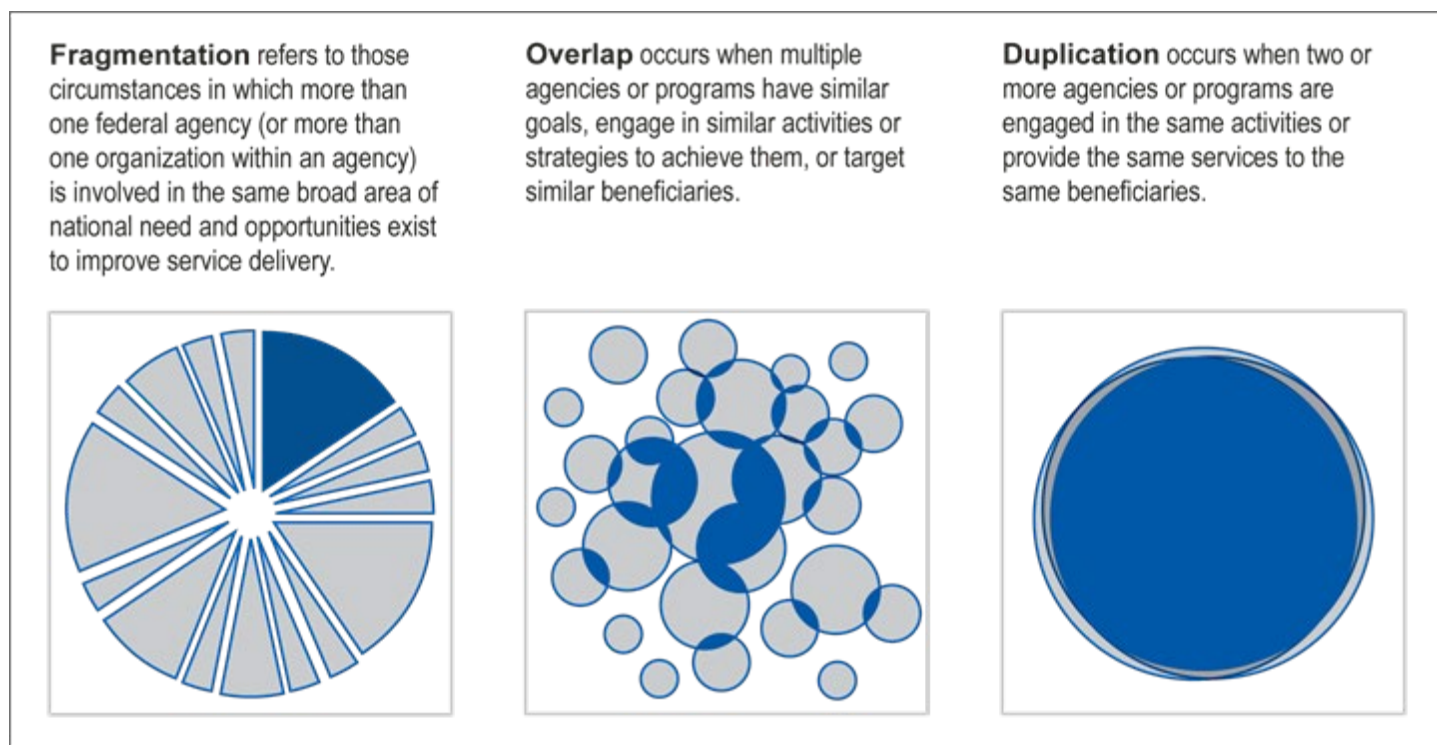
[2] John Busby, Julia Tanberk, and Tyler Cooper. *BroadbandNow Estimates Availability for all 50 States; Confirms that More than 42 Million Americans Do Not Have Access to Broadband*, BroadbandNow Research, (May 2021).

[3] GAO, *Tribal Broadband: National Strategy and Coordination Framework Needed to Increase Access,* GAO-22-104421 (Washington, D.C.: June 22, 2022).

discuss (1) the fragmentation and overlap among federal broadband programs; (2) the challenges stakeholders face in using federal broadband programs; and (3) the lack of a national strategy for broadband. My statement will also provide an update on the key recommendations made in this report and actions taken by the Department of Commerce and the White House to implement those recommendations.

To examine these issues for our report, we collected funding award data for federal broadband programs for fiscal years 2015-2020. We made assessments about potential fragmentation, overlap, and duplication among the programs based on definitions developed in our prior work (see fig.1).[4]

Figure 1: Definitions of Fragmentation, Overlap, and Duplication

Fragmentation refers to those circumstances in which more than one federal agency (or more than one organization within an agency) is involved in the same broad area of national need and opportunities exist to improve service delivery.

Overlap occurs when multiple agencies or programs have similar goals, engage in similar activities or strategies to achieve them, or target similar beneficiaries.

Duplication occurs when two or more agencies or programs are engaged in the same activities or provide the same services to the same beneficiaries.

Source: GAO. | GAO-23-106818

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[4]GAO, *Fragmentation, Overlap, and Duplication: An Evaluation and Management Guide*, GAO-15-49SP (Washington, D.C.: Apr. 14, 2015).

We interviewed 50 nonfederal stakeholders such as internet providers, consultants who work with communities, and experts about the challenges to using federal broadband programs. We also identified and analyzed coordination efforts and broadband strategies through interviews and written responses from 17 different federal agency offices. In analyzing the coordination and broadband strategies, we were guided by our previous work on these issues.[5] More detailed information on our objectives, scope, and methodology for that work can be found in the issued report. We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Fragmentation and Overlap of Federal Broadband Programs

We identified at least 133 funding programs—administered across 15 agencies—that can be used to support broadband access, including support for planning and deploying infrastructure, making service affordable, providing devices, and building digital skills. Some of these programs support broadband as their main purpose or one possible purpose, and others can be used for multiple purposes related to broadband. Eligible recipients for these programs range widely and include: internet providers; other private sector entities; nonprofits; tribal, state, and local governments; education agencies; and healthcare providers. Through these programs, federal agencies invested at least $44 billion in broadband-support activities from fiscal years 2015–2020, according to our analysis of agencies' data.[6] See our report for a list of broadband funding award information by agency and program.

Having numerous broadband programs can be helpful to address a multifaceted issue like broadband access, but this fragmentation can also mean that programs overlap and lead to the risk of duplicative support.

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[5]GAO, Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms, GAO-12-1022 (Washington, D.C.: Sept. 27, 2012); GAO, Combatting Terrorism: Evaluation of Selected Characteristics in National Strategies Related to Terrorism, GAO-04-408T (Washington, D.C.: Feb. 3, 2004).

[6]This total is not adjusted for inflation and includes all types of funding support, such as grants and loans. For most programs that have broadband as one possible use of funds, agencies do not track the specific amounts that have gone to support broadband—thus this total likely understates the full amount of federal broadband support.
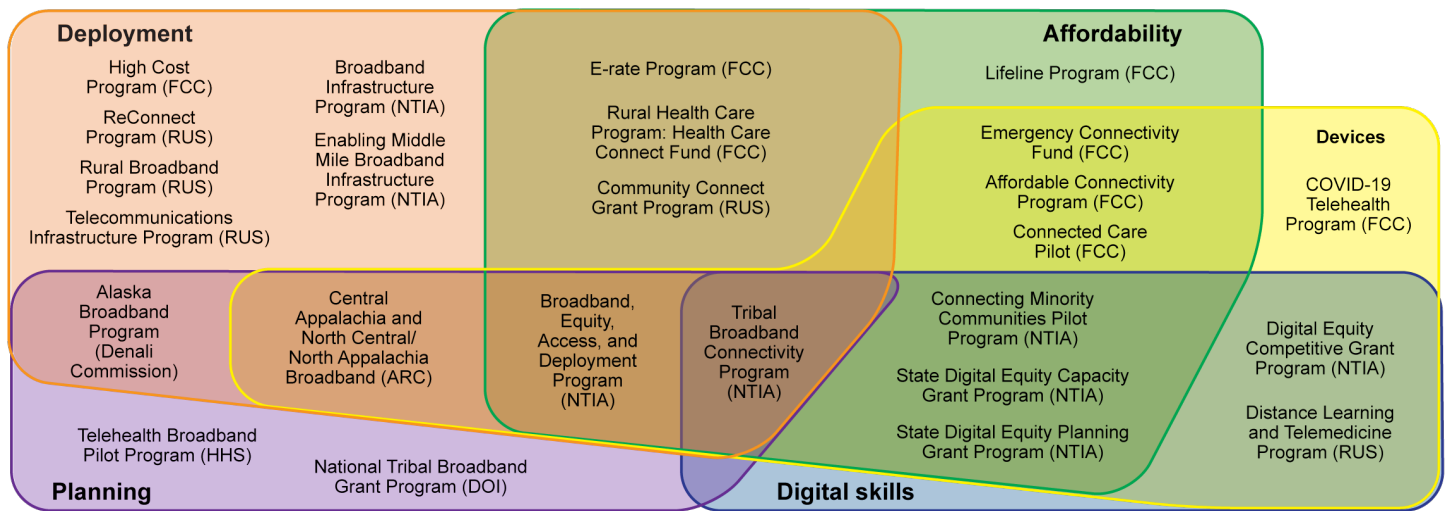
For example, figure 2 shows that 25 programs have broadband as their main purpose and that 13 overlap because they can each be used for the purpose of broadband deployment. This situation can result in different parties, such as communities and providers, independently seeking funding to deploy broadband in the same area. For example, we identified multiple instances where awards from FCC's High Cost program[7] and the U.S. Department of Agriculture's (USDA) Rural Utility Service (RUS)[8] programs had overlapping service areas. FCC and RUS officials acknowledged the challenges involved with overlap but said they do not consider awards duplicative unless the awards provide the same areas with the same level of service and type of support at the same time. For example, different programs may target the same broad areas but provide different levels of service or serve different locations within the area, which programs may allow because the minimum required broadband deployment speeds vary among programs and continue to change. Further, differences in how program funds can be used may mean that programs serving the same area are complementary, not necessarily duplicative. For example, FCC's High Cost funds can be used for capital expenses involved in deployment, as well as ongoing operations and maintenance. RUS funds such as ReConnect can only be used for capital expenses in most cases. So despite overlap in some areas, determining if funding is duplicative can be challenging.

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[7]The largest component of FCC's Universal Service Fund is the High Cost program, which targets financial support to rural and high-cost areas for the deployment, operation, and maintenance of voice and broadband-capable networks (typically called "deployment of broadband networks" in the High Cost program context).

[8]Within USDA, RUS programs provide funding for infrastructure in rural communities, including telecommunications services such as broadband.

Figure 2: The 25 Federal Programs that have Broadband as a Main Purpose, as of November 2021, by Purpose Category

Deployment

High Cost Program (FCC)

ReConnect Program (RUS)

Rural Broadband Program (RUS)

Telecommunications Infrastructure Program (RUS)

Broadband Infrastructure Program (NTIA)

Enabling Middle Mile Broadband Infrastructure Program (NTIA)

E-rate Program (FCC)

Rural Health Care Program: Health Care Connect Fund (FCC)

Community Connect Grant Program (RUS)

Affordability

Lifeline Program (FCC)

Emergency Connectivity Fund (FCC)

Affordable Connectivity Program (FCC)

Connected Care Pilot (FCC)

Devices

COVID-19 Telehealth Program (FCC)

Alaska Broadband Program (Denali Commission)

Central Appalachia and North Central/ North Appalachia Broadband (ARC)

Broadband, Equity, Access, and Deployment Program (NTIA)

Tribal Broadband Connectivity Program (NTIA)

Connecting Minority Communities Pilot Program (NTIA)

State Digital Equity Capacity Grant Program (NTIA)

State Digital Equity Planning Grant Program (NTIA)

Digital Equity Competitive Grant Program (NTIA)

Distance Learning and Telemedicine Program (RUS)

Telehealth Broadband Pilot Program (HHS)

National Tribal Broadband Grant Program (DOI)

Planning

Digital skills

ARC: Appalachian Regional Commission
DOI: Department of the Interior
FCC: Federal Communications Commission

HHS: Department of Health and Human Services
NTIA: National Telecommunications and Information Administration (Department of Commerce)
RUS: Rural Utilities Service (Department of Agriculture)

Source: GAO analysis. | GAO-23-106818

Effective coordination can help ensure that programs are complementary when possible and minimize the potential for wasteful duplicative support. Agencies work to avoid duplication in funding awards through data sharing, regular meetings, and other efforts. Since 2014, FCC and RUS—the agencies that have historically provided the bulk of federal funding for broadband deployment—have had an interagency agreement to share data on locations of their funded broadband projects and have met regularly to share data and coordinate their programs.

Agencies also use other controls to help avoid duplicative awards, such as by specifying that areas served by one program are ineligible for other programs. For example, areas that had previously received certain federal or state funding were ineligible for FCC's Rural Digital Opportunity Fund 2020 awards.[9] For other programs, such as with RUS's ReConnect program, rules allowed overlap with other award areas if the area lacked speeds considered sufficient under the new program's rules and the

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[9]The Rural Digital Opportunity Fund is one of FCC's High Cost programs.

previous award recipient was not required to offer those speeds.[10] In fact, ReConnect's third round of funding makes explicit allowances for proposed service areas to overlap with areas that have received FCC High Cost funding if the project meets certain conditions. Coordination challenges will likely grow as the Department of Commerce's National Telecommunications and Information Administration (NTIA) begins distributing approximately $42 billion from the Broadband Equity, Access, and Deployment program, because this funding will be distributed to states and territories to administer, which may increase the difficulty in tracking unwanted overlap.[11]

In addition, programmatic differences, whether from changes over time or the development of new programs, have limited agencies' ability to align programs to address broadband needs in a complementary way, according to agency officials. For example, when developing notices of funding opportunity for some new broadband programs, NTIA officials said they consulted with several agencies to inform them and align program definitions regarding eligible areas, populations, and broadband speeds but were at times limited in what they could do by statutory provisions among the programs. We have previously found that taking steps to establish compatible policies, procedures, and other means to operate across agency boundaries—including developing legislative proposals to change statutes—may be necessary to better manage the potential negative effects of fragmentation and overlap.[12] Without identifying key areas where statutory provisions limit beneficial program alignment—and developing legislative proposals as appropriate—Congress will lack insight into potential beneficial legislative changes and agencies may continue to face challenges in collaborating to help people access broadband.

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[10]RUS's ReConnect program is a broadband deployment program used to construct, improve, or acquire facilities and equipment needed to provide broadband in rural areas that lack sufficient access.

[11]NTIA has multiple roles with regard to federal broadband programs, including administering programs, leading interagency coordination, and developing other resources. NTIA's Broadband Equity, Access, and Deployment program provides funding to states for projects that support broadband planning, deployment, mapping, equity, and adoption.

[12]GAO-15-49SP and GAO-12-1022.

Challenges Stakeholders Face in Using Federal Broadband Programs

In addition to the struggles agency officials face in coordinating their programs, stakeholders we interviewed identified several challenges associated with program applicants navigating and using these fragmented and overlapping federal broadband programs. Challenges included difficulty identifying relevant programs, administrative complexities, using programs in a complementary way, and unintended results from program provisions intended to prevent duplication.

- **Identifying relevant programs** NTIA developed the BroadbandUSA Federal Funding Guide (Guide) to help potential applicants identify relevant programs within the fragmented federal broadband program landscape. However, stakeholders we interviewed for our report found the Guide overwhelming and of limited usefulness in determining which federal programs to pursue.

- **Administrative complexity.** The administrative complexity involved in obtaining federal broadband assistance can act as a barrier to participation for some intended recipients.[13] Varying eligibility requirements, definitions, and application deadlines can contribute to confusion when navigating among programs, according to the stakeholders we interviewed. Applicants with limited resources, notably those trying to serve the communities most in need of improved broadband service, may be among the most affected by the fragmentation of broadband programs. Some stakeholders pointed out that determining which programs to apply for and completing the applications can be especially challenging for applicants from smaller communities, tribal communities, or companies that lack in-house expertise or resources to hire consultants to assist them.

- **Complementary use of programs.** While some federal broadband programs can be complementary, some stakeholders said it can be challenging to use programs together to boost overall broadband access because programs may have certain restrictions. For example, requirements restricting federal funding to "single use" deployment— such as limiting use of deployment funding to only clinics, or schools, or libraries—can mean that nearby or co-located schools and clinics need to seek separate program funding for broadband.

- **Unintended results of program restrictions**. Some stakeholders expressed concern that restrictions intended to help avoid providing

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[13]Economists have addressed administrative complexity in the provision of social benefit programs, showing how it adds transactions costs that diminish the value of the tax dollars used, and may act as a barrier to the participation of the populations that the programs are intended to help.

federal funds to the same area and purpose (duplication) may unintentionally block access to needed programs. For example, as mentioned earlier, areas that had previously received certain federal or state funding were generally ineligible for the FCC Rural Digital Opportunity Fund 2020 awards. Stakeholders noted that if a provider receives funding to deploy in a particular area but does not deliver on its commitments, the community may be ineligible for other funding programs during the provider's buildout period and would continue to lack sufficient access to broadband.

No National Broadband Strategy

The federal government has used a variety of mechanisms for coordination of fragmented and overlapping federal broadband programs, but no current national strategy exists to provide clear roles, goals, objectives, and performance measures to synchronize the numerous interagency coordination efforts. The Executive Office of the President, through the National Economic Council, and numerous agencies have increasingly worked to coordinate federal broadband programs. These coordination efforts have included National Economic Council led regular coordination meetings, interagency agreements and meetings focused on avoiding duplication, an interagency working group, and hosting joint events. However, there is no current overarching strategy that synchronizes these efforts and establishes agency accountability. FCC developed the National Broadband Plan in 2010, and while FCC officials said they still consider the plan relevant as a framework for modernizing policies, they acknowledge it is now outdated.[14] Furthermore, officials from several agencies told us that no national broadband strategy of this scope is currently in effect.

While interagency coordination can help agencies and those they support, broad and challenging goals like increasing broadband access may require a national strategy.[15] We have reported that strategies to coordinate programs that address cross-cutting issues of broad national need can help identify and mitigate negative effects associated with

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[14]FCC, *Connecting America: The National Broadband Plan* (Washington, D.C.: Mar.17, 2010). The plan set out several broad goals to be accomplished by 2020. FCC officials acknowledged that the plan is outdated in a number of respects and that, while the plan was intended to evolve over time, it could not anticipate new issues, circumstances, and agency policies. FCC officials also said they still considered the plan relevant for providing a framework to modernize the Universal Service Fund and FCC's other telecommunications policies.

[15]GAO-12-1022 and GAO-15-49SP.

fragmented, overlapping, and potentially duplicative federal programs.[16] In particular, coordinating efforts with mutually reinforcing or joint strategies can help better manage fragmentation and overlap.[17]

Most of the agency officials and more than half of the nonfederal stakeholders we interviewed said a new national strategy would be helpful. An official from one agency explained that a strategy could enable agencies to combine or consolidate their programs and administer them in a way that reduces barriers to participation. In addition, a national strategy could guide the efforts of states and localities implementing programs in coordination with the federal government. The roles of states have become even more important as they receive and then distribute funds from new federal broadband programs administered by NTIA and the Department of the Treasury, among other things.[18]

Further, all of the agencies we spoke with that had views on the topic said leadership from the Executive Office of the President would be helpful. Officials from agencies that implement broadband programs told us a strategy from the Executive Office of the President would be helpful because it could establish agency roles and common goals for federal broadband programs, including addressing fragmentation and overlap and implementing programs for applicants in a simplified, complementary way. In addition, officials from another agency told us a strategy from the Executive Office of the President could provide a framework from which agencies could design or modify their programs to meet interagency goals set in the strategy. A strategy led by the Executive Office of the President could help guide programs across agencies, mediate interagency issues, and encourage agencies to work together to improve the management of federal broadband programs.

The COVID-19 pandemic laid bare the effects of the digital divide, particularly on tribal lands. Those with broadband access could work, attend school, and receive telehealth services, while those without sufficient broadband access could not. While FCC, NTIA, RUS, and the many other agencies' funding of federal broadband programs have had

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[16]GAO-15-49SP.

[17]GAO-15-49SP.

[18]For example, NTIA's Broadband Equity, Access, and Deployment Program will provide funding to states to support projects on planning, deployment, mapping, equity, and adoption. The Department of the Treasury's Coronavirus Capital Projects Fund provides funding to states that may be used for broadband deployment, among other things.

some success in increasing the number of people with access to broadband, millions of Americans remain without service. Greater direction through a national strategy led by the Executive Office of the President could guide agencies in working more collaboratively to close the digital divide, across the country and on tribal lands. Without a strategy, federal broadband efforts will continue to not be fully coordinated, and thereby continue to risk unwanted overlap and duplication of effort.

Key Recommendations and Actions to Date

In our May 2022 report, we recommended that NTIA consult with relevant agencies, as well as the Office of Management and Budget and other White House offices, and present to Congress a report that identifies the key statutory provisions that limit the beneficial alignment of broadband programs and offers legislative proposals to address the limitations, as appropriate. At the time we issued the report, the Department of Commerce agreed with our recommendation. Since then, NTIA told us it plans to solicit input about statutory limitations and legislative proposals from relevant agencies during interagency broadband meetings. NTIA also told us that it plans to provide a report to Congress by May 31, 2026 that will, among other things, identify barriers and statutory limitations that limit the beneficial alignment of broadband programs and offer potential legislative changes, as appropriate.[19]

We also recommended that the Executive Office of the President develop and implement a national broadband strategy and that it include a national strategy for closing the gap in broadband access on tribal lands.[20] Both strategies should include clear roles, goals, objectives, and performance measures to support better management of fragmented, overlapping federal broadband programs and synchronize coordination efforts. At the time of our report, the Executive Office of the President was considering if a national strategy was needed. As of this testimony, it has not developed a national strategy for broadband. However, the National Economic Council said it is prioritizing broadband coordination, including by chairing a leadership committee attended by key agency heads and convening a broadband working group that coordinates interagency efforts.

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[19]NTIA told us it plans to provide a report well before the 2026 deadline.

[20]The recommendation for a national strategy for tribal lands was part of our June 2022 report on tribal broadband. See GAO-22-104421.

Chairman Griffith, Ranking Member Castor, and Members of the Subcommittee, this completes my prepared statement. I would be pleased to respond to any questions that you may have at this time.

GAO Contacts and Staff Acknowledgments

If you or your staff have any questions about this testimony, please contact Andrew Von Ah, Director, Physical Infrastructure at (202) 512-2834 or VonAhA@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. GAO staff who made key contributions to this testimony are Keith Cunningham (Assistant Director), Eric Hudson (Analyst in Charge), Melissa Bodeau, Zachary Conti, William J. Harrison, Joshua Ormond, Patricia Palao Da Costa, Kate Perl, Matthew Rowen, and Sarah Veale. GAO staff who made contributions to the underlying work supporting this testimony can be found in that report.