United States Government Accountability Office

Report to Congressional Requesters

June 2022

TRIBAL BROADBAND

National Strategy and Coordination Framework Needed to Increase Access

GAO-22-104421

GAO Highlights

Highlights of GAO-22-104421, a report to congressional requesters

June 2022

TRIBAL BROADBAND

National Strategy and Coordination Framework Needed to Increase Access

Why GAO Did This Study

Broadband is critical to modern life. Despite federal efforts, broadband access on tribal lands has traditionally lagged behind the rest of the country.

GAO was asked to review federal efforts for improving broadband on tribal lands. This report examines: (1) the extent to which federal funding programs have supported the deployment of broadband infrastructure on tribal lands; (2) barriers tribes and providers face in accessing federally funded programs to serve tribal lands; and (3) the extent to which federal agencies focus on tribal issues related to broadband access.

GAO analyzed federal government data on broadband funding for tribal lands; interviewed selected tribes, broadband providers, tribal organizations, and other local officials about challenges to obtaining and using federal broadband funding; and interviewed officials from the Federal Communications Commission and other federal agencies about their broadband programs and coordination.

What GAO Recommends

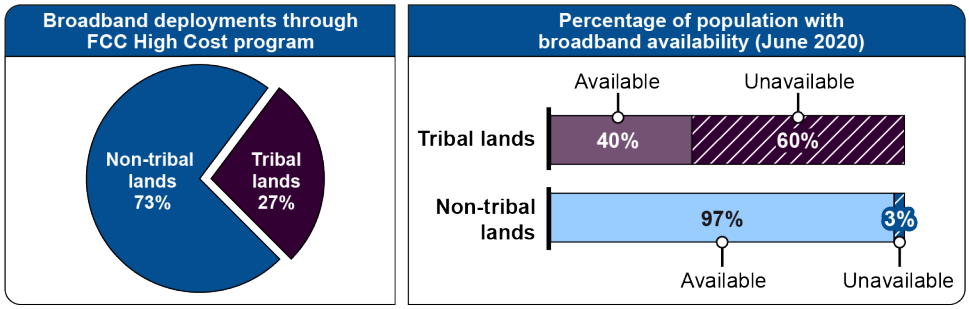
GAO is making two recommendations: (1) that the Executive Office of the President should specifically address tribal needs within a national broadband strategy and (2) that the Department of Commerce create a framework within the American Broadband Initiative for addressing tribal issues. The Executive Office of the President did not agree or disagree with our recommendation, but highlighted the importance of tribal engagement in developing a strategy. Commerce agreed in part with our recommendation.

View GAO-22-104421. For more information, contact Andrew Von Ah at (202) 512-2834 or vonaha@gao.gov

What GAO Found

Federal funding from 2015–2020 has increased broadband access for people living on tribal lands, but access continues to lag behind the rest of the country. Nationwide, conservative estimates show more than 18 percent of people living on tribal lands remain unserved by broadband as of 2020, compared to about 4 percent of people in non-tribal areas. For example, in Arizona federal programs have increased broadband access on tribal lands, but that access continues to lag far behind the rest of the state (see figure).

Broadband Availability in Arizona



Sources: GAO analysis of Universal Service Administrative Company's High Cost: Connect America Fund Broadband Map data, 2015-2020, and FCC 477 data as of June 2020. | GAO-22-104421

Note: Broadband availability includes speeds of 25 Mbps download and 3 Mbps upload or greater, excluding satellite service. We have previously reported that FCC's data overstates access to broadband, particularly on tribal lands.

Persistent barriers limit tribes' and providers' ability and interest in participating in federal broadband programs, including fragmentation of federal programs and difficult application requirements. Tribes and providers continue to face challenges identifying programs to suit their needs from the landscape of numerous, but fragmented, federal broadband programs. Furthermore, complex application processes and the need for upfront funds create additional barriers and discourage participation.

The Executive Office of the President took the lead on coordinating federal tribal broadband efforts in 2021, but these efforts are not guided by a national strategy with clear roles, goals, and performance measures. Officials from agencies that implement broadband programs told us that a national strategy led by the Executive Office of the President could improve coordination and the persistent gap in access on tribal lands warrants specific focus. In addition, the primary ongoing broadband coordination body, the American Broadband Initiative (ABI), lacks a framework for addressing tribal barriers that could also support implementing a national strategy. While ABI has formal frameworks that focus on federal funding and permitting in general, ABI members said they do not hold regular discussions about tribal issues. In 2020, the Department of the Interior also identified a need for increased focus within ABI on tribal issues. The Department of Commerce's National Telecommunications and Information Administration (NTIA) is a leader within ABI, and NTIA officials said they intend to use ABI to meet NTIA's statutory requirements related to broadband coordination. Without a national strategy and a framework within ABI to focus tribal efforts, broadband access for people living on tribal lands will continue to lag behind the rest of the country, perpetuating the digital divide.

Contents

Abbreviations

ABI	American Broadband Initiative
BEAD	Broadband Equity, Access, and Deployment Program
BIA	Bureau of Indian Affairs
BIE	Bureau of Indian Education
CARES Act	Coronavirus Aid, Relief, and Economic Security Act
Commerce	Department of Commerce
COVID-19	Coronavirus Disease 2019
ETC	eligible telecommunications carrier
FCC	Federal Communications Commission
Interior	Department of the Interior
Mbps	Megabits per second
NEC	National Economic Council
NTIA	National Telecommunications and Information Administration
RDOF	Rural Digital Opportunity Fund
RUS	Rural Utilities Service
Treasury	Department of Treasury

U.S. GOVERNMENT ACCOUNTABILITY OFFICE
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June 22, 2022

The Honorable Brian Schatz
Chairman
The Honorable Lisa Murkowski
Vice Chairman
Committee on Indian Affairs
United States Senate

The Honorable John Hoeven
United States Senate

Access to broadband service on tribal lands has traditionally lagged behind even the most underserved rural areas of the country.[1] The Coronavirus Disease 2019 (COVID-19) pandemic made the importance of broadband service for tribal lands more apparent, as broadband has been critical for remote education, work, and healthcare, among other purposes.[2] To improve access to this critical service, federal agencies, primarily the Federal Communications Commission (FCC) and the U.S. Department of Agriculture (USDA) through its Rural Utilities Service (RUS), provided at least $44 billion from fiscal years 2015 through 2020

[1]Broadband commonly refers to internet service with speeds generally faster than dial-up connections. The Federal Communications Commission's (FCC) fixed speed benchmark for determining advanced telecommunications capability (i.e., broadband) is 25 megabits per second (Mbps) download and 3 Mbps upload.

[2]For the purposes of this report, we used the term tribal lands as defined in FCC's Fourteenth Broadband Deployment Report. FCC's definition of tribal lands includes (1) Joint Use Areas; (2) legal federally recognized American Indian area consisting of reservation and associated off-reservation trust land; (3) legal federally recognized American Indian area consisting of reservation only; (4) legal federally recognized American Indian area consisting of off-reservation trust land only; (5) Statistical American Indian area defined for a federally recognized tribe that does not have reservation or off-reservation trust land (Tribal designated statistical area or Oklahoma Tribal Statistical Area); (6) Alaskan Native village statistical area; and (7) Hawaiian Home Lands established by the Hawaiian Homes Commission Act of 1921. *See In re Inquiry Concerning Deployment of Advanced Telecommunications Capability to all Americans in a Reasonable and Timely Fashion*. FCC 21-18, para.20 n.84 (Jan. 19, 2021) (Fourteenth Broadband Deployment Report).

for broadband access across the country.[3] While many federal programs can support broadband on tribal lands, most are not exclusive to tribes and thus tribes compete with other communities and broadband providers for funding. We have previously reported on the challenges tribes and carriers face in accessing broadband funding and improving service in tribal communities, including demonstrating financial sustainability of a network and obtaining matching funds.[4]

You asked us to examine issues related to federal funding programs that support broadband access on tribal lands. This report examines:

- the extent to which federal funding programs have supported deployment of broadband infrastructure on tribal lands;
- the barriers faced by tribes and broadband providers to accessing federal broadband funding programs to serve tribal lands; and
- the extent to which federal agencies focus on tribal issues related to broadband access.

To determine the extent to which federal funding programs have supported broadband access on tribal lands, we identified those federal programs that could support broadband access on tribal lands and analyzed data from 2015 through 2020 for the programs at select agencies, including FCC and RUS. We assessed the reliability of the data by reviewing documents on the databases and speaking with staff at FCC and RUS, and determined the data to be sufficiently reliable for the purpose of our reporting on funding that supported broadband on tribal lands. We interviewed officials from 14 federal agencies to understand the program rules and benefits received from broadband deployments

[3]Broadband access refers to the ability to connect to and use broadband. Federal funding that supports broadband access includes funding available for various aspects of planning for a broadband network, deployment (construction of the infrastructure for a broadband network), and adoption of broadband services (affordability of connecting to broadband, understanding of how to use broadband and connected devices). See GAO, *Broadband: Overall Strategy Needed to Coordinate Federal Efforts to Address Digital Divide,* GAO-22-104611 (Washington, D.C.: May 31, 2022).

[4]GAO, *Telecommunication: Additional Coordination and Performance Measurement Needed for High-Speed Internet Access Programs on Tribal Lands,* GAO-16-222 (Washington, D.C. January 29, 2016). GAO, *Broadband Internet: FCC's Data Overstate Access on Tribal Lands,* GAO-18-630 (Washington, D.C., Sept. 7, 2018). GAO, *Tribal Broadband: Few Partnerships Exist and the Rural Utilities Service Needs to Identify and Address Any Funding Barriers Tribes Face,* GAO-18-682 (Washington, D.C., September 28, 2018). GAO, *Tribal Broadband: FCC Should Undertake Efforts to Better Promote Tribal Access to Spectrum,* GAO-19-75 (Washington, D.C., Nov. 14, 2018).

funded by federal programs. We also interviewed 31 stakeholders who included officials from tribes, tribally owned broadband providers, non-tribally owned broadband providers, tribal associations, a tribal company, and other knowledgeable stakeholders about the programs and benefits received.[5] For reporting purposes, we developed the following series of indefinite quantifiers to describe collective responses from the 31 stakeholders we interviewed including: "some" (five to six); "several" (seven to nine); and "many" (10 or more). Of the 31 stakeholders, we categorized 16 as tribal stakeholders which consists of 3 tribes, 5 tribal associations or tribally-owned companies (not broadband providers), and 8 tribally owned broadband providers. Of the 31 stakeholders, we also categorized 18 as broadband providers, which consists of 8 tribally owned providers and 10 non-tribally owned providers.[6] For describing responses from the groups categorized as tribal stakeholders and broadband providers, we used the quantifiers: "some" (two to four) and "several" (five or more).

To identify barriers faced by tribes and broadband providers, we interviewed officials from federal agencies and all stakeholders about the challenges tribes face in applying for and using program funds for broadband access. Finally, to understand the extent to which federal agencies focus on tribal broadband issues, we interviewed officials from federal agencies and the Executive Office of the President on how they coordinate amongst each other on tribal issues and compared agencies' actions against selected leading collaboration practices that we identified in prior work.[7] The views obtained from these interviews are not generalizable to all stakeholders. (See app. I for a full list of stakeholders we interviewed, as well as the federal agencies we contacted and app. II for a complete description of our methodology.)

We conducted this performance audit from July 2020 to May 2022 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

[5]Collectively, we refer to these interviewees as "stakeholders" throughout the draft.

[6]Tribally owned broadband providers were considered both tribal stakeholders and broadband providers for our analysis.

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

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.

Background

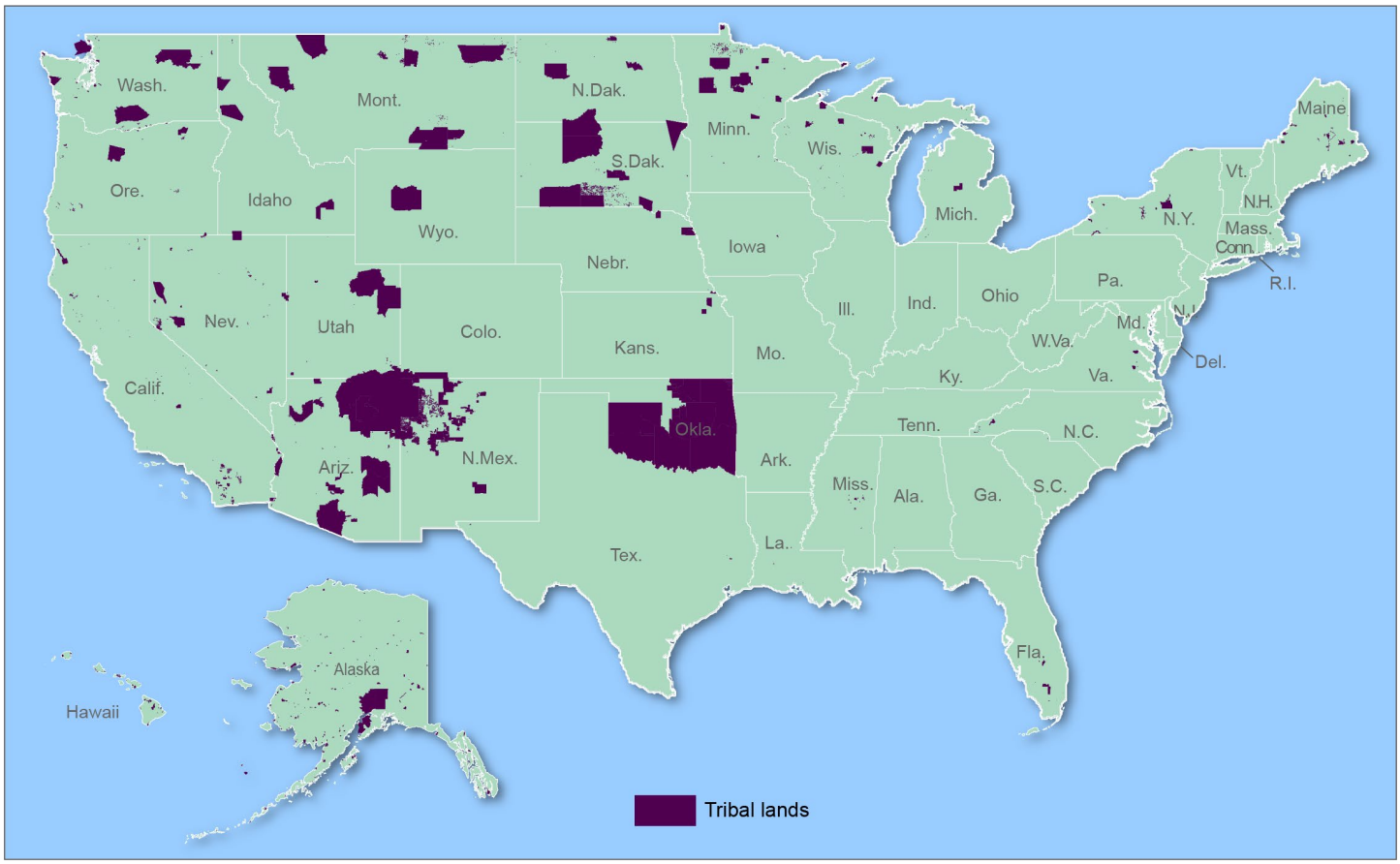
As of May 2022, the federal government has recognized 574 Indian tribes as distinct, independent political communities with certain powers of self-government. These tribes are diverse in type, size, and location. Some tribes have reservations—land set aside by treaty, federal law, or executive order for the residence or use of an Indian tribe—while some tribes have no land.[8] The size of reservations varies with the smallest in size measuring less than one square mile, and the largest, the Navajo Nation, measuring more than 24,000 square miles (approximately the size of West Virginia). In addition to reservations, tribal lands include other types of land, such as the land around Alaska Native villages[9] and Native Hawaiian Homelands.[10] Tribal land locations can range from extremely remote, rural locations to urban areas. Figure 1 shows the location of tribal lands in the United States according to the 2020 census.

[8]The land within the reservation's boundaries may include a mixture (or checkerboard) of tribal, individual Indian, and non-Indian land. Tribal and individual Indian land may be held in trust, restricted, or fee status. Beginning in the late 1880s, federal laws were enacted that divided some reservations into individual parcels, which were distributed to tribal members and "surplus" parcels sold to non-Indians. In some cases, the United States government still holds individual allotments in trust or the allotments are still in restricted fee status, while others have transferred to private (non-Indian) ownership.

[9]Most Alaska Native villages are federally recognized Indian tribes but generally do not own the land surrounding the village. Alaska Native village statistical areas represent the permanent and/or seasonal residences for Alaska Natives who are members of, or receiving governmental services from the Alaska Native village located within the region and vicinity of the village's historic and/or traditional location.

[10]Native Hawaiian homelands were set aside by the Hawaiian Homes Commission Act to establish a permanent land base for Native Hawaiians. Native Hawaiians are not a federally recognized tribe.

Figure 1: Map of Tribal Lands in the United States



Source: GAO, based on U.S. Census Bureau data and the Federal Communications Commission's definition of tribal lands. | GAO-22-104421

Notes: Tribal lands include, as defined by the Federal Communications Commission (FCC): (1) Joint Use Areas; (2) legal federally recognized American Indian area consisting of reservation and associated off-reservation trust land; (3) legal federally recognized American Indian area consisting of reservation only; (4) legal federally recognized American Indian area consisting of off-reservation trust land only; (5) Statistical American Indian area defined for a federally recognized tribe that does not have reservation or off-reservation trust land (Tribal Designated Statistical Area or Oklahoma Tribal Statistical Area); (6) Alaskan Native village statistical area; and (7) Hawaiian Home Lands established by the Hawaiian Homes Commission Act of 1921. We also included two state-recognized American Indian reservations in our analysis because they were home to federally recognized tribes.

This map does not include certain areas that are eligible for the National Telecommunications and Information Administration's Tribal Broadband Connectivity Program. Specifically, this map does not include areas or communities designated by the Assistant Secretary of Indian Affairs of the Department of the Interior that are near, adjacent, or contiguous to reservations where financial assistance and social service programs are provided to Indians because of their status as Indians.

Across the federal government, 15 agencies have over 130 programs that may support broadband access and could include broadband access on

tribal lands.[11] Some programs are specifically aimed at broadband access, while others, such as economic development programs, may have many purposes of which broadband infrastructure is one. For many of these programs tribes or providers that serve tribal lands are eligible recipients. Other programs are specifically for tribes. In addition, some programs are specifically for broadband while others have broadband access as one of many other eligible purposes.

Traditionally, FCC and RUS have had the key ongoing programs that provide broadband funding to underserved areas of the country, including tribal lands. (See table 1.) FCC funds programs through the Universal Service Fund (USF), including the high cost support mechanism (commonly known as the High Cost program),[12] and the schools and libraries universal support mechanism (commonly known as the E-rate program).[13] Separate from the USF, in 2020, FCC also provided an exclusive opportunity for tribes to obtain free licenses for spectrum in its 2.5 GHz spectrum auction. [14] The Rural Tribal Priority Window was an opportunity for tribes in rural areas to directly access unassigned spectrum over their tribal lands, subject to buildout requirements. In

[11]GAO, *Broadband: National Strategy Needed to Guide Federal Efforts to Reduce Digital Divide,* GAO-22-104611 (Washington, D.C.: May 31, 2022).

[12]The universal service High Cost program is also known as the Connect America Fund. The High Cost program has provided support to carriers through various support mechanisms including the Connect America Cost Model, Connect America Fund Phase II auction, and Rural Digital Opportunity Fund (RDOF).

[13]FCC also oversees the lifeline and rural health care universal support mechanisms (commonly known as the Lifeline and Rural Health Care programs) as part of the USF. The Lifeline program provides subsidies to help lower income Americans afford voice and broadband service, and the Rural Health Care program provides subsidies to help connect rural healthcare providers to voice and broadband services. We did not include these programs in our review because they were both part of recent studies that reported on these programs on tribal lands. See GAO, *Telecommunications: FCC Has Implemented the Lifeline National Verifier but Should Improve Consumer Awareness and Experience,* GAO-21-235 (Washington, D.C.: Jan. 28, 2021).

[14]Spectrum is the resource that makes wireless broadband connections, such as fixed connections like a home Wi-Fi network or mobile connections like cell phones, possible. FCC administers spectrum for nonfederal uses—such as state, local government, and commercial entities. Eligible entities for the Rural Tribal Priority Window were any federally recognized tribe, Alaska Native Village, consortia of federally recognized tribes or Alaska Native Villages, and entities controlled and majority-owned by federally recognized tribes or consortia of federally recognized tribes and Alaska Native villages. The Department of Hawaiian Home Lands received a waiver to allow it to apply for spectrum licenses over Hawaiian Home Lands. The application window was initially six months and was later extended to 7 months. For more information see https://www.fcc.gov/25-ghz-rural-tribal-window (accessed September 7, 2021).

addition, RUS has five funding programs that focus on supporting broadband access in rural areas including providing funding for construction, equipment, and educational and health care services, among other purposes.

Table 1: Key FCC and RUS Programs for Tribal Broadband Access

Federal agency	Federal program	Description of program purpose	Eligibility
Federal Communications Commission (FCC)	High Cost	Construct, operate, and maintain infrastructure for broadband and voice service so that consumers in rural, remote, or other areas where costs of providing service are high, have access to comparable services at comparable rates.	Designated eligible telecommunications carriers (ETC) as designated by the state or by FCC. Eligible areas vary by program but generally are those not economical to serve without support from the program and that are not already served by an unsubsidized provider.
	Schools and Libraries (E-rate)	Provide funding that can be used for telecommunications services, internet access, internal connections (e.g., routers, switches, hubs, and wiring), or basic maintenance of internal connections, among other purposes.	Schools, libraries, and consortia that include eligible schools and libraries.
Department of Agriculture – Rural Utilities Service (RUS)	Community Connect	Grants to construct broadband networks including construction, acquisition, or leasing of facilities, land, spectrum, or buildings.	Eligible entities include private corporations, limited liability companies, cooperatives, state and or local governments, and federally recognized tribes.
	Distance Learning and Telemedicine	Grants to finance construction of facilities, software, and equipment for broadband access supporting distance learning or telemedicine services in rural communities.	Eligible entities include state and local governments, federally recognized tribes, nonprofits, for-profit businesses and “consortia of eligible entities” providing education or healthcare services through telecommunications.
	Rural Broadband	Grants, loans, and loan guarantees to finance the construction, improvement, or acquisition of facilities and equipment needed to provide broadband service.	Eligible rural areas have fewer than 3 service providers and at least 20 percent of households lack access to broadband service.
	Rural eConnectivty (ReConnect)	Loans and grants to finance the construction, improvement, or acquisition of facilities and equipment needed to provide broadband in eligible rural areas.	Eligible areas are those that lack sufficient access to broadband service.
	Telecommunications Infrastructure	Loans to finance the construction or improvement of telephone and broadband infrastructure.	Eligible areas are defined as rural areas that have a population of 5,000 or less.

Source: GAO analysis of selected federal agencies’ programs. | GAO-22-104421

Two additional funding programs are specific to tribes and exclusively for broadband. The first is the Department of the Interior's (Interior) Bureau of Indian Affairs' (BIA) National Tribal Broadband Grants, which provides funding to tribes to hire consultants to perform feasibility studies for deployment or expansion of broadband. The second is the Department of Commerce's (Commerce) National Telecommunications and Information Administration's (NTIA) new Tribal Broadband Connectivity Program, a program created by the Consolidated Appropriations Act, 2021, which provides grants to expand access to and adoption of broadband service on tribal lands, among other things.[15]

Since 2020, laws have been enacted that either provided additional funding to existing broadband programs or created new programs to directly address broadband access, including on tribal lands. These laws have established funding opportunities to be administered by NTIA, the Department of the Treasury (Treasury), and the states.

- **Consolidated Appropriations Act, 2021.** This Act appropriated $1 billion for the Tribal Broadband Connectivity Program within NTIA to make grants to tribal governments or other eligible entities.[16] NTIA began awarding grants in November 2021. Also, as part of meeting the requirements of the Act, NTIA will allocate up to $500,000 to each of the federally recognized tribes to address concerns of equity; however, these tribes must apply to be awarded funding.
- **Infrastructure, Investment and Jobs Act.** NTIA's Tribal Broadband Connectivity Program was appropriated an additional $2 billion in this act.[17] This act also created the Broadband Equity, Access, and Deployment (BEAD) Program and directed NTIA to administer this program as well. The BEAD Program was appropriated over $42 billion. The program provide grants to states, territories, the District of

[15]In addition to BIA's National Tribal Broadband Grants, Interior's Bureau of Indian Education (BIE) is responsible for ensuring adequate broadband access at BIE and tribally operated schools and facilitating remote learning through the provision of hotspots, tablets, laptops, and similar equipment to BIE students. BIE Educational Native American Network is only for Kindergarten through 12th grade at 57 BIE operated schools and 126 tribally controlled schools. For more information, see GAO, Indian Education: Schools Need More Assistance to Provide Distance Learning, GAO-21-492T (Washington, D.C.: Apr. 28, 2021).

[16]Pub. L. No. 116-260, div. N, tit. IX, § 905, 134 Stat. 1182, 2136-44 (2020).

[17]Pub. L. No. 117-58, div. J, tit. II, 135 Stat. 429, 1353-54 (2021).

Columbia, and Puerto Rico for broadband planning, deployment, mapping, equity, and adoption activities.[18]

- **CARES Act.** In March 2020, the CARES Act was signed into law and appropriated $8 billion for the Coronavirus Relief Refund Tribal Government Set-Aside.[19] According to Treasury's guidance, the Set-Aside could be used to expand rural broadband capacity to assist with distance learning and telework if such capacity was necessary for the public health emergency.
- **American Rescue Plan Act of 2021.** This act appropriated billions of dollars that could be used to support broadband access on tribal lands. For example, $20 billion of the nearly $220 billion appropriated for the Coronavirus State Fiscal Recovery Fund at Treasury was set aside for tribal governments to use for a variety of specified purposes, including investments in necessary broadband infrastructure.[20] Payments to tribes began in May 2021.

Federal Funding Has Increased Broadband Access on Tribal Lands, but They Remain Underserved

Funding from multiple agencies across the federal government increased broadband access on tribal lands. FCC and RUS had key programs that deployed broadband to hundreds of thousands of locations on tribal lands and provided hundreds of millions in funding for broadband projects on tribal lands. New programs at FCC, BIA, and NTIA focused specifically on broadband access on tribal lands, while more than 100 programs with primary purposes other than broadband could also support broadband access on tribal lands. Despite these programs, people living on tribal lands remain among the most underserved populations in the nation.

[18]If a state or territory does not submit a grant application by the applicable deadline, a political subdivision or consortium of political subdivisions may submit an application. NTIA's Notice of Funding Opportunity for the BEAD Program requires states (and other eligible entities) to involve sovereign tribal and Native entities in the development of plans for the BEAD grant, including but not limited to conducting formal tribal consultations when the state contains tribal lands and obtain consent from the tribal government for project deploying infrastructure on tribal land. See NTIA, Notice of Funding Opportunity: Broadband Equity, Access, and Deployment Program.

[19]Pub. L. No. 116-136, § 5001, 134 Stat. 281, 501-04 (2020) (*codified at* 42 U.S.C. § 801(a)(2)(B), (d)).

[20]Pub. L. No. 117-2, § 9901, 135 Stat. 4, 223-28 (2021) (*codified as amended* at 42 U.S.C. § 802).

Key Funding Programs Increased Broadband Access on Tribal Lands, While New and Other Programs Offer Additional Opportunities

High Cost Program

From 2015 through 2020, FCC's High Cost program funded more than 203,000 broadband deployments on tribal lands. This accounts for about 4 percent of the nearly 5.29 million total High Cost deployments across the country during that time period, according to our analysis of Universal Service Administrative Company's (USAC) data.[21] These High Cost deployments were spread across 299 tribal lands in 30 states. Of those, over 74 percent of deployments on tribal lands were located within five states: Oklahoma, Alaska, Arizona, New Mexico, and Minnesota.[22] These five states accounted for between 78 and 83 percent of the population who lived on tribal lands nationwide, according to 2015–2019 American Community Survey data.[23] Deployments on tribal lands represented the majority of all High Cost program deployments made in Oklahoma and Alaska.[24] These states were the two states with the largest population on

[21]Broadband deployments refers to the number of locations, or individual units associated with a building to which a provider deployed broadband; this number may be households or businesses. If a provider deployed broadband to an apartment or office building, the number of deployment locations would be equal to the number of apartments or offices within the building. For the purposes of this report, we will refer to deployment locations as "deployments." USAC is an independent not-for-profit designated by the FCC to administer the Universal Service Fund (USF).

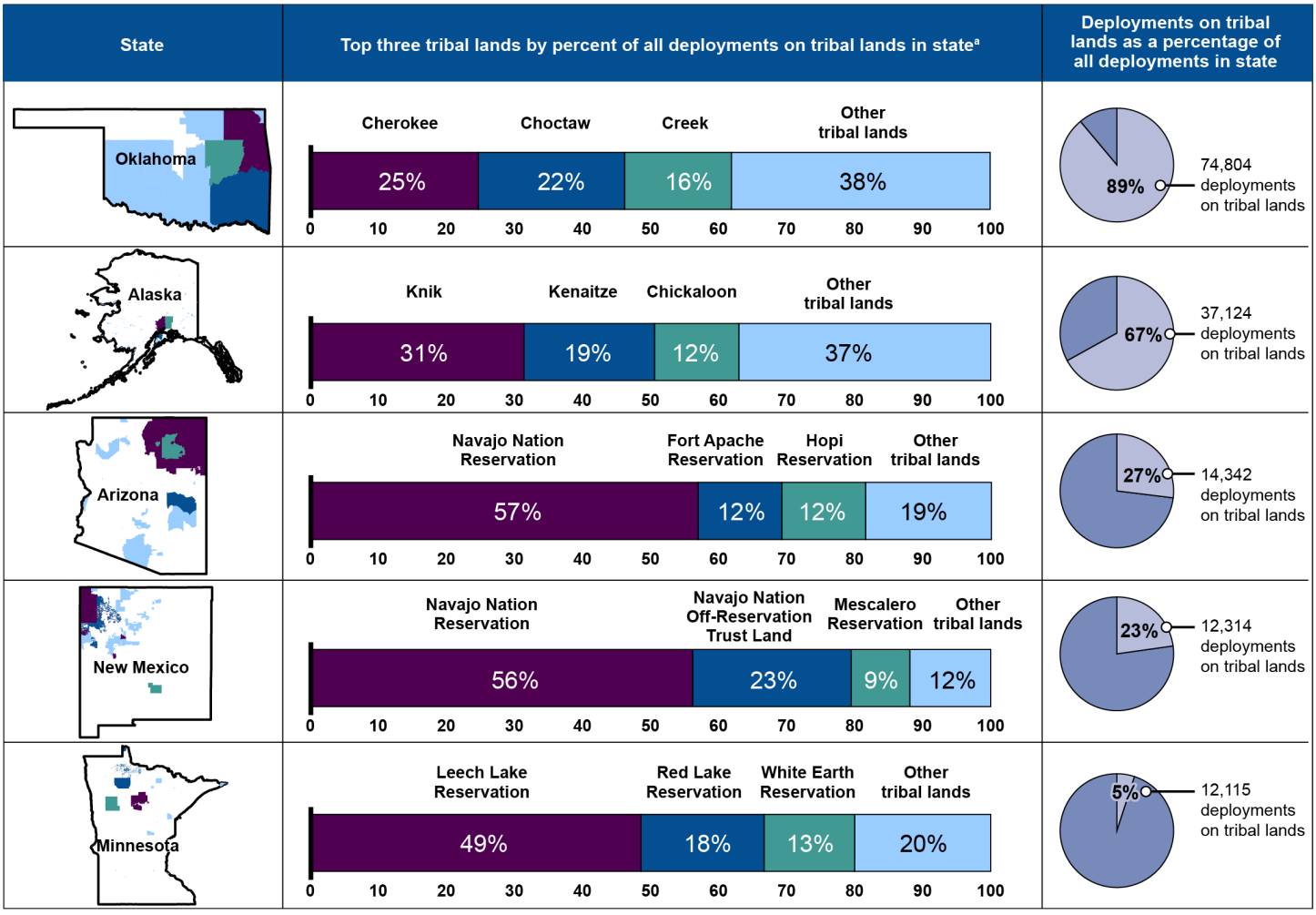
[22]These five states included all but 2 of the 10 tribal lands with the most number of FCC High Cost program deployments received from 2015 through 2020. In descending order of deployments, these 10 tribal lands were: Cherokee (OK); Choctaw (OK); Navajo Nation Reservation (AZ, NM, UT); Creek (OK); Knik (AK); Kenaitze (AK); Samish (WA); Leech Lake Reservation (MN); Uintah and Ouray Reservation (UT); and Chickasaw (OK).

[23]U.S. Census Bureau data, collected from 2015 through 2019. Some tribal lands cross state borders and, in such instances, Census data lists each state that the tribal land covers. Therefore, the estimates range from the lower bound of the proportion of the population living on tribal lands completely within each of the five states listed alone (78 percent), to the upper bound of the proportion of the population living on tribal lands within each of the five states and potentially their neighboring states, which includes California, Colorado, Nevada, Utah, and Wisconsin (83 percent).

[24]We used data from the 2015–2019 American Community Survey to examine populations living on tribal lands by state. The American Community Survey is an annual survey conducted by the U.S. Census Bureau that collects and reports information on social, economic, housing, and demographic characteristics of our nation's population.

tribal lands. The majority of deployments on tribal lands in Arizona and New Mexico were located on the Navajo Nation Reservation, the largest reservation by land area in the country, while the majority of deployments on tribal lands in Oklahoma, Alaska, and Minnesota were located on two or three different tribal lands. (See fig. 2.)

Figure 2: Federal Communications Commission's (FCC) High Cost Program: Broadband Deployments on Tribal Lands, 2015 through 2020—Top Five States and Top Three Tribal Lands within Each of Those States



Source: GAO analysis of Universal Service Administrative Company's High Cost: Connect America Fund Broadband Map data and U.S. Census Bureau data. | GAO-22-104421

Note: For the purposes of this report, we used the term tribal lands as defined in FCC's Fourteenth Broadband Deployment Report. FCC's definition of tribal lands includes (1) Joint Use Areas; (2) legal federally recognized American Indian area consisting of reservation and associated off-reservation trust land; (3) legal federally recognized American Indian area consisting of reservation only; (4) legal federally recognized American Indian area consisting of off-reservation trust land only; (5) Statistical American Indian area defined for a federally recognized tribe that does not have reservation or off-

reservation trust land (Tribal Designated Statistical Area or Oklahoma Tribal Statistical Area); (6) Alaskan Native village statistical area; and (7) Hawaiian Home Lands established by the Hawaiian Homes Commission Act of 1921. See *In re Inquiry Concerning Deployment of Advanced Telecommunications Capability to all Americans in a Reasonable and Timely Fashion*. FCC 21-18, para.20 n.84 (Jan. 19, 2021) (Fourteenth Broadband Deployment Report). Although FCC's definition of tribal lands does not include state-recognized American Indian reservations, we included two in our analysis because they were home to federally recognized tribes.

[a]Percentages may not sum to 100 percent due to rounding.

Broadband providers we interviewed, both non-tribally owned and tribally owned, provided details on how the High Cost program was being used to improve broadband access in tribal communities. For example, an official from Golden West Telecommunications, a non-tribally owned broadband provider in South Dakota, said that the company is using High Cost funds, among other federal funds, on an ongoing project that will connect all of Golden West's service area on the Pine Ridge Reservation. This project will serve about 90 percent of the land area of the reservation and over 3,000 locations with fiber-to-the-home service.[25] Similarly, Saddleback Communications, a tribally owned provider that serves the Salt River Pima-Maricopa Indian Community in Arizona, said that its network is 100 percent fiber-to-the-home and that it achieved this in large part because of funding from the High Cost program.

Additionally, three tribally owned providers we interviewed noted that the High Cost program was critical to their company's operations and sustainability, as well as their ability to provide broadband access. For example, the Tohono O'odham Utility Authority, a tribally owned provider that serves the Tohono O'odham Nation in southern Arizona, said that High Cost funds provide about 40 percent of its revenue, and that the company would not be sustainable without those funds. According to our analysis of USAC data, from 2015 through 2020, Tohono O'odham Utility Authority deployed broadband to nearly 250 locations with High Cost program funding. Similarly, Gila River Telecommunications, Inc., another tribally owned provider in Arizona, said the High Cost program is very important to the company and that it uses the funds to build out broadband connections, maintain its existing network, and make upgrades to its network as required. According to our analysis of USAC data and Gila River Telecommunications, Inc. officials, from 2015 through 2020, the company deployed broadband to nearly 975 locations and

[25]Fiber-to-the-home services connect fiber optic lines to individual homes. Fiber optic lines can provide the fastest broadband service available among existing consumer technologies.

maintained over 2,000 broadband subscriptions with High Cost program funding.

E-rate Program

From 2016 through 2020, FCC's E-rate program provided at least $441 million to improve broadband access for nearly 4,000 individual schools and libraries on tribal lands, about 3.6 percent of the approximately $12.4 billion in total program disbursements, according to our analysis of USAC data.[26] Annually, during this time period, about 81 percent of tribal schools and libraries that received E-rate support were located in Oklahoma, Arizona, Alaska, and New Mexico, and these states accounted for about 92 percent of all E-rate funding awarded to tribal schools and libraries.[27] These four states were among the top six states by the number of people who lived on tribal lands, according to 2015–2019 American Community Survey data.[28]

Tribes have used the E-rate program to improve broadband access for eligible schools and libraries, including through building fiber and wireless broadband networks, according to tribes and broadband providers we interviewed. One non-tribally owned broadband provider we interviewed, Sacred Wind Communications, which serves tribal communities in New Mexico, said that it has received E-rate program funding, including $37 million in 2020 to deploy a 400-mile fiber network to connect community facilities and schools across the Navajo Nation in New Mexico. Tribal officials from the Choctaw Nation described one of their tribal communities where the school uses E-rate support to fund its wireless broadband connection. Officials stated this wireless connection is the only internet access the community has, as there are no broadband options available to the wider community.

RUS Loans and Grants

From fiscal years 2015 through 2020, an estimated $260 million in RUS loans and grants were awarded to expand broadband service on tribal lands. This represents approximately 8 percent of the total $3.1 billion

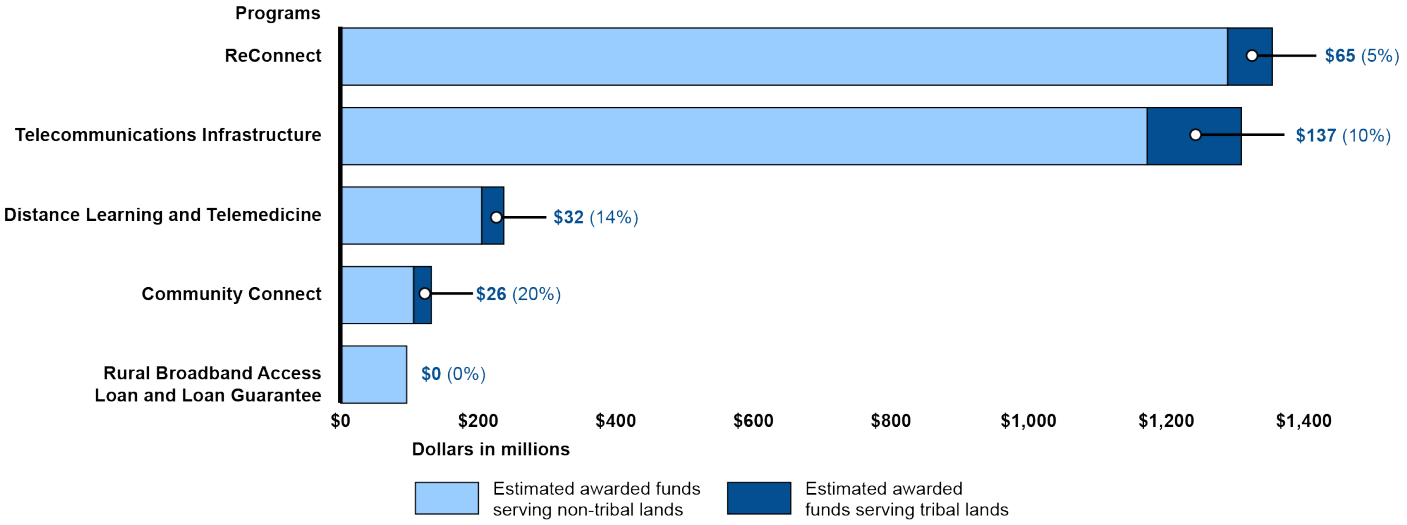
[26]We could only determine the total amount of E-rate support awarded to tribal schools and libraries in instances where all of the schools and libraries included in a funding request were tribal schools or libraries.

[27]On January 27, 2022, FCC adopted an order to update the definition of "library" in the E-rate program rules to make clear that it includes tribal libraries; this update, according to FCC officials, is meant to address the longstanding issue that limited access to affordable broadband connectivity through the E-rate program. FCC officials said that tribal libraries are eligible to apply for E-rate funding beginning in 2022.

[28]This excludes tribal lands that span more than one state.

awarded through the agency's five telecommunications programs during that time.[29] (See fig. 3). Among RUS' programs, the Telecommunications Infrastructure Program is estimated to have provided the largest amount of funding awarded for broadband on tribal lands at over $137 million (10 percent of total funding). The Community Connect program had the highest estimated percent of program funding awarded for broadband on tribal lands, providing approximately 20 percent of total funding ($26 million). The ReConnect program provided the most funding for broadband overall at nearly $1.4 billion, of which an estimated $65 million was used on tribal lands.

Figure 3: The Rural Utilities Service (RUS) Estimated Broadband Awards Serving Tribal Lands, Fiscal Years 2015–2020



Source: GAO analysis of Rural Utilities Service data. | GAO-22-104421

Note: For the purpose of estimating the amount of telecommunications programs funding that was used on tribal lands, we used RUS' definition of tribal lands that is more expansive than the Federal Communication Commission's definition. RUS' definition includes (1) Joint Use Areas; (2) legal federally recognized American Indian area consisting of reservation and associated off-reservation trust land; (3) legal federally recognized American Indian area consisting of reservation only; (4) legal federally recognized American Indian area consisting of off-reservation trust land only; (5) Statistical American Indian area defined for a federally recognized tribe that does not have reservation or off-reservation trust land (Tribal Designated Statistical Area or Oklahoma Tribal Statistical Area); (6) Alaskan Native village statistical area; (7) Hawaiian Home Lands established by the Hawaiian Homes Commission Act of 1921; (8) State American Indian Reservations; and State Designated Tribal Statistical Areas.

[29]RUS uses a more expansive definition of tribal lands than the one used by FCC for its analysis of the estimated amount of funding that was used on tribal lands. In addition to the tribal lands included in FCC's definition, RUS also includes State American Indian Reservations and State Designated Tribal Statistical Areas.

Funding from four of RUS's programs has been awarded to tribes, tribally owned providers, and non-tribally owned providers that serve tribal lands. For example, the Choctaw Nation of Oklahoma (Choctaw Nation) received a $3 million Community Connect grant in fiscal year 2018 to build out both a fixed wireless and fiber-to-the-home network to unserved areas of the Choctaw Nation.[30] Officials from the Choctaw Nation said that the project will serve an estimated 300 homes and 15 businesses and will provide new opportunities to the community, such as access to distance learning and telemedicine. In fiscal year 2015, Mescalero Apache Telecom, Inc., a tribally owned provider in New Mexico, received a $5.4 million Telecommunications Infrastructure Program loan to improve broadband service on the Mescalero Apache Reservation. An official from Mescalero Apache Telecom, Inc. told us the company used the loan to upgrade parts of its network and provided fiber-to-the-home connections to approximately 850 homes on the reservation.[31] In fiscal year 2017, Beehive Telephone Company, Inc., a non-tribally owned provider in Utah, also received a Telecommunications Infrastructure Program loan of nearly $16.7 million. An official from Beehive Telephone Company said that the company was using a portion of the loan to bring fiber-optic cable to the Utah side of the Goshute Reservation; this step will make high-speed service available to most of the company's subscribers on the reservation by the end of 2022.

Recent Federal Broadband Opportunities for Tribal Lands

Since 2019, some federal agencies offered new opportunities that were specifically designed to increase broadband access on tribal lands. For example, in 2019, FCC created the 2.5 GHz Rural Tribal Priority Window, which provided tribes in rural areas with the opportunity to obtain spectrum licenses in portions of the 2.5 GHz frequency band over their rural tribal lands. Eligible tribes could use this spectrum to provide broadband service to their communities through fixed or mobile wireless technologies. Tribes that receive a license must meet certain buildout requirements, including an interim buildout requirement within 2 years, and failure to meet the final buildout deadline results in cancellation of the

[30]A fixed wireless network provides broadband service through transmitting signals from fixed sites, such as radio towers, to other individual fixed locations, such as a consumer's premises.

[31]The approximately 850 homes that the Mescalero Apache Telecom, Inc. official told us about account for approximately 66 percent of the estimated 1,282 total housing units (95 percent margin of error +/- 136 housing units) on the Mescalero Apache Reservation, according to Census data collected from 2015 through 2019, the most current data available at the time of our analysis.

license.[32] As of January 2022, FCC had granted 328 spectrum licenses to tribes or tribally controlled entities through its 2.5 GHz Rural Tribal Priority Window.

In fiscal year 2020, BIA introduced the National Tribal Broadband Grant program, which has awarded grants to 30 different tribes totaling nearly $1.5 million, according to agency officials. This grant's purpose was to provide support to tribes to hire consultants to conduct studies on the feasibility of deploying or expanding broadband within their communities. Two tribes we spoke with said that they used their National Tribal Broadband Grant funding to develop plans to build out new fiber and wireless broadband networks to improve broadband access in their communities.

- **Akiak Native Community.** The Akiak Native Community in Alaska used a grant of nearly $50,000 to conduct a broadband feasibility study from which were developed both short- and long-term solutions to bring broadband to the community, according to an Akiak official we interviewed. The official said that the long-term solution—bringing fiber-optic cable to the community—would require a sizeable amount of additional funding.
- **Seneca Nation of Indians (Seneca Nation).** The Seneca Nation in New York conducted a planning and feasibility study to build out a broadband network to one of its communities, according to a Seneca Nation official we interviewed. The official said that the planned buildout will require additional funding, and that the tribe is considering NTIA's Tribal Broadband Connectivity Program as a possible source of support.

In fiscal year 2021, NTIA began administering the Tribal Broadband Connectivity Program, which provides grants to expand access to and adoption of broadband service on tribal lands or for programs that promote the use of broadband to access remote learning, telework, or telehealth resources. In a notice of funding opportunity issued in 2021,

[32]Buildout requirements include, first, that the tribes put the spectrum to use. Tribes must then meet the 2 year interim buildout requirement which starts when the license was granted and requires that tribes that use certain technologies demonstrate reliable signal coverage to 50 percent of the population in their geographic service area. The final buildout deadline requires that tribes demonstrate reliable signal coverage to 80 percent of the population in the service area within 5 years of when the license was granted. Failure to meet the interim deadline shortens the final deadline to 4 years from the license granted date; failure to meet the final deadline will result in cancellation of the license.

NTIA said it will make $980 million available for federal assistance under the program. NTIA received 301 applications for a total of $5.8 billion in funding requests for the initial funding opportunity, and the agency began awarding grants to tribal governments and other eligible entities in November 2021.[33]

Federal Programs with Other Primary Purposes That Could Support Broadband Access

More than 100 of the 133 total federal programs we identified from 2015 to November 2021 that could be used to support broadband did not specifically focus on broadband or broadband access on tribal lands. For example, Commerce's Economic Development Administration provides grants through its Public Works and Economic Adjustment Assistance programs and its Planning and Local Technical Assistance programs, which support a broad range of economic development activities, including broadband access. From fiscal year 2015 through fiscal year 2020, these programs awarded approximately $2.2 million to seven tribes to be used for a variety of projects to improve broadband access. For example, in fiscal year 2019, the Seneca Nation received a $290,000 Economic Adjustment Assistance award to conduct a feasibility study, create a deployment strategy, and develop engineering plans to support the creation of a fiber broadband network.

Similarly, the Department of Housing and Urban Development identified multiple programs that could be used to support broadband. One of those programs, the Indian Community Development Block Grant program, awarded $600,000 to the Fond du Lac Band of Lake Superior Chippewa in fiscal year 2017.[34] The grant was used in combination with other state- and federal-funding sources to build a fiber broadband network for the Fond du Lac Band of Lake Superior Chippewa community.

Broadband Access on Tribal Lands Continues to Lag Behind the Rest of the Nation

Despite the increases in broadband access described, tribal lands continue to lag behind the rest of the nation in access to broadband, according to FCC data from June 2020. Approximately 18 percent of people living on tribal lands lacked access to broadband, compared to

[33]As of March 25, 2022, NTIA has awarded 10 grants as part of this program.

[34]The primary objective of the Department of Housing and Urban Development's Indian Community Development Block Grant program is the development of "viable Indian and Alaska native communities, including decent housing, a suitable living environment, and economic opportunities, principally for persons of low and moderate income." 24 C.F.R. § 1003.2.

about 4 percent of people living in non-tribal areas.[35] In rural areas, where tribal lands are disproportionately located, the gap in broadband access between tribal and non-tribal lands is even greater: approximately 30 percent of people in rural tribal lands lacked broadband access compared to 14 percent in rural non-tribal lands. The gap is likely even greater as our previous work shows that FCC's data overstate access to broadband, particularly on tribal lands.[36] Specifically, we reported that the way that FCC collects and reports data could show census blocks as being fully served if only one house in a census block could receive service.[37]

Data from other sources on related measures of broadband availability may further show how FCC's data overstate broadband access to certain levels of broadband speed. For example, according to FCC data from June 2020, 87 percent of the population in Osage County, Oklahoma—which encompasses all of the Osage Nation's tribal lands—has access to broadband at speeds of 25 Mbps download and 3 Mbps upload or greater. However, according to user-initiated speed test data collected from January through June 2020, the median download speed in Osage County was between approximately 9 Mbps and 17 Mbps. Furthermore, during the month of November 2019, Microsoft found that only 10 percent of device updates or connections to its services in Osage county were conducted at speeds of 25 Mbps download or greater.[38]

[35]FCC 477 data for June 2020. Our analysis of this data examined the availability of broadband at speeds of 25 Mbps download and 3 Mbps upload, or greater, excluding service provided through satellite.

[36]GAO-18-630.

[37]FCC is in the process of improving the accuracy of how it collects and reports data on locations that lack broadband access. For more information, see GAO, *Broadband: FCC Is Taking Steps to Accurately Map Locations That Lack Access,* GAO-21-104447 (Washington, D.C.: Sep. 28, 2021).

[38]NTIA, "NTIA Indicators of Broadband Need Map," (Washington, D.C.), accessed on October 20, 2021, https://broadbandusa.maps.arcgis.com. The NTIA Indicators of Broadband Need Map aggregates data from multiple sources on a number of different measures of broadband availability in the United States. Data on median speed tests are derived from speed test values recorded by Measurement Lab (M-Lab) and from Ookla Speedtest results, both collected from January to June 2020. Both M-Lab and Ookla calculated median speed test values for counties using a methodology that accounts for user test-taking practices that may skew the median for a given geography. Microsoft data is collected every time a device using Microsoft software receives an update or connects to a Microsoft service, and was collected during the month of November 2019.

Tribal stakeholders and federal agencies indicated that the lack of broadband service on tribal lands remains a consistent problem. More than half of the tribes and tribal providers we interviewed stated that there is still a lack of adequate broadband service within their tribal lands, and some noted that there are still areas without any service. For example, officials from the Choctaw Nation described a community where teachers could not assign homework that required research because the school was the only place that had broadband. FCC, in its most recent Broadband Deployment report, noted that "deployment of advanced telecommunications capability on certain tribal lands…lags behind deployment in other, non-tribal areas."[39] The COVID-19 pandemic exacerbated the digital divide on tribal lands—communities that are, as we have previously reported, disproportionately affected by a lack of broadband access.[40] In addition, the continued need for broadband access on tribal lands was highlighted in the applications for NTIA's Tribal Broadband Connectivity program, where applicants' funding requests totaled more than five times the initial amount of funding appropriated for the program.

Tribes and Broadband Providers Face Barriers in Accessing Federal Programs to Increase Broadband Access on Tribal Lands

Tribes and non-tribally owned broadband providers continue to face barriers to deploying broadband on tribal lands. These barriers fall into two main categories: (1) fragmented federal programs and (2) complex application requirements. These barriers limit the ability or interest of tribes and providers to participate in federal broadband programs.

Fragmented Federal Programs

Officials from tribes, tribal associations, and broadband providers told us that those seeking broadband funding are challenged by the many federal programs that create a fragmented approach to supporting broadband access. Fragmentation refers to those circumstances in which more than one federal program is involved in the same broad area of need and

[39]FCC, *Inquiry Concerning Deployment of Advanced Telecommunications Capability to all Americans in a Reasonable and Timely Fashion*. FCC 21-18, para.20 (Jan. 19, 2021).

[40]GAO-21-104447.

opportunities exist to improve service delivery.[41] Fragmentation has created barriers for tribes in navigating the number of programs, understanding and applying for the programs, and overcoming specific program rules and features.

Number of federal programs. As previously mentioned, 15 federal agencies administer over 130 programs that can support broadband access, a number that officials told us could be a challenge for tribes and providers to navigate. Several stakeholders raised the issue in our interviews. They said they may not have the time or resources to identify and learn which broadband programs are available due to the large number of federal programs. Many stakeholders said it was difficult to determine which of the many programs were most applicable to their needs, and several tribal stakeholders said they lack the time to research the programs. One of these providers noted that tribes generally focus more on grants for housing and subsistence living, and cannot spend time and resources reviewing all the broadband programs. Officials from a tribal association also stated that tribes may not always know what programs exist. As a result, tribes and providers may lack a complete understanding of the best program or programs to fit their needs.

Eligibility for programs. Officials from some stakeholders told us that eligibility for a given funding program is sometimes limited or prohibited by their participation in other funding programs. Some eligibility requirements are designed to avoid duplicative federal funding for broadband access in the same area. For example, census blocks receiving funds from RUS's ReConnect Program would be ineligible for funds from FCC's Rural Digital Opportunity Fund (RDOF).[42] Several tribal stakeholders said these requirements can present unintended challenges for tribes and tribal areas. Although a provider may have received funding to serve a tribal area and therefore be limited in its eligibility for funding through other programs, tribes do not always know if or when the broadband provider will deploy service on their lands. In 2019, FCC's

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

[42]FCC's RDOF program provides funds to bring high speed fixed broadband service to rural homes and small businesses that lack it. For Phase I of the Digital Opportunity Fund auction, FCC excluded census blocks which have been identified as having been awarded funding through the ReConnect Program or awarded funding through other similar federal or state broadband subsidy programs to provide 25/3 Mbps or better service. *In the Matter of Rural Digital Opportunity Fund Connect Am. Fund*, 35 F.C.C. Rcd. 686, ¶13 (2020).

Native Nations Communications Task Force report found that FCC program rules have allowed carriers to serve tribal areas at the end of program timeframes or drop tribal areas entirely.[43] As a result, even when providers in an area with tribal lands receive funding, tribal lands may be the last served, if they are served at all. For instance, according to the report, a reservation in California remained unserved for several years after funding was made available to broadband providers because decisions made at the state, local, and provider level delayed deployment to the tribal lands. According to FCC officials, FCC has moved toward requiring providers to build out service to 100% of locations within an authorized area, including on tribal lands, to ensure that no areas gets left behind. For example, RDOF requires providers to build out service to every location within an authorized area.

Eligibility challenges are worsened by known problems with broadband availability maps that inaccurately show some tribal areas that lack service as having service, according to our prior work and FCC's 2019 Native Nations Communications Task Force report.[44] As previously discussed, FCC's methodology overstates broadband availability by allowing entire geographic areas to be listed as "served" by broadband even when some locations within the area are not served.[45] The 2019 Native Nations Communications Task Force report also found that current maps over-report "served" census blocks, particularly in rural and remote areas, since deployment to one household within one census block can show that broadband is deployed to an entire census block.[46] As a result, while the intended purpose of some broadband programs is to address unserved locations, some tribal areas may be excluded from broadband funding despite lacking access to adequate broadband speeds or broadband service at all.

[43]Federal Communications Commission, *Native Nations Communications Task Force: Improving and Increasing Broadband Deployment on Tribal Lands* (Nov. 5, 2019).

[44]GAO-18-630.

[45]GAO-18-630.

[46]According to FCC officials, this issue is currently being addressed through its Broadband Data Collection. The Broadband Data Collection (BDC) is a new broadband availability data collection that will collect information on fixed broadband services at the location level, which FCC believes will address over-reporting and other issues with current reporting. The FCC has announced that the first collection of data in the BDC will commence on June 30, 2022.

Since 2020, federal agencies have created or revised program rules that address some of the eligibility challenges that tribal lands face. For instance, NTIA's Tribal Broadband Connectivity Program does not exclude tribal lands that have previously received federal broadband funding if certain requirements are met.[47] In addition, RUS released its most recent funding opportunity announcement for the ReConnect program in October 2021. This announcement included $350 million for grants to tribes and socially vulnerable communities. Tribal applicants, proposing to provide service to their tribal lands are not required to provide matching funds. Additionally, areas that do not have sufficient access to broadband but have received funding from FCC are eligible for these ReConnect grants. Areas receiving or under consideration for receiving a RDOF award could be eligible for these ReConnect program grants if certain criteria were met. Specifically, the applicant should explain why RUS should provide additional funding, such as if ReConnect funding will accelerate deployment, and certifies that the funds will be used for complementary purposes. Moreover, both of these programs will let tribes self-certify the level of available service, rather than relying solely on mapping data.

Program rules and features. Several stakeholders we spoke to raised the issue that the rules guiding broadband programs can present barriers to accessing funding and deploying broadband. For instance, in 2019 the Seneca Nation received a grant from Commerce's Economic Development Administration to develop a strategy to bring broadband to portions of its tribal lands. Later in 2019, Seneca Nation was awarded a RUS ReConnect grant to build the planned broadband network. However, according to RUS officials, program rules would not allow Seneca Nation to use the same engineering company for construction that they had used to design the network to prevent conflicts of interest.[48] Therefore, according to tribal officials, Seneca Nation used some of the ReConnect funds to pay another engineering company to inspect and certify the plans that had previously been done using the first grant. Officials said

[47]In areas where there is the potential duplication of funding with unconstructed projects that would provide qualifying broadband service or higher capacity to unserved areas, projects may still be eligible for the Tribal Broadband Connectivity Program if tribal governments have not authorized or commenced the use of the other funding on tribal lands.

[48]Government-wide grant regulations prohibit contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals from competing for such procurements in order to ensure objective contractor performance and eliminate unfair competitive advantage. 2 C.F.R. § 200.319(b).

that the program rules and processes did not improve the design but added costs and time to the project.

We also found that program rules can contribute to fragmentation by limiting funds to a "single-use" deployment—such as use only for clinics, schools, or libraries—which can make it difficult for tribes to reap wider benefits. In 2019, FCC's Native Nations Communications Task Force reported that the most significant barrier to broadband deployment on tribal lands are the requirements restricting federal funding to single-use deployments. For instance, E-rate funding may only be used to provide support for eligible broadband and telecommunications services or equipment provided to an eligible school or library for an eligible use.[49] If there is a clinic on the same street, it cannot use E-rate funding to connect that building to the school or library's E-rate funded broadband network. Instead, the clinic would have to seek out and apply for other funds, such as FCC's Rural Health Care support, to connect the clinic to a broadband network to receive services. As a result, the Task Force reported that tribes generally cannot leverage federally subsidized infrastructure to extend service to areas where there is limited or no coverage, or otherwise benefit from the efficiencies of connecting a multi-purpose facility, such as a community's building housing educational and healthcare services. Tribal officials highlighted the difficulty single-use deployments create in requiring tribes to piece together funding from various programs to create a comprehensive solution.

In addition, a broadband program feature may only support one part of developing or maintaining a network, thus requiring tribes and providers to piece together multiple programs to fund a broadband network, a situation that can present barriers. Programs may provide funding for planning, deploying, or operating a network but rarely does one program support all aspects. For example, the RUS ReConnect program generally provides funding for the construction or improvement of infrastructure to provide broadband services, but does not fund operating expenses.[50] A non-tribally owned provider said that the high costs of servicing low-density subscribers can easily make operating a network unprofitable even if the network deployment was fully financed, thus making providers look for additional funding to maintain the network. In addition, applying to

[49]GAO, *Telecommunications: FCC Should Take Action to Better Manage Persistent Fraud Risks in the Schools and Libraries Program,* GAO-20-606 (Washington, D.C.: Sept. 16, 2020).

[50]7 C.F.R. § 1740.12.

multiple programs is costly, time-consuming, and uncertain, according to many stakeholders.

FCC's 2.5 GHz Rural Tribal Priority Window featured an opportunity for tribes in rural areas to obtain free licenses for spectrum over their tribal lands that could be used for broadband but did not include funds for tribes to meet the buildout requirements. This created a barrier for some tribes that needed additional funding, planning, or training support. Some tribal stakeholders we spoke to said they are seeking funding from other federal programs to fund the buildout of infrastructure necessary to use the spectrum. In addition, one state created a technical assistance program to support tribes planning for communications networks using the 2.5 GHz licenses or other technology solutions. According to officials from the state broadband office, the program provides $150,000 in grants to tribes in their state to develop plans for using the spectrum, since there was no clear source of federal support.

Further complicating the management of multiple programs are challenges related to deployment timeframe rules. For instance, tribes that received a spectrum license from FCC's Rural Tribal Priority Window and that deploy certain technologies are required to demonstrate reliable signal coverage to 50 percent of the population in their geographic service area within 2 years after the license is granted.[51] The tribes are also held to final build-out requirements, and failure to meet these requirements by the specified deadline results in cancellation of the license. An official from a tribally owned provider told us that tribes that currently do not provide broadband services may find the buildout timeframe requirement too short to identify and apply for federal funds needed to support the buildout. One stakeholder that helped numerous tribes apply for the spectrum noted how frustrating it would be for tribes to take the time and effort to apply for and receive the license just to lose it because they lacked the technical expertise to meet the build out requirement.

Barriers to Applying

Tribes and providers cited barriers that discourage or make it difficult to apply for broadband funding from federal programs, such as a complex application process and the requirement for matching or upfront funds for

[51] 47 C.F.R. § 27.14(u)(5). FCC requires licensees to put their spectrum to use and meet performance requirements depending on the specific service they are offering.

some programs. Any of these application barriers may cause a tribe or provider to choose not to apply for program funding.

Complex application process. Federal broadband program applications have complex requirements that can present barriers for all applicants, including tribes and tribal providers. According to our prior work and many stakeholders, the complexity of the applications necessitates that some applicants hire paid consultants.[52] In 2018, we reported that complying with regulatory requirements for RUS Community Connect grants could be a challenge for tribes, in part, because the program requires applicants to submit information on the network's design that includes all the technical information on the applicant's existing and proposed network.[53] According to a tribal association we spoke to, most tribes do not have the expertise in house to build and maintain their own broadband network, and cannot provide this information without outside assistance.

We previously reported that applications for funding may also be difficult to navigate without experience and understanding of the bureaucratic process.[54] A stakeholder we spoke to told us that for the most part, schools could not successfully apply for E-rate funding on their own. The stakeholder said schools need someone with experience who understands the application and bureaucratic process, because it is easy for schools to make mistakes in the application process. For instance, schools may unknowingly not fill out all of the required forms, resulting in the application being denied. Furthermore, NTIA received many comments from tribes indicating that competitive programs put many tribes at a disadvantage, largely due to a lack of resources or capacity to submit competitive applications.[55] As we previously reported, this situation can result in some tribes and broadband providers hiring consultants with no guarantee that their application will be approved.[56]

[52]GAO-16-222.

[53]GAO-18-682.

[54]GAO-16-222.

[55]NTIA invited tribal leaders to participate in online tribal consultation webinars in February 2021 to seek input on NTIA's implementation of the Tribal Broadband Connectivity Program. NTIA received written and oral comments from tribal leaders, representatives, and stakeholders.

[56]GAO-18-682.

Requirements for matching or upfront funding. We previously reported that federal broadband programs may have requirements to match or provide upfront funds from non-federal sources that are difficult for tribes to meet.[57] In addition, several stakeholders we met with identified this persistent challenge. While matching funds ensure that the applicants have a financial stake in the project's success, two tribal stakeholders said it was a challenge for tribes to participate in programs that had those requirements. Similarly, the requirement for upfront funding deterred two tribally-owned providers we spoke to from pursuing federal broadband funding programs.

Other broadband programs that require upfront funding reimburse grantees after the grantee spends money. For example, RUS's Community Connect program reimburses grantees as money is spent rather than provide the funds upfront, which officials from three providers said was difficult due to their limited access to capital. Officials from some providers we spoke to noted that the reimbursement process can be lengthy; in one case the reimbursement process took years. In addition, we previously reported that in general, tribes cannot collateralize tribal property, making it difficult to obtain bank loans for upfront funding.[58] In 2019, FCC's Native Nations Task Force reported that the inability to collateralize property is unique for tribes and leaves them heavily dependent on federal aid programs for development of broadband networks.[59]

Furthermore, the upfront funding needed to complete the application itself can be costly. For instance, officials from one tribally owned provider told us that they had spent close to $650,000 towards meeting engineering requirements to apply for a $9 million loan. Officials from some stakeholders told us that the high costs of applying meant they avoid programs with smaller amounts of funding available.

Other Barriers to Broadband Access on Tribal Lands

Lack of sufficient operating funds. According to many stakeholders, broadband providers are generally unable to operate and maintain networks on tribal lands by generating revenue from the subscriber base alone. For instance, a non-tribally owned provider we spoke to relies on FCC High Cost programs to sustain its network on tribal lands. Similarly,

[57]GAO-18-682.

[58]GAO-18-682.

[59]FCC, *Native Nations Communications Task Force* (2019).

a tribally owned provider we spoke to relies on tribal subsidies to sustain its network but said that not all tribes have alternate sources of income that can subsidize the operational expenses of a broadband network.

FCC's High Cost program is the primary source of federal funding to sustain a network, but we previously reported that very few tribes are eligible for this source of funding.[60] To be eligible for High Cost program support, a provider must be designated an eligible telecommunications carrier (ETC) by the appropriate state or by FCC. Under FCC rules, which many state programs mirror, ETCs must meet certain service obligations, such as providing voice service and demonstrating their ability to remain functional in emergencies. Some tribal stakeholders told us that providers may or may not choose to meet these requirements because they are costly and cumbersome. Providers that cannot or choose not to meet these requirements to be designated an ETC are therefore ineligible for these funds. We previously reported that as of 2018, FCC officials told us 11 tribes had their own provider that is designated as an ETC and would therefore be eligible to receive High Cost funding.[61]

Unique permitting environment on tribal lands. For projects on certain tribal lands, permission from and approval by tribes, individuals, and BIA are required, but the additional effort to obtain these permissions and approvals may have unintended consequences.[62] Several stakeholders said that obtaining additional permissions and permits required from individual tribes and, for certain tribal lands approval from BIA in order to deploy broadband on tribal lands, may delay deployment and increase costs, potentially deterring providers. Officials from a tribally owned provider told us that because it takes longer to get through the approval processes than on non-tribal lands, the process is more costly and can deter non-tribally owned providers from delivering service on tribal lands. The same officials also told us that broadband providers may avoid building broadband on tribal lands because of the uncertainty in the approval process. An official from a non-tribally owned provider we spoke to said that the additional reviews and requirements to obtaining rights to build on tribal lands made broadband deployment on tribal lands more challenging. In 2021, BIA updated its policies to simplify and streamline

[60]GAO-18-682.

[61]GAO-18-682.

[62]Generally, use of trust and restricted fee land requires permission of the tribe or individual Indians and approval of the Secretary of the Interior.

the approval process to deploy broadband on tribal lands.[63] For instance, applicants may submit one application for multiple contiguous tracts rather than submitting one application per tract.

Federal Coordination Lacks a National Strategy and Organizational Framework That Focuses Attention on the Tribal Broadband Gap

To better manage the fragmented landscape of federal broadband programs, federal agencies have increasingly sought to coordinate their efforts, with the Executive Office of the President taking the lead through the National Economic Council (NEC) and other offices. These offices have also taken the lead on coordination efforts focused on tribal broadband. However, the NEC has not developed a national strategy to guide these efforts, particularly for those efforts on tribal lands. Furthermore, coordination efforts amongst federal agencies lack an organizational framework focused on reducing the persistent gap in broadband service on tribal lands.

Federal Coordination Efforts

NEC and federal agencies have employed several types of interagency coordination efforts to help manage federal broadband programs. However, there is no overarching strategy that synchronizes these efforts by establishing clear roles, goals, and performance measures to work towards. In addition, most of these efforts do not have a tribal focus.

NEC leads tribal broadband efforts. Staff from the Executive Office of the President said the NEC, Domestic Policy Council, and other offices within the Executive Office of the President took the lead on tribal broadband efforts in 2021. According to NEC staff, they established the Tribal Broadband Coordination Committee, which has representatives from the NEC, Domestic Policy Council, NTIA, RUS, FCC, and Interior. NEC staff stated that the committee coordinates on outreach to tribes and the implementation of new funding programs established by the Infrastructure Investment and Jobs Act and other recent legislation.

American Broadband Initiative. The American Broadband Initiative (ABI) is the current iteration of an interagency coordination group for broadband issues, but it lacks a tribal focus. According to FCC, RUS, and NTIA officials, ABI does not have regular discussions about tribal barriers

[63]Department of the Interior, Bureau of Indian Affairs, *Streamlining the Rights-of-Way (ROW) Application Process for Telecommunications Projects,* NPM-TRUS-40 (Washington, D.C.: May 5, 2021). BIA's National Policy Memorandum states that it expires on May 5, 2022.

to broadband access. The ABI has a mission to "… drive change across Federal Agencies to better leverage public assets and resources through partners to expand our Nation's broadband capacity."[64] To accomplish this mission, ABI has cross-agency working groups—called "workstreams"—related to federal funding programs, streamlining federal permitting, and leveraging federal assets. These workstreams provide the framework to implement coordination efforts and address issues within their specific jurisdictions. However, ABI has not established a framework for addressing tribal issues. In January 2021, Interior recommended that the ABI create a tribal workstream to help reduce barriers and improve outreach, among other actions.[65] The Department of Commerce agreed that a framework for focusing on tribal issues is necessary but believed it could create such a framework within existing vehicles. Without a framework to focus on tribal issues either through a new workstream or within the existing ABI structure—possibly by adding a tribal subcommittee or standing agenda item to the existing workstreams—agencies could continue to struggle to reach the tribes that most need broadband assistance .

Interagency agreements and discussions. In recent years, FCC, RUS, and NTIA have entered into interagency working agreements that provide a foundation for sharing information about their respective broadband programs but lack a specific focus on tribal needs. In June 2021, in response to a requirement in the Consolidated Appropriations Act of 2021, FCC, USDA, and NTIA developed and signed a memorandum of agreement to share information on their broadband deployment funding programs, including existing or planned projects. However, the agreement does not include language on ways the agencies will share information to support tribes and their tribal access to funding programs. RUS has also entered into separate agreements with FCC and NTIA to coordinate their efforts supporting broadband access in rural areas and share information on broadband availability, respectively. FCC officials stated they

[64]American Broadband Initiative, *Milestones Report* (Feb. 2019). The ABI defined three core principles to support its missions. These principles are, 1) government processes should be clear, transparent, and responsive to stakeholders; 2) federal assets should provide the greatest possible benefit to stakeholders and the public; and 3) the Federal Government should be a good steward of taxpayer funds.

[65]Department of the Interior, *National Tribal Broadband Strategy* (Jan. 15, 2021). Interior's strategy was developed in collaboration with other agencies and recommends 28 activities to address barriers to broadband deployment on tribal lands, such as lack of coordination, insufficient funding, and complex permitting.

coordinate with NTIA and RUS on tribal broadband issues in regular conversations as part of the interagency agreements and on an ad hoc basis.

New office within NTIA. The Consolidated Appropriations Act, 2021 established an Office of Internet Connectivity and Growth at NTIA, and charged the new office with interagency coordination responsibilities for broadband.[66] NTIA officials indicated that they plan to use the ABI as it is currently structured to implement the law's coordination requirements, but as mentioned, that structure lacks a tribal focus. Another responsibility for this office is to oversee the new Tribal Broadband Connectivity Program. According to NTIA, this will include outreach and coordination with tribes about this new program, as well as coordination with FCC and RUS. Furthermore, the new NTIA office will be responsible for consulting with agencies offering federal broadband support programs to streamline and standardize the application process, a barrier tribes have faced.

Agency broadband plans. FCC and Interior have developed broadband plans that include tribal focus, but neither plan is currently guiding federal efforts. FCC's National Broadband Plan from 2010 included goals for expanding use on tribal lands, but officials from several agencies and the Executive Office of the President told us they no longer recognize it as a current national broadband strategy.[67] Interior released a Tribal Broadband Strategy in January 2021 to encourage interagency coordination to increase broadband access on tribal lands, but according to agency officials, Interior lacks the resources or tools to oversee

[66]The Consolidated Appropriations Act, 2021 gave NTIA's Office of Internet Connectivity and Growth significant responsibilities related to coordinating federal broadband support programs. For example, the Office is required to track the construction and use of and access to any broadband infrastructure built with federal support. The law also tasks agencies with federal broadband funding programs to coordinate their work with NTIA with the goals of serving the largest number of unserved locations, ensuring all residents have access to high-speed broadband, and promoting job and economic growth for residents of the United States. Pub. L. No. 116-260, div. FF, tit. IX, § 903, 134 Stat. at 3210-13 (codified at 47 U.S.C. § 1307).

[67]The plan set out several broad goals to be accomplished by 2020. In the 116th Congress, legislation was introduced to require FCC to update the national broadband plan and annually report on its progress in achieving the goals of the plan. National Broadband Plan for the Future Act of 2021, S. 279, 117th Cong. (2021); H.R. 870, 117th Cong. (2021). See also, National Broadband Plan for the Future Act of 2020, S. 4022, 116th Cong. (2020).

implementation of the strategy. In addition, NEC staff said the Interior strategy has not guided their efforts to close the tribal broadband gap.

Other coordination efforts. Agencies employ other coordination efforts that aim to avoid potential duplication, to increase awareness of federal programs for tribes, and to conduct joint outreach to tribes. For example, federal agencies coordinate to conduct an annual conference on federal broadband funding programs for tribes. Since 2019, Interior has partnered with several agencies on the National Tribal Broadband Summit.[68] This event included summaries of various federal funding programs and success stories from tribes that have received funding and deployed broadband networks. FCC staff also stated that when they conduct outreach to tribes they invite staff from RUS to join these meetings.

Tribal Broadband Efforts Are Not Guided by a National Strategy

Neither efforts by the Executive Office of the President nor Interior's 2021 Tribal Broadband Strategy has established a recognized national strategy to guide all the related federal programs. While staff from the Executive Office of the President said the NEC, Domestic Policy Council, and other offices within the Executive Office of the President took the lead on tribal broadband efforts in 2021, the administration has not yet determined if a national strategy is needed.[69] As stated earlier, Interior does not have the resources to implement its 2021 Strategy and it has not been used by the Executive Office of the President.

Our past work has shown that complex, interagency efforts can benefit from the focus of a national strategy.[70] While interagency coordination can help agencies and those they support, broad and challenging goals like increasing broadband access on tribal lands may require a national strategy.[71] Our prior work also identified desirable characteristics of a

[68]Interior collaborated with Commerce, USDA, DOT, FCC, Institute of Museum and Library Services, and the White House Council on Native American Affairs to plan the 2021 National Tribal Broadband Summit.

[69]The National Economic Council advises the President on US and global economic policy and is leading broadband efforts within the White House. The Domestic Policy Council drives the development and implementation of the President's domestic policy agenda in the White House and across the Federal government.

[70]GAO, *Biosurveillance: Efforts to Develop a National Biosurveillance Capability Need a National Strategy and a Designated Leader,* GAO-10-645 (Washington, D.C.: June 30, 2010). GAO, *Combating Terrorism: Selected Challenges and Related Recommendations*, GAO-01-822 (Washington, D.C.: Sept. 20, 2001).

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

national strategy, including clear organizational roles, goals, and performance measures to gauge and to monitor results.[72] Clear roles, goals, and performance measures could help align efforts to more effectively reduce the persistent barriers tribes face in accessing federal programs in part by helping agencies align program rules, eligibility, and application requirements.

FCC, NTIA, RUS, and Interior, officials stated that a new national strategy led by Executive Office of the President could help focus and coordinate their individual efforts. In a May 2022 report, we recommended the Executive Office of the President develop a national broadband strategy for these purposes.[73] FCC, NTIA, RUS, and Interior have recognized that a special focus on tribes is needed to close the gap. This need was further echoed by the Denali Commission stating that such a focus could help bring minimum network capabilities that are affordable to tribes. Greater direction through a national strategy with a tribal focus developed by the Executive Office of the President could guide agencies in working more collaboratively to close the digital divide for this historically underserved population.

American Broadband Initiative Lacks a Framework to Address Tribal Broadband Barriers

The federal government has increased the number of mechanisms for coordinating efforts related to broadband programs generally, but these efforts lack an ongoing framework that focuses on tribal broadband. Along with the Tribal Broadband Coordination Committee led by the Executive Office of the President that we described above, there are other structured coordination mechanisms for federal broadband programs. Key among those efforts is the ABI, which is used to implement coordination efforts. NTIA co-chairs ABI with USDA, and NTIA officials said that it intends to use ABI to fulfill its government coordination requirements. As previously stated, ABI does not have regular discussions about tribal barriers to broadband access.

Tribal stakeholders we interviewed identified an ongoing need for improved coordination to help tribes overcome barriers to accessing federal broadband programs. For example, four tribal stakeholders indicated that better interagency coordination is needed to reduce barriers, such as better leveraging funding from multiple programs. One

[72]GAO, *Combating Terrorism: Evaluation of Selected Characteristics in National Strategies Related to Terrorism*, GAO-04-408T (Washington, D.C.: Feb. 3, 2004).

[73]GAO, *Broadband: National Strategy Needed to Guide Federal Efforts to Reduce Digital Divide*, GAO-22-104611 (Washington D.C.: May 31, 2022).

stakeholder stated that better coordination between agencies could help stop duplication of efforts that come from so many federal programs and prevent pitfalls that challenged previous programs. For example, as previously stated, program rules can limit access to funding. We have previously reported that coordination efforts, if done effectively, can help the federal government better manage fragmented programs by aligning goals and leadership on common issues.[74] Creating a framework for focusing on tribal issues to help implement a national strategy within the federal government's longstanding broadband coordination body will help agencies reduce key barriers that have contributed to the gap in broadband availability.

Conclusions

Tribal lands continue to lack broadband access at a time when such access is growing more critical for health care, education, jobs, economic development, and overall quality of life. The federal government recognized the importance of broadband access and, from 2015 through 2020, provided at least $44 billion through over 130 programs for broadband support throughout the U.S. However, only a small percentage benefited tribes, and generally benefited the largest tribes in states with the largest tribal populations. Further, in 2020 and 2021 Congress appropriated billions to support broadband access on tribal lands. However, tribes may continue to struggle to identify, to understand, and to access federal broadband programs, and NTIA's new program specifically designed to fund broadband on tribal lands already has demand far in excess of the available funding.

The persistent lag in broadband access on tribal lands will require focused efforts to close. But the federal government lacks a current national broadband strategy with clear roles, goals, and performance measures for closing the digital divide on tribal lands. The Executive Office of the President took the lead in tribal coordination in 2021 but has not yet determined if a national strategy is needed. The Executive Office of the President is well positioned to develop and oversee a national strategy that contains a tribal focus to help address the persistent broadband gap. ABI is the ongoing body comprised of agencies that could help implement any strategy but it lacks a framework for addressing tribal barriers to accessing programs. Without a national strategy and an implementing framework within ABI to focus tribal efforts, broadband

[74]GAO-12-1022.

access for people living on tribal lands will continue to lag behind the rest of the country, perpetuating the digital divide.

Recommendations for Executive Action

We are making two recommendations, one to the Executive Office of the President and one to the Department of Commerce:

The Executive Office of the President, through the National Economic Council, should develop a national strategy with clear roles, goals, and performance measures for closing the gap in broadband access on tribal lands as part of a broader national broadband strategy. (Recommendation 1)

The NTIA Administrator should establish a framework within the American Broadband Initiative for addressing tribal barriers. Such a framework could include adding a tribal subcommittee or standing agenda item to the existing workstreams or establishing a new workstream. (Recommendation 2)

Agency Comments

We provided a draft of this report for review and comment to Commerce, USDA, FCC, the Executive Office of the President, and the other agencies we identified in appendix I. In written comments, Commerce agreed with our recommendation to create a framework for addressing tribal issues and indicated that such a framework could be developed through existing mechanisms. In response, we added context to our report and second recommendation indicating that such a framework could be created within the existing ABI framework. We reproduced the Commerce's comments in appendix III.

The White House did not agree or disagree with our recommendation but emphasized the importance of tribal engagement as part of the development of a national strategy and a framework within the ABI. Furthermore, the White House stated it anticipates engaging with tribes as part of this process.

FCC, USDA, Interior, Treasury, and the Denali Commission all provided technical comments that we incorporated as appropriate. The Department of Education, Department of Housing and Urban Development, Department of Labor, Department of Transportation, Appalachian Regional Commission, and Northern Border Regional Commission all told us they did not have comments on the draft report.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the

report date. At that time, we will send copies to the appropriate congressional committees, the Executive Office of the President, the Secretary of Commerce, the Chair of the FCC, the Secretary of Agriculture, the Secretary of the Interior, and other relevant agencies, as well as other interested parties. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me 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 report. GAO staff who made key contributions to this report are listed in appendix IV.

Andrew Von Ah
Director, Physical Infrastructure

Appendix I: List of Stakeholders Interviewed

Table 2: List of Stakeholders Interviewed

Tribal stakeholders (tribal governments, broadband providers owned by tribes, tribal associations, tribal companies, and nonprofit organizations)
Akiak Native Community (AK)/Akiak Technology, LLC
Alaska Tribal Spectrum
AMERIND
Chitimacha Tribe of Louisiana (LA)
The Choctaw Nation of Oklahoma (OK)
Confederated Tribes of the Warm Springs Reservation of Oregon (OR)/Warm Springs Telecom
Gila River Indian Community of the Gila River Indian Reservation, Arizona (AZ)/Gila River Telecommunications, Inc.
Mescalero Apache Tribe of the Mescalero Reservation, New Mexico (NM)/Mescalero Apache Telecom, Inc.
National Congress of American Indians
National Tribal Telecommunications Association
Saint Regis Mohawk Tribe (NY)/Mohawk Networks, LLC
Salt River Pima-Maricopa Indian Community of the Salt River Reservation, Arizona (AZ)/Saddleback Communications
Seneca Nation of Indians (NY)/Seneca Energy, LLC
Southern California Tribal Chairmen's Association
Tohono O'odham Nation of Arizona (AZ)/Tohono O'odham Utility Authority
Yurok Tribe of the Yurok Reservation, California (CA)/Yurok Connect
Private broadband providers
Alaska Communications
Beehive Telephone Company
Emery Telcom
Frontier Communications
Golden West Telecommunications Cooperative
Hawaiian Telcom
Lumen Technologies/CenturyLink
Pine Telephone Company
Sacred Wind Communications
Windstream Communications
Other stakeholders
California Public Utilities Commission
CTC Technology and Energy
Internet Society
Magellan Advisors
Yavapai County, Arizona Education Service Agency

Source: GAO. | GAO-22-104421

Table 3: List of Federal Stakeholders Interviewed

Federal Stakeholders
Appalachian Regional Commission
Delta Regional Authority
Denali Commission
Department of Agriculture
Department of Commerce
Department of Education
Department of Housing and Urban Development
Department of Labor
Department of the Interior
Department of the Treasury
Department of Transportation
Executive Office of the President – Domestic Policy Council
Executive Office of the President – National Economic Council
Executive Office of the President – Office of Science and Technology Policy
Federal Communications Commission
Institute of Museum and Library Services
Northern Border Regional Commission

Source: GAO. | GAO-22-104421

Appendix II: Objectives, Scope, and Methodology

This report examines (1) the extent to which federal funding programs have supported deployment of broadband infrastructure on tribal lands; (2) the barriers faced by tribes and broadband providers to accessing federal broadband funding programs to serve tribal lands; and (3) the extent to which federal agencies focus on tribal issues related to broadband access.

To understand how federal funding programs have supported broadband deployment and access on tribal lands, we identified federal agencies that had programs that could be used to support broadband access on tribal lands from National Telecommunications and Information Administration's (NTIA) Broadband USA Federal Funding Guide (2020) and conducted analysis of data from key programs. We specifically analyzed data on Federal Communication Commission's (FCC) High Cost program from 2015 through 2020 to determine the number of broadband deployments made on tribal lands. We analyzed publicly available data on deployment locations from the Universal Service Administrative Company's (USAC) open data website.[1] We used the geographic coordinates reported by providers to map all deployment locations supported by the High Cost program, from 2015 through 2020. We then overlaid U.S. Census Bureau's geographic data on tribal lands to determine which deployment locations were within the boundaries of tribal lands.[2]

We also analyzed data on FCC's E-rate program from 2016 through 2020 to determine the number of E-rate recipient schools and libraries that may be recognized or recognize themselves as tribal schools and libraries, and the amount of support they received. Specifically, we analyzed publicly available data on E-rate recipients from USAC's open data website and data on tribal schools and libraries from other relevant

[1]USAC, *USAC Open Data*, accessed May 24, 2021, https://opendata.usac.org/.

[2]For the purposes of this report, we used the term tribal lands as defined in FCC's Fourteenth Broadband Deployment Report. FCC's definition of tribal lands includes (1) Joint Use Areas; (2) legal federally recognized American Indian area consisting of reservation and associated off-reservation trust land; (3) legal federally recognized American Indian area consisting of reservation only; (4) legal federally recognized American Indian area consisting of off-reservation trust land only; (5) Statistical American Indian area defined for a federally recognized tribe that does not have reservation or off-reservation trust land, specifically a tribal designated statistical area or Oklahoma Tribal Statistical Area; (6) Alaskan Native village statistical area; and (7) Hawaiian Home Lands established by the Hawaiian Homes Commission Act of 1921. FCC, *In re Inquiry Concerning Deployment In re Inquiry Concerning Deployment of Advanced Telecommunications Capability to all Americans in a Reasonable and Timely Fashion*. FCC 21-18, para.20 n.84 (Jan. 19, 2021) (Fourteenth Broadband Deployment Report).

agencies.[3] We geocoded the addresses of E-rate recipient schools and libraries from USAC's data on E-rate recipients to map all E-rate recipient schools and libraries from 2016 through 2020.[4] We then overlaid U.S. Census Bureau's geographic data on tribal lands to determine which schools and libraries were located on tribal lands. We used Department of the Interior Bureau of Indian Education data to identify E-rate recipient schools that were tribally or Bureau of Indian Education-operated.[5] Finally, we used Institute of Museum and Library Services' Public Library Survey data from 2018 to identify E-rate recipient libraries that were under the jurisdiction of tribal governments.

To assess the reliability of FCC's High-Cost and E-rate program data, we conducted electronic testing and analysis of the data, reviewed agencies' guidance and documentation, and interviewed agency officials about the accuracy and reliability of their data. Based on the results of our reliability assessment, we determined the data to be reliable for our purposes, which were: (1) to estimate the number of FCC High Cost program broadband deployments located on tribal lands; (2) estimate the number of tribal schools and libraries that received E-rate support and the amount of E-rate support they received; and (3) present agency-reported data on how their programs supported broadband on tribal lands.

We also analyzed FCC data on the availability of fixed broadband—at speeds of 25 Megabits per second (Mbps) download and 3 Mbps upload—on tribal and non-tribal lands, as of June 2020.[6] Providers currently report this information to FCC by filing a "Form 477" twice a year. Although our prior work has found that FCC's Form 477 data lacks accuracy and overstates the number of Americans with broadband access, we believe these data represent the best snapshot of fixed broadband availability. Therefore, we used these data to report estimates

[3]E-rate applicants may self-identify as a tribal entity if (1) the majority of students or library patrons served are tribal members; (2) the school or library is located partially or entirely on tribal land; (3) the school is operated by or receives funding from the Bureau of Indian Education; or (4) the school or library is operated by a tribal nation.

[4]FCC's data on E-rate program recipients and the amount of support they received was only available back to 2016.

[5]BIE, *Bureau of Indian Education Schools Directory*, accessed on March 9, 2021, https://www.bie.edu/schools/directory.

[6]FCC, *Fixed Broadband Deployment: Compare Broadband Availability in Different Areas*, accessed on June 25, 2021, https://broadbandmap.fcc.gov/#/area-comparison?version=jun2020&tech=acfw&speed=25_3&searchtype=tribal.

on the percentage of the population that has access to fixed broadband at speeds of at least 25 Mbps upload and 3 Mbps download, with the appropriate explanations of its limitations.[7]

In addition to FCC, we requested and reviewed data on Department of Agriculture's (USDA) Rural Utility Service (RUS) telecommunications programs—Broadband ReConnect, Community Connect, Distance Learning and Telemedicine, Rural Broadband Access, and Telecommunications Infrastructure Programs. RUS provided reports on estimated funding from each program that went to tribal and trust lands from 2015 through 2020. According to RUS, to estimate the amount of funding that is used to serve tribal lands, it conducts an overlap analysis of funded service areas and tribal lands.[8] To assess the reliability of the data RUS provided, we reviewed RUS documentation on how it determines the estimated amount of funding that was used to serve tribal lands, and interviewed knowledgeable agency officials about the accuracy and reliability of their data. Based on the information provided by RUS, we determined the data were sufficiently reliable for the purposes of our reporting objectives.

To understand the size of tribal lands and to contextualize broadband deployments and funding, we analyzed U.S. Census Bureau's American Community Survey data, collected from 2015 through 2019. Specifically, we analyzed data on the population who lived on tribal lands and the number of housing units located on tribal lands. Margins of error and confidence intervals are provided at the 95 percent confidence level.

We also interviewed agency officials from FCC, RUS, and the 11 other agencies that oversee funding programs and reviewed relevant reports to understand how federal funding programs have supported broadband deployment and access on tribal lands. We interviewed agency officials to understand the rules overseeing the programs and to understand how funding from the programs could be used for broadband activities. Also, we used the interviews to determine if the program had been used for broadband deployment and access on tribal lands and whether they had data on the amount of funding that supported broadband deployment. For

[7]See GAO, *Broadband Internet: FCC's Data Overstate Access on Tribal Lands*, GAO-18-630 (Washington, D.C.: Sept. 7, 2018).

[8]RUS uses a more expansive definition of tribal lands than the one used by FCC for its analysis of the estimated amount of funding that was used on tribal lands. In addition to the tribal lands included in FCC's definition, RUS also includes State American Indian Reservations and State Designated Tribal Statistical Areas.

many of the agencies we interviewed, the programs they oversee do not directly support broadband deployment and access but are an allowed expense as part of the programs. In these cases, we did not collect data because the data was not readily available or was not tracked to the level to determine if broadband was one of the expenses.

To understand the perspectives of the recipients and beneficiaries of federal funding support for broadband deployment and access, we interviewed 31 stakeholders who included officials from tribes, tribally owned broadband providers, non-tribally owned broadband providers, and tribal associations or organizations that work with tribes. (See app. I for complete list of stakeholders we interviewed and federal agencies we contacted.) We interviewed officials from 11 tribal governments or tribally owned providers to understand the federal programs and benefits that tribes directly experienced as a result of federal funding that supported broadband deployment and access. We selected these tribes and tribally owned providers based on geography, receipt of federal funding for broadband deployment and access, and funding from a variety of federal programs. We also interviewed officials from ten privately owned broadband providers whom we selected based on size, geography, and whether they received federal support to serve tribal lands, among other factors. Finally, we interviewed representatives from five tribal associations or organizations that work with tribes to further understand how federal programs benefit tribes. The views obtained from these interviews are not generalizable to all tribes, all broadband providers, or all industry stakeholders.

To understand the challenges that tribes and providers serving tribal lands face in obtaining and using federal funds for broadband deployment and access, we interviewed officials of tribal governments, tribally owned and privately owned providers, and tribal organizations that work with tribes. For reporting purposes, we developed the following series of indefinite quantifiers to describe collective responses from the 31 stakeholders we interviewed including: “some” (five to six); “several” (seven to nine); and “many” (10 or more). Of the 31 stakeholders, we categorized 16 as tribal stakeholders which consists of 3 tribes, 5 tribal associations, tribally-owned company (not broadband providers), or non-profit, and 8 tribally owned broadband providers. Of the 31 stakeholders, we also categorized 18 as broadband providers, which consists of 8

tribally owned providers and 10 non-tribally owned providers.[9] For describing responses from the groups categorized as tribal stakeholders and broadband providers, we used the quantifiers: “some” (two to four) and “several” (five or more). We spoke with tribes and tribally owned providers to understand the challenges they faced in applying for and using federal funds. Also, we asked about how federal agencies coordinate and provide support to tribes and providers and what more federal agencies could provide to coordinate and support tribes accessing federal funding.

We also reviewed reports related to challenges to broadband deployment and access on tribal lands. Specifically, we reviewed FCC’s annual Broadband Deployment reports, FCC’s 2019 Report on Broadband Deployment in Indian Country, and the 2019 Native Nations Communications Task Force report on Improving and Increasing Broadband Deployment on Tribal Lands, among others. Further, we attended national summits, conferences, and webinars related to tribal broadband issues to gain further insights to the challenges and barriers faced by tribes. In particular, we attended Department of the Interior’s National Tribal Broadband Summit, Internet Society’s Indigenous Connectivity Summit, and NTIA/s consultations on their Tribal Broadband Connectivity Program. Finally, we reviewed prior GAO reports on barriers to broadband deployment and access on tribal lands.

To understand how federal agencies viewed the challenges that tribes and providers face and how they coordinate to work together with tribes and providers, we interviewed officials from federal agencies and the Executive Office of the President, and reviewed relevant reports. We spoke with officials at federal agencies about what they view as the challenges tribes face both in accessing federal funding and in deploying and accessing broadband. We also interviewed officials from federal agencies and the Executive Office of the President about how the agencies coordinate with other federal agencies around tribal issues and how they work with tribes and providers to support their access to funding and deployment of broadband. We also reviewed reports and documentation on federal coordination efforts around broadband. In particular, we reviewed documentation related to NTIA’s American Broadband Initiative to understand the extent to which the workgroups within the initiative focus on tribal broadband issues. We also reviewed

[9]Tribally owned broadband providers were considered both tribal stakeholders and broadband providers for our analysis.

memoranda of understanding between FCC, USDA, and NTIA related to coordination and sharing of information regarding their broadband programs. Finally, we compared these actions agencies have taken to coordinate with leading collaboration practices used in coordination efforts to assess if there were additional actions the federal government could take to support tribes.

We conducted this performance audit from July 2020 to June 2022 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.

Appendix III: Comments from the Department of Commerce

UNITED STATES DEPARTMENT OF COMMERCE
Office of the Chief Financial Officer and
Assistant Secretary for Administration
Washington, D.C. 20230

June 3, 2022

Mr. Andrew Von Ah
Director, Physical Infrastructure Issues
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Mr. Von Ah:

Thank you for the opportunity to respond to the GAO draft report entitled GAO-22-104421, *TRIBAL BROADBAND: National Strategy and Coordination Framework Needed to Increase Access.* The Department of Commerce appreciates the work the GAO has done to understand the range of federal broadband funding programs and how the government coordinates these programs.

GAO made two recommendations in this report, including one for NTIA. On behalf of the Department of Commerce, I have enclosed comments to the proposed report from NTIA that address the specific GAO recommendation. The Department agrees with the recommendations for NTIA in part and proposes an alternative to the recommended vehicle to address Tribal issues. I understand that EDA has provided technical comments on the draft report directly to GAO.

If you have any questions, please contact MaryAnn Mausser, Department GAO Audit Liaison, at (202) 482-8120 or mmausser@doc.gov.

Sincerely,

JEREMY PELTER

Digitally signed by JEREMY PELTER
Date: 2022.06.03 14:45:47 -04'00'

Jeremy Pelter

Acting Chief Financial Officer and
Assistant Secretary for Administration

Enclosure: NTIA Response to Recommendations

ENCLOSURE

RESPONSE OF THE NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION TO RECOMMENDATIONS

GAO REPORT 22-104421

Recommendation 2. The NTIA Administrator should establish a framework within the American Broadband Initiative for addressing tribal barriers.

Response: NTIA believes that a framework to focus on addressing tribal barriers is necessary but suggests that goal is best achieved through existing vehicles rather than establishing a new American Broadband Initiative (ABI) workstream. Though agency Tribal coordinators participate in existing ABI workstreams, the breadth of participants make those forums optimal for maintaining a holistic view of programs and actions and allow for collaboration across diverse organizations and communities (Tribal, HBCUs, State governments, etc.) rather than focused solely on a particular population. By moving Tribal programs and coordinators to a standalone workstream within ABI, NTIA risks fragmenting the existing workstream and undermining the whole of government goal for ABI collaboration.

NTIA has taken a targeted approach to address tribal barriers to broadband access through the Tribal Broadband Connectivity Program (TBCP) and coordination efforts with the Executive Office of the President (EOP). With TBCP, NTIA works directly with American Indian, Alaska Native, and Native Hawaiian communities in a way that allows for direct feedback and fits their individual needs and circumstances. Multiple Tribal Consultations and listening sessions were held to inform the development of the TBCP Notice of Funding Opportunity and after its release NTIA held 10 national webinars, participated in 55 national and regional engagements and technical assistance workshops, and our staff directly contacted over 350 tribal governments known to be without qualifying broadband service, twice, to ensure awareness of the Tribal Broadband Connectivity Program.

NTIA is also coordinating with the White House Council on Native American Affairs (WHCNAA) and the White House National Economic Council (NEC). Both the NEC and WHCNAA have served to facilitate and disseminate tribal focused information, including tribal consultation. The NEC has formed a tribal broadband subcommittee consisting of NTIA, USDA, FCC, Treasury and DOI. Work products from the members of this body in this past year include:

- FCC/NTIA MOU to leverage tower notification system for section 106 compliance
- DOI/NTIA MOU on NHPA coordination to not duplicate effort
- Treasury/NTIA Capital Project Fund Outreach Assistance
- DOI/NTIA Tribal Broadband Summit
- DOI IIJA streamlining permitting
- White House Tribal Broadband Symposium (Included all federal partners)
- Tribal Consultation promotion and tracking for conflicts between agencies
- Coordination on BABA implementation and waivers

As WHCNAA and NEC are at the top of the executive branch and hold the authority and perspective to coordinate across agencies to implement changes most beneficial to Tribal stakeholders, NTIA believes this body is best situated to establish the framework to support a national strategy for addressing tribal barriers and the needs of tribes.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Andrew Von Ah, (202) 512-2834 or VonAhA@gao.gov.

Staff Acknowledgments

In addition to the individual named above, Keith Cunningham (Assistant Director); Eric Hudson (Analyst-in-Charge); Eli Albagli; Oluwaseun Ajayi; Melissa Bodeau; Jason Coates; Derrick Collins; Philip Farah; Grant Mallie; John Mingus; Natasha Oliver; Anna Maria Ortiz; Kate Perl; Malika Rice; Matthew Rowen; Jeanette Soares; Andrew Stavisky; and Janet Temko-Blinder made key contributions to this report.

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