



September 2018

TRIBAL BROADBAND

Few Partnerships Exist and the Rural Utilities Service Needs to Identify and Address Any Funding Barriers Tribes Face

Accessible Version

GAO Highlights

Highlights of [GAO-18-682](#), a report to congressional requesters

Why GAO Did This Study

In 2018, FCC estimated that 35 percent of Americans living on tribal lands lack broadband service compared to 8 percent of Americans overall. Various federal programs support increasing broadband deployment in unserved areas, including tribal lands. Tribes can form partnerships with private sector companies and others to deploy broadband infrastructure on tribal lands. GAO was asked to provide information on these partnerships.

This report discusses (1) examples and outcomes of tribal partnership arrangements, (2) the amount of federal funding provided to tribal entities for broadband deployment, and (3) stakeholder-identified barriers that tribes face in obtaining federal funding and the extent to which federal agencies have addressed those barriers. GAO identified partnerships by reviewing federally funded broadband projects that included a partnership component; analyzed federal funding dedicated to broadband deployment; interviewed agency and tribal government officials, tribal associations, tribally owned broadband providers, and industry stakeholders; and assessed RUS's efforts to address the regulatory funding barriers tribes may face. The information presented is illustrative and is not generalizable to all tribes or all partnerships.

What GAO Recommends

GAO recommends that RUS identify and address regulatory barriers that impede tribal entities from obtaining RUS funding for broadband deployment. RUS neither agreed nor disagreed with this recommendation.

View [GAO-18-682](#). For more information, contact Mark Goldstein at (202) 512-2834 or goldsteinm@gao.gov.

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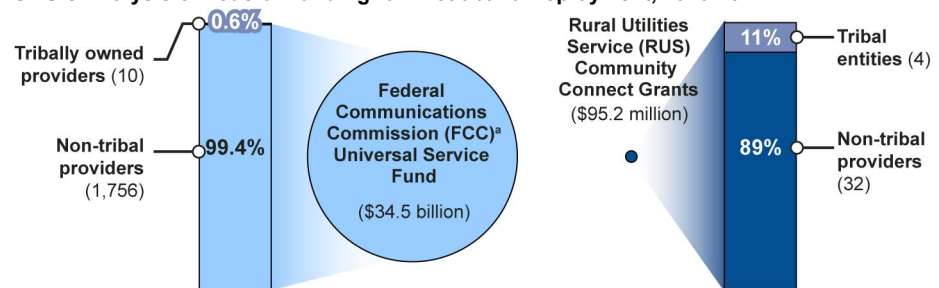
Few Partnerships Exist and the Rural Utilities Service Needs to Identify and Address Any Funding Barriers Tribes Face

What GAO Found

GAO identified some partnership arrangements between tribes and other entities to increase broadband access on tribal lands. Among the seven examples GAO identified, tribes partnered with different types of entities including private broadband providers, a community access network provider, an electric cooperative, a regional consortium, and tribally owned broadband providers. According to the tribes participating in the partnerships, almost all of the partnerships improved broadband service on tribal lands.

The Federal Communications Commission (FCC) and the Rural Utilities Service (RUS) are the primary sources of federal funding to deploy broadband infrastructure where the cost of providing service is high, including on tribal lands. GAO reviewed funding for four programs, three in FCC and one grant program in RUS, and found that in total, less than 1 percent has gone directly to tribes or to tribally owned broadband providers to expand broadband service. GAO found that 14 tribal entities received federal funding from FCC and RUS to increase broadband deployment for 2010–2017.

GAO's Analysis of Federal Funding for Broadband Deployment, 2010-2017



Sources: GAO analysis of FCC and RUS data. | GAO-18-682

*FCC funding includes the Mobility Fund Phase I, Tribal Mobility Fund Phase I, and Connect America Fund.

The tribal officials, tribal associations, and tribally owned broadband providers GAO contacted cited several barriers tribes face in obtaining federal funding to deploy broadband service on tribal lands. For example, they said tribes face regulatory barriers in applying for RUS's grant funding, including (1) preparing existing and proposed network design, (2) demonstrating financial sustainability of the broadband project within 5 years, and (3) obtaining matching funds. An interagency council recently recommended that federal agencies identify and address regulatory barriers that may unduly impede broadband deployment. Although RUS conducts some outreach with tribes, it has not undertaken a formal assessment to identify and address the regulatory barriers that tribes may face in obtaining RUS's funding for broadband deployment. RUS officials told GAO that they do not have the resources to do so. Nevertheless, lacking such an assessment, tribes may continue to face regulatory barriers in obtaining RUS funding for broadband deployment on their lands. By identifying and addressing any regulatory barriers that impede tribal entities' access to RUS funding, RUS could help tribes obtain funding to expand broadband deployment on tribal lands.

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Abbreviations

BIP	Broadband Initiatives Program
BTOP	Broadband Technology Opportunities Program
CAF	Connect America Fund
EDA	Economic Development Administration

ETC	eligible telecommunications carrier
FCC	Federal Communications Commission
KCEC	Kit Carson Electric Cooperative
NoaNet	Northwest Open Access Network
NTIA	National Telecommunications and Information Administration
NTUA	Navajo Tribal Utility Authority
RUS	Rural Utilities Service

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September 28, 2018

The Honorable John Hoeven
Chairman

The Honorable Tom Udall
Vice Chairman

Committee on Indian Affairs
United States Senate

The Honorable John Barrasso

The Honorable Maria Cantwell

The Honorable Steve Daines

The Honorable Martin Heinrich

The Honorable Heidi Heitkamp

The Honorable Brian Schatz

The Honorable Jon Tester

United States Senate

Broadband service provides users with many opportunities to improve communications, including enhancements in e-commerce, telemedicine, and education tools.¹ In 2018, the Federal Communications Commission (FCC) estimated that 35 percent of Americans living on tribal lands lack broadband service, compared to 8 percent of Americans overall.²

According to FCC, the gap in broadband access between rural areas and rural tribal lands is even larger. Further, when including mobile broadband service, FCC reported that nearly 60 percent of Americans living in rural tribal lands nationwide lack broadband access, compared to about 31

¹The term “broadband” commonly refers to Internet access that is high speed and provides an “always-on” connection, so users do not have to reestablish a connection each time they access the Internet.

²See FCC, *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 33 FCC Rcd 1660 (2018) (2018 Broadband Deployment Report). For the purposes of this report, we use the definition of “tribal lands” from this report. That report defines tribal lands as: (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. See Federal Communications Commission (FCC), *2018 Broadband Deployment Report*, FCC 18-10 (Washington, D.C.: Feb. 2, 2018).

percent of rural Americans overall.³ This large difference is due, in part, to the relatively high proportion of tribal lands that are located in rural areas with rugged terrain and low population density, which decreases business incentives to invest in broadband infrastructure in these areas. According to FCC, this lack of service on tribal lands could impede efforts by Indian tribes to achieve self-governance and promote economic opportunity, education, public safety, and cultural preservation.

Currently, the federal government has programs that support increasing broadband deployment in rural and unserved areas (including tribal lands). Most notably, Congress has tasked FCC with encouraging the deployment of advanced telecommunications capability in a reasonable and timely fashion to all Americans, including those in rural areas and on tribal lands.⁴ To accomplish this requirement, FCC is responsible for implementing Universal Service Fund programs, one of which, the Connect America Fund, provides approximately \$4.5 billion annually to support broadband service in underserved and unserved areas.⁵ The Rural Utilities Service (RUS), a component agency of the U.S. Department of Agriculture, also has the Community Connect Program that provides grant funding to improve broadband service.⁶ Tribes as well as partnerships between tribes and other entities may apply for such funding in order to expand service on tribal lands.

You asked us to examine several issues related to broadband access on tribal lands, including the use of partnership arrangements between tribal entities—that is, tribal governments and telecommunications providers owned by tribes—and other entities. This is the second report we are

³Levels of broadband access may vary between specific tribal lands, which may not be reflected in these nationwide figures. We previously reported that FCC's broadband data overstate broadband access on tribal lands. As such, it is possible that the percentage of Americans living on tribal lands that lack broadband access is higher than reported. See GAO, *Broadband Internet: FCC's Data Overstate Access on Tribal Lands*, [GAO-18-630](#) (Washington, D.C.: Sept. 7, 2018).

⁴47 U.S.C. § 1302(a). Advanced telecommunications capability enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.

⁵47 U.S.C. § 254.

⁶Other federal programs can also be used to fund broadband deployment, including additional RUS programs. A list of funding resources is available at: <https://broadbandusa.ntia.doc.gov/funding-list>.

issuing in response to your request.⁷ This report discusses (1) examples of partnership arrangements that tribal entities have used to increase broadband deployment on tribal lands and the outcomes of those partnerships, (2) the amount of funding provided to tribal entities for broadband deployment from key federal programs, and (3) stakeholder-identified barriers that tribal entities face in obtaining federal funding for broadband deployment and the extent to which federal agencies have taken action to address those barriers. In this report, we use the term “partnerships” to refer to when an Indian tribe works with another entity to design, build, or operate infrastructure assets to improve or enhance broadband access.

To address these objectives, we reviewed the Communications Act of 1934, as amended,⁸ the *National Broadband Plan*,⁹ and relevant literature identified through a literature search of tribal partnerships for broadband deployment. In addition, we reviewed documentation and interviewed officials from FCC, RUS, and the Department of Commerce’s National Telecommunications and Information Administration (NTIA).¹⁰

To identify examples of tribal broadband partnerships for our review, we first interviewed agency officials, tribes, private providers, and tribal associations to determine if they were aware of any partnerships focused on broadband deployment on tribal lands. We then identified any broadband projects with a tribal partnership component by reviewing financial information from 2010 to 2017 for the following federal programs: (1) FCC’s Universal Service Fund high-cost program and Connect America Fund (including the Mobility Fund Phase I (Auction 901) and Tribal Mobility Fund Phase I (Auction 902)); (2) RUS’s Community Connect Grant Program; (3) RUS’s Broadband Initiatives Program; and (4) NTIA’s Broadband Technology Opportunities Program. While there may be other tribal partnerships that exist, through these efforts we found seven tribal partnership examples that we discuss in this report. The

⁷[GAO-18-630](#).

⁸Pub. L. No. 73-416, 48 Stat. 1064 (1934) codified as amended at 47 USC §§ 151 et seq.

⁹In March 2010, an FCC task force issued the *National Broadband Plan* that included a centralized vision for achieving affordability and maximizing use of high-speed Internet. See, FCC, *Connecting America: The National Broadband Plan* (Washington, D.C.: 2010).

¹⁰NTIA advises the President on telecommunications and information policy issues, including broadband access.

identified tribal broadband partnerships are intended to be illustrative examples and, accordingly, are not generalizable to others that may exist.

To determine the amount of funding from key federal programs provided to tribal entities for broadband deployment, we first identified the federal programs that provide broadband funding from NTIA's *Guide to Federal Funding of Broadband Projects*.¹¹ The guide lists 17 federal programs that fund broadband infrastructure. Of those federal programs, we focused our review on four programs—three in FCC and one grant program in RUS—selected because they provide the most directly relevant funding for broadband deployment in unserved areas, which includes tribal lands.¹² We compiled total funding data for these four federal programs and the amount of funding provided to tribes and tribal entities for broadband deployment projects for 2010 to 2017. We took steps to assess the reliability of the data, such as cross-checking the data, following up with agency officials, and reviewing documentation, and found the data were sufficiently reliable for the purposes of summarizing total funding and the amount provided to tribes and tribal entities. Because we relied upon titles or names of grant recipients to identify those grants awarded to tribes and tribally owned providers, our analysis may not include some grants awarded to broadband providers that deploy infrastructure to larger service areas that may also include tribal lands.

We obtained stakeholder views on barriers that tribal entities face in obtaining federal funding and federal government efforts to address those barriers by interviewing FCC and RUS officials and 17 tribal government officials, 9 tribally owned broadband providers, and 5 tribal associations. We selected tribal governments to interview to include variation in geographic location, level of broadband deployment, and population density. We visited six tribes in Idaho, New Mexico, and Washington State. We also interviewed other stakeholders selected to represent a range of views and those with experience working with Indian tribes and broadband service. These stakeholders included 10 private broadband providers and associations; 2 regional consortium; 2 community access

¹¹Department of Commerce, National Telecommunications and Information Administration, *Broadband USA: Guide to Federal Funding of Broadband Projects* (June 2017).

¹²We found that broadband deployment and infrastructure projects are often included in federal funding programs as auxiliary components of the project and that the primary purpose is not telecommunications related, but rather related to healthcare, telemedicine, or economic growth. Therefore, we excluded those types of programs from our review.

providers; an academic institution; and a cooperative. The views obtained from the interviews are not generalizable to all tribes, all broadband providers, or all industry stakeholders. We reviewed a report from the Broadband Opportunity Council recommending that agencies identify and address regulatory barriers that may unduly impede broadband deployment and assessed RUS's efforts to address the regulatory barriers tribes may face in attempting to obtain RUS funding for broadband deployment.¹³ Appendix I describes our scope and methodology in greater detail.

We conducted this performance audit from September 2017 to September 2018 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.

Background

The federal government has recognized 573 Indian tribes as distinct, independent political communities with inherent powers of a limited sovereignty, which has never been extinguished. These tribes can vary significantly in regard to tribal size, population, and ownership status of land. For instance, some tribal lands include reservations—land set aside by treaty, federal law, or executive order for the residence or use of an Indian tribe.¹⁴ Some tribal lands include parcels with different ownership; parcels may be held in trust by the federal government for the benefit of a tribe or an individual tribal citizen. Trust and restricted lands can affect a tribe's ability to use their land as collateral to obtain a loan. In addition, the size of a tribe's land base can range from less than one square mile

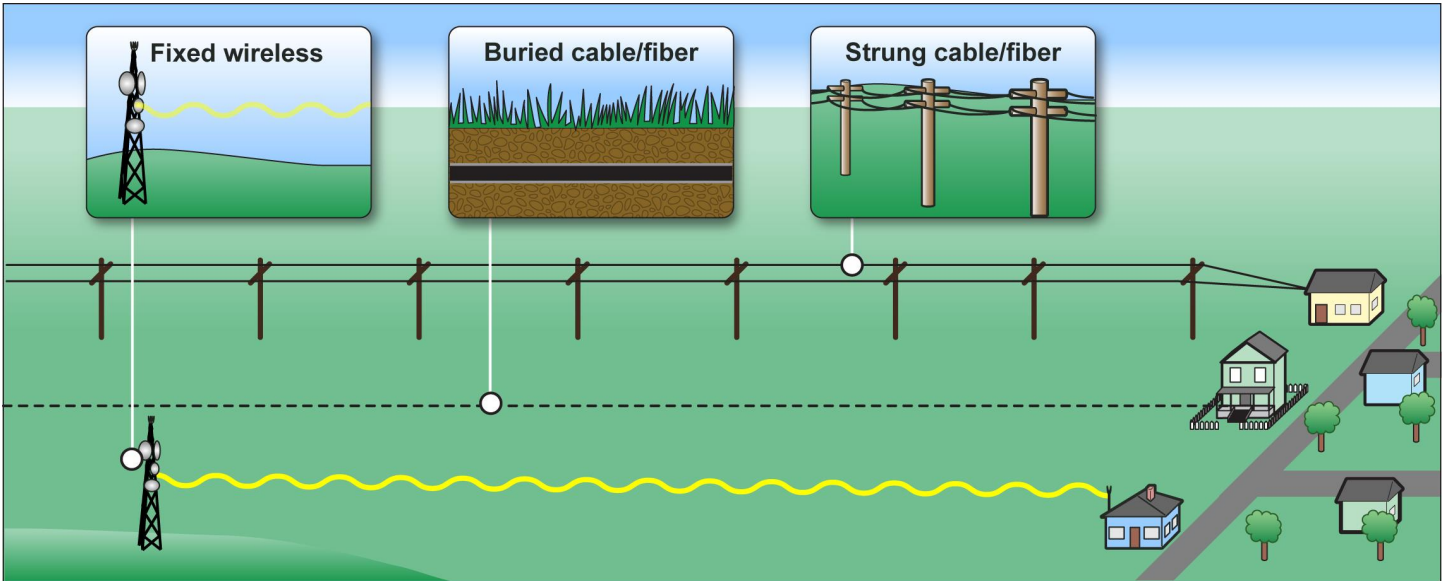
¹³The Broadband Opportunity Council was created by the March 2015 Presidential Memorandum "Expanding Broadband Deployment and Adoption by Addressing Regulatory Barriers and Encouraging Investment and Training." The Broadband Opportunity Council includes 25 federal agencies and departments with missions or programs with the potential to drive broadband infrastructure investment and adoption. The memorandum asked the Council to produce specific recommendations to increase broadband deployment, competition, and adoption through executive actions within the scope of agency programs, mission, and budgets.

¹⁴The land within the reservation may include a mixture (or checkerboard) of tribal trust land, individual Indian trust land, and non-Indian land.

to more than 24,000 square miles (the size of West Virginia). Some tribes are located in extremely remote, rural locations and others are located in urban areas.

The term “broadband” commonly refers to Internet access that is high speed and provides an “always-on” connection, so users do not have to reestablish a connection each time they access the Internet. Broadband providers deploy and maintain infrastructure to connect consumers to the Internet and provide Internet service through a number of technologies. Broadband infrastructure may include burying fiber-optic or copper cables, stringing cable on existing poles, or erecting towers for wireless microwave links, which relay wireless Internet connections from tower to tower. Figure 1 illustrates some of the options for broadband deployment infrastructure. To install this infrastructure, providers must obtain permits from government entities with jurisdiction over the land or permission from public utilities to deploy infrastructure on existing utility poles.

Figure 1: Examples of Broadband Infrastructure



Source: GAO. | GAO-18-682

The federal government has emphasized the importance of ensuring Americans have access to broadband, and a number of agencies, including FCC and RUS, currently provide funding to subsidize broadband deployment in areas in which the return on investment has not attracted private investment. FCC funds a number of programs through the Universal Service Fund, which may increase broadband deployment

on tribal lands.¹⁵ One program is the high-cost program (renamed the Connect America Fund (CAF) in 2011), which provides financial support to both wireline and wireless telecommunications carriers that provide telecommunications services (referred to as providers in this report) to supplement their operating costs to serve consumers in rural or remote areas, where the cost of providing service is high.¹⁶ From 2010 to 2017, a total of \$34.5 billion in annual and standalone Universal Service Fund high-cost support was disbursed to providers, as follows:

- In total, the high-cost program and Connect America Fund provided \$34.1 billion from 2010 to 2017 in financial support to providers, consisting of annual disbursements between \$3.7 and \$5 billion.
- The Mobility Fund Phase I provided \$300 million in 2012 in one-time support to providers to expand broadband service in areas where service was not available, including tribal lands.¹⁷
- The Tribal Mobility Fund Phase I provided \$49.8 million in 2014 in one-time support to providers to deploy broadband service to unserved tribal lands.¹⁸

To be eligible to receive for Universal Service Fund 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

¹⁵The Universal Service Fund also includes the Schools and Libraries Support Program (commonly referred to as E-rate). We did not include this program in our review because it primarily provides assistance to eligible schools and libraries through discounted telecommunications and information services, rather than funding broadband deployment.

¹⁶In November 2011, FCC fundamentally reformed the high-cost program so that it could support both telephone and broadband service. See FCC, *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663 (2011).

¹⁷Those providers wishing to receive this support were asked to indicate the amount of one-time support they needed to provide service to a particular area in a process FCC refers to as a “reverse auction.” Winning bids were based on the lowest per-unit bid amounts and one provider per area received support to deploy the broadband-capable network in the areas winning bids. FCC sometimes refers to this competitive bidding process as a reverse auction since the lower bids win. Mobility Fund Phase II will make up to \$4.53 billion in support available over 10 years to primarily rural areas that lack unsubsidized 4G Long Term Evolution (LTE) service.

¹⁸According to FCC’s March 2017 Report and Order and Further Notice of Proposed Rulemaking, funds reserved for tribal lands will be included as part of the Mobility Fund Phase II auction. See FCC, *In the Matter of Connect America Fund Universal Service Reform – Mobility Fund*, Report and Order and Further Notice of Proposed Rulemaking, FCC 17-11, 32 FCC Rcd 2152 (2017).

programs mirror, ETCs must meet certain service obligations as described below:¹⁹

- provide a 5-year plan showing how program support will be used to improve its coverage, service quality, or capacity in each service area where it seeks designation;
- demonstrate its ability to remain functional in emergency situations;
- demonstrate that it will satisfy consumer protection and service quality standards;
- offer local usage plans comparable to those offered by the incumbent carrier in the areas for which it seeks designation; and
- acknowledge that it may be required to provide equal access to other providers within the service area if all other ETCs in the designated service area relinquish their designations.

In addition to FCC's funding, RUS has a current program and had a prior program and NTIA had a prior program that provided funding to improve broadband service in unserved or underserved areas.²⁰ The RUS and NTIA prior programs were authorized by the American Recovery and Reinvestment Act of 2009 (Recovery Act) to expand high-speed Internet service in unserved areas, and there is no current funding for these programs.²¹

- RUS's Community Connect program currently provides grants to rural communities to provide high-speed Internet service to unserved areas.²² The Community Connect program is significantly smaller than FCC's programs, with \$95.2 million awarded to 36 recipients from 2010 to 2017.²³ The purpose of the RUS Community Connect

¹⁹47 C.F.R. § 54.202

²⁰RUS has other programs to finance broadband deployment in rural areas for which tribal entities are eligible, but those programs are not the subject of this report.

²¹Pub. L. No. 111-5, 123 Stat. 115, 118-119 (2009).

²²The fiscal year 2018 omnibus spending bill includes \$600 million for RUS for a new broadband loan and grant pilot program in which at least 90 percent of the households served by projects receiving a loan or grant do not have sufficient access to broadband.

²³RUS has a more robust broadband loan program for broadband infrastructure projects, including the Telecommunications Infrastructure Loans and Guarantees program and the Rural Broadband Access Loan and Loan Guarantee program. However, the scope of this review does not include federal loan programs.

program is to provide financial assistance to eligible applicants that will provide broadband service that fosters economic growth and delivers enhanced educational, healthcare, and public-safety benefits. In addition, RUS previously administered the Broadband Initiatives Program (BIP), authorized by the Recovery Act to expand high-speed Internet service in unserved areas. BIP funding included \$2.2 billion dedicated to deploy broadband infrastructure. Through the program, RUS funded a total of 247 infrastructure projects with the requirement that all projects be fully completed by June 30, 2015. In addition to the infrastructure awards, 12 technical assistance grants went to tribal communities to develop regional plans to provide broadband service in rural areas that remain critically unserved.²⁴

- NTIA administered a prior program also authorized by the Recovery Act called the Broadband Technology Opportunities Program (BTOP). NTIA made available \$3.1 billion in BTOP funding to deploy broadband infrastructure. Through the program, NTIA awarded a total of 116 infrastructure grants with the requirement that all projects be fully complete within 5 years of the award date.

Selected Tribes Partnered with Various Entities to Increase Broadband Deployment and Outcomes Varied

Although we identified some partnership arrangements between tribes and other entities to increase broadband deployment on tribal lands using prior authorized funding, based on our review, these arrangements are not being used under currently available programs.²⁵ As previously noted, there are greater costs associated with deploying broadband on unserved tribal lands because the unserved areas are generally rural, with possibly rugged terrain, and have low population densities. Because of these greater costs, there may be little to no private sector incentive to deploy broadband or enter into a partnership arrangement to do so.

²⁴Through BIP, RUS funded 19 technical assistance programs, the majority of which went to tribal communities.

²⁵Specifically, we looked for broadband projects with a tribal partnership component by reviewing financial information from 2010 to 2017 for (1) FCC's high-cost program and Connect America Fund (including the Mobility Fund Phase I (Auction 901), and Tribal Mobility Fund Phase I (Auction 902)); (2) RUS's Community Connect Program; (3) RUS's BIP; and (4) NTIA's BTOP.

During our review, we did not find any partnership arrangements that leveraged currently available federal funding from FCC's CAF or RUS's Community Connect Program. The seven partnership examples we identified were ones that obtained federal funding under past programs, namely BIP and BTOP that were funded by the Recovery Act. Among these examples, tribes partnered with several different types of entities that were eligible to receive federal grants, including (1) private providers; (2) a community access network provider; (3) an electric cooperative; (4) a regional consortium; and (5) tribally owned telecommunications companies (which we will refer to as tribally owned providers). These types of arrangements are explained below. Outcomes of these partnership arrangements varied, as reported by tribal officials and other stakeholders we interviewed, but these stakeholders did not always agree on the outcomes.²⁶

Private Providers

Private providers can partner with a tribe to deploy broadband infrastructure on tribal lands. We found two instances in which a tribe partnered with private providers to improve broadband service.

- *Pine Telephone Company and Choctaw Nation.* With the land the tribe has jurisdiction over covering over 10 counties across 12,000 square miles in Oklahoma, the Choctaw Nation's lands encompasses about 15 percent of the State of Oklahoma's total area—an area larger than the entire state of Maryland. According to the Oklahoma Department of Transportation, the Choctaw Nation is the largest employer in the southeastern Oklahoma region and its businesses are key contributors to the state's economy. However, a tribal official told us that the tribal government has struggled to meet the tribe's broadband needs. According to the Choctaw Nation official, Pine Telephone Company (Pine), a privately owned company, has a history of partnering with the Choctaw Nation. In 2010, Pine received a BTOP grant of \$9.5 million to deploy broadband infrastructure to underserved areas of Southeastern Oklahoma, including Choctaw Nation lands.

²⁶We did not independently verify or evaluate the accuracy of project information as reported by the tribal officials and other stakeholders involved in the partnership arrangements.

According to tribal officials and representatives from Pine, the partnership enabled tribal government agencies and buildings—including public schools, public safety agencies, fire and police departments, and a health clinic—to get broadband service. The partnership also improved broadband service for the Choctaw Nation. Additionally, Pine had been proactive in partnering with the Choctaw Nation to secure federal grants and assist with land use and rights-of-way issues, according to a tribal official.²⁷ Pine representatives told us that partnering with the Choctaw Nation had been beneficial based on their common interest to increase broadband service to the area.

- *Inland Cellular, First Step, and Nez Perce.* The Nez Perce Tribe's reservation consists of 750,000 acres located in north central Idaho. Tribal officials told us that the terrain on the reservation makes broadband deployment challenging because it has very large hills and deep valleys; additionally the reservation is sparsely populated. Tribal officials told us that prior to 2010, there was no broadband service available on the Nez Perce reservation. In 2010, the tribe received a BTOP grant of \$1.6 million for the Nez Perce Broadband Enhancement Project; the project was completed in 2013. The tribe used that federal grant to deploy 216 miles of broadband (wireless) infrastructure across its reservation to provide broadband service in four northern Idaho counties. As part of the project, the tribe partnered with two private providers, Inland Cellular and First Step, to expand broadband service on the reservation. The tribe used BTOP funding for infrastructure buildout in areas in need of connectivity, while Inland Cellular and First Step focused their efforts on infrastructure buildout in more populated areas.

According to Nez Perce and Inland Cellular officials, the partnership resulted in broadband service being provided to previously underserved rural communities and 17 community institutions, including schools and public safety organizations. Because the partners each own towers on the reservation, the officials told us they could collocate equipment on each other's towers, an approach that resulted in more reliable service. Further, Nez Perce officials and Inland Cellular representatives told us that their partnership was

²⁷ Securing rights-of-way across Indian lands is an important component of providing tribal lands with the critical infrastructure needed to support economic activity. Obtaining rights-of-ways to deploy telecommunications equipment across tribal lands could involve individual landholders, tribal governments, service providers, and the federal government.

complementary, in that Inland Cellular offered voice services and the tribe's enterprise offered data services.

Community Access Network Provider

Community access network providers are typically owned and operated by public entities rather than by a private corporation. All profits are reinvested to operate, maintain, and expand the community network. Community access networks focus on building broadband infrastructure that allows multiple Internet service providers to offer their services to customers. For example, rather than having one choice for Internet service, community access network providers will allow several service providers to compete for customers.

- *Northwest Open Access Network (NoaNet)*. NoaNet, a utility network that offers communities access to broadband infrastructure, has deployed infrastructure in rural areas of Washington State, including on tribal lands. NoaNet received two BTOP grants in 2010—one grant for \$84 million and the other for \$54 million—to enhance existing infrastructure and improve broadband service in unserved areas. NoaNet representatives told us that over the course of several years, NoaNet deployed 2,300 miles of fiber-optic cable across tribal lands in Washington State and partnered with several Indian tribes and nations, including the Kalispel Indian Community of the Kalispel Reservation, Lower Elwha Tribal Community, and Yakama Nation, to deploy broadband infrastructure. For example, NoaNet representatives told us they partnered with Yakama Nation and exchanged a NoaNet-owned asset for access to a power source and the right to install fiber-optic lines on Yakama tribal land.

According to NoaNet representatives, NoaNet's infrastructure buildout improved broadband services and created new economic development opportunities for several tribes in Washington State. For example, they said NoaNet collaborated with Yakama Nation Networks—a wireless network and tribal enterprise serving the tribe—to provide faster broadband service to the reservation. Further, the NoaNet representatives said the availability of broadband service created new technical jobs with professional growth opportunities on the reservation. NoaNet representatives added that NoaNet enabled high-speed Internet service to the Makah Tribe's health clinic, government offices, school, and library, where they previously had no Internet service at all. Moreover, they told us that partnerships are beneficial in helping tribes gain telecommunications experience.

Similarly, according to a tribal representative from Jamestown S’Klallam Tribe, NoaNet’s infrastructure buildout helped the tribe obtain broadband services for its library and also helped create economic opportunities for the tribe.

Electric Cooperative

Rural electric cooperative networks typically serve areas that have low population density where traditional providers do not want to serve because of limited opportunities for financial return on investment.

- *Kit Carson Electric Cooperative and Taos Pueblo.* Kit Carson Electric Cooperative (KCEC) is a member-owned, nonprofit electric distribution cooperative that operates a fiber-optic broadband network. In 2010, KCEC received \$64 million in grant funding from RUS’s BIP to create a 2,400-mile broadband network in northern New Mexico and provide broadband service to businesses and homes, including those on the Taos Pueblo and Picuris Pueblo.

In an August 2016 presentation to the New Mexico state legislature, KCEC stated that the project connected tribal members and community institutions, created job opportunities, and improved public safety by improving emergency communications services.²⁸ According to Taos Pueblo officials, the impetus to work with KCEC was to improve broadband service to meet immediate economic, education, health service, and public safety needs of the tribe. However, based on our meetings with both KCEC representatives and Taos Pueblo officials they have different perspectives about the success of this partnership at delivering broadband service to the tribe. For example, KCEC representatives told us that the cooperative constructed the fiber-optic network and connected the government buildings and homes of Taos Pueblo and Picuris Pueblo members as promised, and that KCEC has responded to service interruptions when they occurred on tribal lands. On the other hand Taos Pueblo officials told us, that KCEC did not deploy broadband infrastructure to enable service to all homes and buildings on tribal lands as the tribe had expected. Similarly, KCEC representatives told us that they worked regularly with the Taos and Picuris tribal governments and had good

²⁸Kit Carson Electric Cooperative presentation to the New Mexico Committee on Science, Technology, and Telecommunications presented by Luis A. Reyes, Chief Executive Office on August 22, 2016.

relationships with them; they noted that they meet with tribal leadership every quarter to maintain effective communications and address any issues. In contrast, according to Taos Pueblo officials, KCEC did not solicit tribal input when building out the fiber-optic network, and only met with Taos Pueblo officials about once a year and did not follow up on the issues the tribe raised. Further, according to KCEC representatives, in its federal funding application, KCEC made a commitment that the Taos and Picuris tribal lands would be the first areas targeted for building out the network, and the representatives said that KCEC completed 100 percent of the construction and connected the tribal governments as promised. Taos Pueblo officials, however, said that their tribe was the last to receive service and that KCEC did not complete the broadband construction, including service to the homes of some of its members, because KCEC exhausted its BIP funding.

Regional Consortium

We have previously reported that regional consortium, which are typically formed by groups to undertake an enterprise beyond the resources of any one member, can sponsor regional networks that focus on building broadband networks and providing broadband services to schools, medical providers, public safety agencies, and other community institutions.²⁹

- *North Central New Mexico Economic Development District.* Located in northern New Mexico, the Pueblo of Pojoaque, Santa Clara Pueblo, Tesuque Pueblo, and Ohkay Owingeh partnered with local governments to establish the North Central New Mexico Economic Development District (the District), a regional consortium, to address the socio-economic needs of its members. In 2008, regional planners and government officials identified broadband as the region's number-one infrastructure priority because rural north central New Mexico relied significantly on dial-up Internet service and lacked affordable service to small businesses, libraries, schools, and other community institutions. In 2010, the District received a BTOP grant of \$10.6 million to build a community-owned broadband network, known as REDI Net. The District sought the BTOP grant to improve rural healthcare services, make public and higher education more

²⁹GAO, *Telecommunications: Projects and Policies Related to Deploying Broadband in Unserved and Underserved Areas*, [GAO-14-409](#) (Washington, D.C.: Apr. 23, 2014).

accessible, and improve local government services, like public safety. REDI Net's construction included upgrading existing infrastructure and deploying 136 miles of new fiber-optic cable across the region and on pueblo lands to replace low-performing dial-up service with faster, more affordable broadband service.

According to the project's progress report submitted to NTIA, the partnership enabled broadband infrastructure to be deployed across the four participating lands and connect 110 community institutions. The project's description stated that REDI Net was being used to deliver telemedicine services, distance-learning applications, and critical communications for emergency first-responders. According to REDI Net representatives, in 2017, REDI Net became a standalone organization, separate from the District, and currently charges a monthly fee for the pueblos to use the broadband network. A REDI Net representative told us that the biggest outcome of the partnership has been the improved relationships and collaboration among the Pueblo of Pojoaque, Santa Clara Pueblo, Tesuque Pueblo, and Ohkay Owingeh and other local municipalities.

Tribally Owned Providers

Some tribes have created their own telecommunications companies to provide broadband access to their communities. Based on the examples we identified, a tribe may create its own telecommunications or broadband company or a tribe may partner with an existing tribal enterprise such as an electrical utility to provide broadband services.

- *Navajo Nation and Navajo Tribal Utility Authority.* The Navajo Nation—which spans across Arizona, New Mexico, and Utah—partners with a tribally owned entity, the Navajo Tribal Utility Authority (NTUA), to provide broadband service to residents and households. According to a NTUA representative, the Navajo Nation has diverse, challenging terrain—which includes canyons, valleys, timber forest, desert, and mountains—making it difficult to provide broadband service to tribal residents. In 2010, NTUA received a BTOP grant of \$32 million to deploy broadband infrastructure covering 15,000 square miles across the three states. According to the project's progress report submitted to NTIA, by 2013, NTUA leveraged BTOP funding to deploy 570 miles of fiber-optic cable and 775 miles of wireless infrastructure resulting in a total of 1,345 new network miles.

According to NTUA representatives, the partnership between the Navajo Nation and NTUA increased broadband deployment on the

nation and created new opportunities for NTUA to partner with other private providers to further expand broadband services. For example, NTUA representatives said NTUA partnered with a private broadband provider, Commnet, to deploy wireless broadband infrastructure that enabled tribal citizens to receive 4G LTE service. NTUA and Commnet representatives told us NTUA's relationship with Navajo Nation represented an attractive business opportunity for Commnet because of NTUA's established rights-of-ways on the Navajo Nation's tribal lands.

- *Saint Regis Mohawk Tribe and Mohawk Networks.* The Saint Regis Mohawk Tribe, located in the northern region of New York, received a \$10.5 million BIP grant in 2010 to complete a large broadband project expanding access to unserved areas. According to tribal officials and Mohawk Networks representatives, the tribe completed a \$15 million broadband infrastructure project laying 68 miles of fiber and connecting 1,500 tribal households and community institutions. Upon completion of the BIP broadband project, the tribal officials said the tribe launched its tribally owned broadband provider, Mohawk Networks, LLC in 2015, to respond to tribal residents' need for reliable, cost-effective broadband service. Tribal officials said Mohawk Networks currently provides high-speed Internet to tribal homes and businesses.

According to tribal officials, in addition to providing broadband service to tribal residents for the first time, the partnership between Saint Regis Mohawk Tribe and its tribally owned broadband provider created new jobs and opportunities to expand broadband services. For example, the officials said the partnership resulted in the creation of a tribal subsidiary, North Country Broadband Services, Inc., to deploy wireless infrastructure to neighboring counties, thus generating new revenue for Mohawk Networks.

Few Federal Funds Were Provided to Tribal Entities to Increase Broadband Deployment from 2010 to 2017

FCC and RUS are the primary sources of federal funding to deploy broadband infrastructure in rural and remote areas where the cost of providing service is high, including tribal lands. Based on our review of the funding provided by four federal programs targeted to increase deployment in unserved areas, very little has gone directly to tribes or to

tribally owned broadband providers. Specifically, from 2010 to 2017, we found that less than 1 percent of FCC funding and about 14 percent of RUS funding went directly to tribes and tribally owned providers. Combined, FCC and RUS funding totaled \$34.6 billion during that time period and tribes and tribally owned providers received \$235 million, or about 0.7 percent.³⁰

While the majority of the funding from the four programs we reviewed from both agencies is provided to deploy broadband to rural, unserved, or underserved areas, only one source of funding, FCC's Tribal Mobility Fund Phase I, is dedicated specifically to deploying broadband on tribal lands.³¹

The National Broadband Plan stated in 2010 that tribes needed substantially greater financial support than was available to them at the time and that accelerating tribal broadband deployment would require increased funding.³² Furthermore, the National Congress of American Indians expressed concerns that the needs for federally funded broadband projects are greater on tribal lands but tribes do not receive the appropriate share of federal funding aimed at increasing broadband deployment.³³

Through our analysis we found that 14 tribal entities received federal funding from FCC and RUS to increase broadband deployment from 2010-2017 (see fig. 2). Of the four main programs we reviewed, tribes and tribally owned providers received the following funds:

- Connect America Fund: Nine tribally owned providers received high-cost support funding totaling \$218.1 million.
- Mobility Fund Phase I: One tribally owned provider received support totaling \$3.3 million.

³⁰According to RUS officials, Community Connect grant funding has also been awarded to non-tribal providers that serve tribal lands.

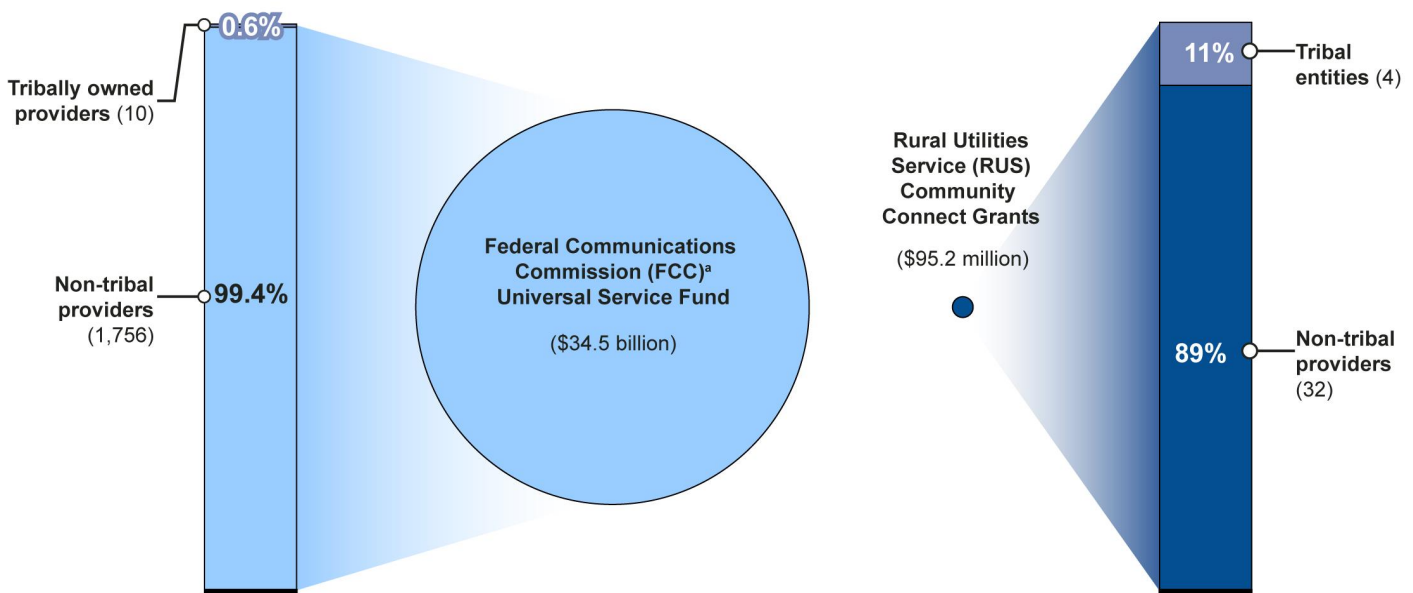
³¹The Mobility Fund Phase II will include a tribal reserve to ensure some of the support is directed to tribal lands.

³²FCC, *Connecting America: The National Broadband Plan* (Washington, D.C., 2010).

³³According to its website, the National Congress of American Indians is the oldest, largest, and most representative American Indian and Alaska Native organization serving the broad interests of tribal governments and communities.

- Tribal Mobility Fund Phase I: No tribal providers received funding.
- RUS Community Connect Grants: Four tribal entities received \$13.5 million.

Figure 2: Percentage of Tribal Entities and Non-Tribal Broadband Providers Receiving Funds from Ongoing FCC and RUS Programs to Increase Broadband Deployment, 2010-2017



Sources: GAO analysis of FCC and RUS data. | GAO-18-682

^aFCC funding includes Mobility Fund Phase I, Tribal Mobility Fund Phase I, and Connect America Fund.

Stakeholders Cited Barriers for Tribes to Obtain Federal Funding and Federal Agencies Have Taken Few Actions to Address the Barriers

The tribal officials, tribal associations, and tribally owned broadband providers we interviewed cited several barriers that tribes may face when seeking federal funding for broadband deployment. The two primary barriers these interviewees cited were (1) the statutory requirement for ETC designation and (2) grant application requirements.

Statutory Requirement for ETC Designation

FCC's Connect America Fund (CAF) is the largest source of federal funding for broadband deployment in unserved and underserved areas; however, very few tribes are currently eligible for this source of funding. At the time of our review, FCC officials told us there were 11 tribes that have providers that are designated as ETCs and therefore would be eligible to receive CAF funding. Although FCC adopted rules in 2011 to create CAF and modernize the program so that it could support broadband capable networks, FCC officials told us that most ETCs are the telephone companies that were in existence when Congress passed the Telecommunications Act of 1996.³⁴ According to FCC officials, FCC has explored whether it has authority to allow non-ETC providers to receive CAF support payments but determined that the statute is clear that only ETCs can receive program support. Between 2012 and 2017, FCC officials said FCC received nine ETC applications, four of which were from tribally owned providers. Of those four, only one tribally owned provider was designated an ETC. Three tribes we contacted said they would like the opportunity to receive CAF support to deploy broadband on tribal lands, but they realize they are not eligible to receive funding unless they have the ETC designation. Moreover, officials from two tribes and a tribal association stated that while they want to provide broadband services in their communities, they did not seek the ETC designation because of the ETC service obligations described above.

The Leech Lake Band of Ojibwe applied for ETC status in 2013. We met with tribal officials who told us that the tribe was providing broadband service in its community through its own, tribally chartered telecommunications company and at the time of our visit, they had been waiting several years for a decision from FCC on their ETC application. The tribal officials told us that if FCC did not make a decision soon, the tribal government would need to shut down the broadband network, as the tribe's original decision to fund the network assumed there would be a CAF subsidy to help defray the costs. The Leech Lake reservation is rural with low population density and is surrounded by the Chippewa National Forest. Subsequent to our meeting with the tribe in November 2017, the tribe withdrew its application in March 2018, noting that it was ceasing its attempt to run its telecommunications company specifically "due to inaction" by FCC.

³⁴Pub. L. No. 104-104, 110 Stat. 56 (1996).

According to representatives from a tribal association we contacted, FCC has provided ETCs with billions of dollars to deploy service to unserved areas through the Universal Service Fund programs, but FCC's efforts have not always been successful in the hardest to reach areas, particularly tribal lands. The representatives noted that FCC's competitive market approach does not work where competition cannot be supported and that there needs to be a different approach. Similarly, tribal officials from Idaho told us that rural service providers are able to operate due to CAF support, but the tribe is not eligible to receive those subsidies. Officials said although the provider in their area has received millions of dollars in CAF subsidies, it has not deployed broadband on the tribal lands. Other tribal officials from Washington State told us that although private providers received CAF subsidies to deploy broadband service to their reservation, the private providers told the tribe it would be years before they offer service on tribal lands.

In 2014, FCC conducted its Rural Broadband Experiment to open up eligibility for CAF funding to non-ETC providers. FCC made \$100 million available for the experiment and applicants included a diverse group of entities, including competitive providers, electric utilities, wireless Internet service providers, and others. However, while this experiment opened the application process to non-ETC providers, it did not remove the ETC requirement. CAF support awarded through this experiment was provisional pending the broadband providers' obtaining ETC status. According to FCC documentation, there were 181 applicants for the experiment, but only 16 ended up meeting all the requirements to receive funding. None of those 16 entities was tribal.

Grant Application Requirements

Stakeholders we interviewed said tribes may face barriers completing federal grant applications to obtain funding for broadband deployment. In particular, two community access providers, five tribally owned providers, and one regional consortium we contacted said that meeting the application requirements was difficult. Representatives from eight of the tribes we contacted told us that in general, the language included in the federal grant applications is difficult to understand or the administrative requirements of federal grants are burdensome. Another tribal representative told us he would only recommend applying for RUS's Community Connect program if the tribe has an entire team of dedicated people to manage the grant process. Some of the tribal officials we contacted cited difficulties preparing required application materials

between the time a grant announcement was made and the submission deadline. For example, tribal officials we contacted from New Mexico and Oklahoma stated that the constrained time frames prevented them from effectively preparing a comprehensive application package. In some cases, the narrow application windows prevented the tribes from applying at all.³⁵ Furthermore, tribal officials, tribal associations, and tribally owned broadband providers told us that complying with the following regulatory requirements for RUS Community Connect grants could be challenging for tribes:

- *Preparing existing and proposed network design:* RUS's Community Connect program requires applicants to submit information on the network's design that contains all the technical information on the applicant's existing (if applicable) and proposed network. The network design is typically completed by a licensed engineer. Tribal officials in Washington State told us that conducting analyses of existing infrastructure and what improvements are needed can be cost-prohibitive for some tribes because it requires financial resources that the tribe may not have before applying for the grant. Many of these costs are related to the expense of bringing in outside experts or consultants who are needed to perform the technical studies. Another tribal representative told us since the tribe has no way of knowing if the grant will be approved, spending money to complete the application is a large risk. According to RUS officials, the Community Connect program is not authorized to fund pre-planning activities.
- *Demonstrating financial sustainability within 5 years:* The RUS Community Connect grant application requires a "financial forecast" that includes the applicant's existing operations and the proposed project and must be supported by a detailed narrative that explains the methodology and assumptions used to develop the projections, including the number of subscribers projected to take the applicant's service. The financial forecast must cover at least 5 years, and it is used by RUS to determine whether the proposed project is financially sustainable. However, tribal officials from Idaho told us that it is not feasible for tribes to show financial sustainability (a return on investment) in 5 years in high cost areas. They noted that a period of 15 years may be needed to produce a return on investment in those areas, and this requirement prevents tribes from qualifying for Community Connect grants.

³⁵For example, the Community Connect grants for 2018 were announced in March 2018, and completed applications were due in May 2018.

- *Obtaining matching funds required to apply for federal grants:* RUS's Community Connect program requires grant applicants to provide matching funds of at least 15 percent from non-federal sources and does not accept in-kind contributions of goods or services.³⁶ The matching fund requirement can be difficult for some tribes to obtain. For example, officials from RUS and the tribal entities we contacted told us that tribes often times do not have the upfront cash to meet the matching requirement. According to a tribal association we contacted, obtaining credit is a serious problem for some tribes. In general, tribes cannot collateralize tribal property, and therefore often times are unable to get bank loans for infrastructure projects.

The *National Broadband Plan* recommended that federal agencies facilitate tribal access to broadband funding opportunities. Furthermore, recognizing the need to reduce barriers to expand broadband deployment, the Broadband Opportunity Council, established in March 2015, issued a report stating that federal agencies should use all available and appropriate authorities to identify and address regulatory barriers that may unduly impede either broadband deployment or the infrastructure to augment broadband deployment.³⁷ RUS officials said they have held a number of external training and outreach events, such as workshops and seminars, with tribes over the past 5 years to provide information about RUS's broadband programs.³⁸ For example, in April 2018, before the 2018 Community Connect grant's application deadline, RUS hosted a webinar on various requirements for grant applications. RUS officials told us that RUS's outreach efforts generally focus on specific programs and instructing potential applicants on program requirements and how to complete application packages.

However, beyond these outreach efforts, RUS officials said they have not undertaken a formal assessment to identify and address the regulatory barriers that tribes may face in obtaining RUS funding for broadband

³⁶Examples of in-kind contributions include the donation of personal service, material, equipment, buildings, land and other non-cash goods or services.

³⁷The Broadband Opportunity Council was tasked with producing specific recommendations to increase broadband deployment, competition, and adoption through executive actions within the scope of agency programs, mission, and budgets.

³⁸Additionally, according to the Department of Agriculture's Office of Tribal Relations 2017 Communication and Outreach Plan, that office intends to identify and expand current modes of outreach to prospective tribal applicants to ensure that relevant programs and policies are efficient, easy to understand, accessible, and developed in consultation with the American Indian and Alaska Native constituents they impact.

deployment. When we asked RUS officials about the feasibility of doing so, they said that they have limited resources and multiple competing priorities for those resources. RUS officials also noted that BIP authorized and provided funding for technical assistance for applicants, funding that enabled RUS to address some of the barriers tribes face. Nevertheless, lacking such an assessment, tribes may continue to face the regulatory barriers described above in obtaining RUS funding for broadband deployment on their lands.³⁹ According to the *National Broadband Plan*, local entities (including tribal, state, regional, and local governments) decide to offer broadband services when no providers exist that meet local needs, and local entities do so after trying to work with established carriers to meet local needs. Several of the tribes we visited told us they were trying to deploy broadband infrastructure or offer service because the private providers were not building out on their lands. For example, one tribe stressed that unlike private providers, they would prioritize tribal areas needing broadband service, but they need federal funding to do so.

Conclusions

An estimated 35 percent of Americans living on tribal lands lack broadband service, which could hinder tribal efforts to promote self-governance, economic opportunity, education, public safety, and cultural preservation. However, little federal funding aimed at increasing broadband service actually goes to tribal entities, even though the *National Broadband Plan* stressed that tribes needed substantially greater financial support and recommended that federal agencies facilitate tribal access to broadband funding opportunities. Tribes may face barriers in obtaining federal funds to deploy broadband, and the Broadband Opportunity Council recognized the need for federal agencies to reduce the barriers that are impeding broadband deployment. However, RUS has not taken steps to identify or address the barriers tribes face when applying for RUS grant funding. By identifying and addressing any regulatory barriers that impede tribal entities' access to RUS funding, RUS could help tribes obtain funding to expand broadband deployment on tribal lands.

³⁹Because the information we present is not generalizable to all tribes, tribes may face other barriers in obtaining RUS funding.

Recommendation for Executive Action

The Secretary of Agriculture should direct the Administrator of RUS to undertake an assessment to identify any regulatory barriers that may unduly impede efforts by tribes to obtain RUS federal grant funds for broadband deployment on tribal lands and implement any steps necessary to address the identified barriers. (Recommendation 1)

Agency Comments

We provided a draft of this report to FCC, RUS, and NTIA for comment. FCC and RUS provided technical comments, which we incorporated as appropriate; NTIA did not have any comments. A Department of Agriculture official indicated in an e-mail message that RUS neither agreed nor disagreed with the recommendation. RUS's technical comments noted that RUS has and will continue to work with tribes to facilitate broadband deployment, whether tribes have the desire and capacity to provide the service or whether another provider is able to bring that service to tribal areas.

We are sending copies of this report to the appropriate congressional committees, the Chairman of FCC, the Secretary of Agriculture, the Secretary of Commerce, and 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 goldsteinm@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 II.



Mark L. Goldstein
Director, Physical Infrastructure

Appendix I: Objectives, Scope, and Methodology

This report discusses (1) examples of partnership arrangements that tribal entities have used to increase broadband deployment on tribal lands and the outcomes of those partnerships, (2) the amount of funding provided to tribal entities for broadband deployment from key federal programs, and (3) stakeholder-identified barriers that tribal entities face in obtaining federal funding for broadband deployment and the extent to which federal agencies have taken action to address those barriers.

To address these objectives, we reviewed relevant federal statutes, including the Communications Act of 1934, as amended,¹ and Federal Communications Commission's (FCC) regulations, orders, and policy statements including FCC's *Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes*.² In addition, we reviewed documentation and interviewed officials from FCC, including officials from the Office of Native Affairs and Policy; U.S. Department of Agriculture's Rural Utilities Service (RUS); U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA); and U.S. Department of Housing and Urban Development's Office of Native American Programs.

To gather information on partnership arrangements that tribes have entered to increase broadband deployment on tribal lands and their outcomes, we conducted a review of relevant published literature that included government reports, industry articles, and publications from

¹The Communications Act of 1934, as amended, codified at 47 U.S.C. § 151, et seq.

²FCC, *In the Matter of Wireless Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Second Report and Order (FCC 18-30) (2018) and *In the Matter of Statement of Policy on Establishing a Government to Government Relationship with Indian Tribes*, 16 FCC Rcd 4078 (2000).

associations, non-profits, and public policy research organizations.³ Although we were not able to identify an industry-accepted definition of partnerships, we used the term partnerships to refer to instances in which a tribal nation or tribal government works with another entity to design, build, or operate infrastructure assets, or other capital assets to improve or enhance broadband service. This also included partnerships between a tribe and its tribally owned broadband provider. To identify examples of tribal broadband partnerships for our review, we first interviewed agency officials, tribes, private providers, and other stakeholders such as tribal associations. We also identified broadband projects with a tribal partnership component by reviewing reports from 2010 to 2017 for the following federal programs: (1) FCC's Universal Service Fund high-cost program and Connect America Fund (including the Mobility Fund Phase I (Auction 901) and Tribal Mobility Fund Phase I (Auction 902)); (2) RUS's Community Connect Program; (3) RUS's Broadband Initiatives Program; and (4) NTIA's Broadband Technology Opportunities Program. While there may be other tribal partnership examples that exist, through these efforts we identified seven broadband projects with a tribal partnership component completed within the last 5 years (2013 to 2017). We interviewed tribal leaders and officials from the seven tribes that were involved in the selected partnerships, and visited six tribes in Idaho, New Mexico, and Washington State. When meeting with tribal leaders and officials, we used the same semi-structured interview questions for all tribes; however, tribal officials may not have answered all questions. Because we limited our review to these seven selected partnership examples, our findings are not generalizable.

To determine the amount of funding from key federal programs provided to tribal entities for broadband deployment, we first identified the federal programs that provide broadband funding from NTIA's *Guide to Federal*

³For the purposes of this report, we use the definition of "tribal lands" from FCC's 2018 Broadband Deployment Report. That report defines tribal lands as: (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. See FCC, *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 33 FCC Rcd 1660 (2018) (2018 Broadband Deployment Report).

*Funding of Broadband Projects.*⁴ The guide lists 17 federal programs that fund broadband infrastructure. Of those federal programs, we focused our review on four programs, three in FCC and one grant program in RUS, selected because they provide the most directly relevant funding for broadband deployment in unserved areas, which includes tribal lands. We first identified federal agencies and programs that provide grants or loans to tribal and non-tribal entities to buildout broadband infrastructure on tribal lands including: FCC, RUS, U.S. Department of Commerce Economic Development Administration (EDA), and NTIA. We interviewed federal agency officials to identify any additional federal programs that provided funding in the last 7 years. We excluded federal loan programs because they may require letters of credit and or assets as collateral, which is often not a feasible option for tribes given land ownership issues. We also considered but excluded those federal programs that are not directly related to broadband expansion and deployment, such as the Department of Housing and Urban Development's Choice Neighborhoods Program, whose primary purpose is housing related. We compiled total funding data for these four federal programs and the amount of funding provided to tribes and tribal entities for broadband deployment projects for 2010 to 2017. We took steps to assess the reliability of the data—such as cross-checking the data, following up with agency officials, and reviewing documentation—and found the data were sufficiently reliable for the purposes of summarizing total funding and the amount provided to tribes and tribal entities. Because we relied upon titles or names of grant recipients to identify those grants awarded to tribes and tribally owned providers, our analysis may not include some grants awarded to broadband providers that deploy infrastructure to larger service areas that may also include tribal lands.

To determine stakeholder-identified barriers that tribal entities face in obtaining federal funding for broadband deployment and federal government efforts to address those barriers, we interviewed FCC and RUS officials and the tribal government officials, tribally owned broadband providers, and tribal associations listed in table 1. We interviewed representatives from 17 tribes in different locations with varying population sizes and levels of broadband deployment. Additionally, we interviewed officials from 9 tribally owned and 7 private broadband providers operating on tribal lands. We selected these broadband

⁴Department of Commerce, National Telecommunications and Information Administration, *Broadband USA: Guide to Federal Funding of Broadband Projects* (June 2017).

providers to interview because they received federal support to serve on tribal lands or because they were a designated eligible telecommunications carrier (ETC) serving tribal interests. Furthermore, we identified and interviewed industry stakeholders such as research groups and telecommunications associations on their views regarding barriers to obtaining federal program assistance for broadband deployment on tribal lands. These stakeholders were selected based on their exposure to broadband issues on tribal lands such as representing tribally owned broadband providers. The views obtained from these interviews are not generalizable to all tribes, all broadband providers, or all industry stakeholders. We also reviewed a report from the Broadband Opportunity Council directing agencies to identify and address regulatory barriers that may unduly impede broadband deployment and assessed RUS's efforts to address the regulatory barriers tribes may face in attempting to obtain RUS funding for broadband deployment. For a complete list of entities we interviewed see table 1.

We conducted this performance audit from September 2017 to September 2018 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.

Table 1: List of Entities Interviewed

Category	Category member
Representatives from Tribal Governments	Choctaw Nation of Oklahoma (OK)
Representatives from Tribal Governments	Confederated Tribes of the Colville Reservation (WA)
Representatives from Tribal Governments	Coeur d'Alene Tribe (ID)
Representatives from Tribal Governments	Fond du Lac Band of Lake Superior Chippewa (MN)
Representatives from Tribal Governments	Fort Belknap Indian Community (MT)
Representatives from Tribal Governments	Jamestown S'Klallam Tribe (WA)
Representatives from Tribal Governments	Karuk Tribe (CA)

Appendix I: Objectives, Scope, and Methodology

Category	Category member
Representatives from Tribal Governments	Leech Lake Band of Ojibwe (MN)
Representatives from Tribal Governments	Makah Tribe (WA)
Representatives from Tribal Governments	Nez Perce Tribe (ID)
Representatives from Tribal Governments	Pueblo of Acoma (NM)
Representatives from Tribal Governments	Pueblo of Pojoaque (NM)
Representatives from Tribal Governments	Pueblo of San Ildefonso (NM)
Representatives from Tribal Governments	Taos Pueblo (NM)
Representatives from Tribal Governments	Saint Regis Mohawk Tribe (NY)
Representatives from Tribal Governments	Spokane Tribe of Indians (WA)
Representatives from Tribal Governments	Yurok Tribe (CA)
Representatives from Tribally Owned Broadband Providers	Gila River Telecommunications, Inc. (AZ)
Representatives from Tribally Owned Broadband Providers	Hopi Telecommunications, Inc. (AZ)
Representatives from Tribally Owned Broadband Providers	Mohawk Networks, LLC (NY)
Representatives from Tribally Owned Broadband Providers	Mescalero Apache Telecommunications (NM)
Representatives from Tribally Owned Broadband Providers	Navajo Tribal Utility Authority (AZ, NM, UT)
Representatives from Tribally Owned Broadband Providers	Red Spectrum Communications (Coeur d'Alene Tribe (ID))
Representatives from Tribally Owned Broadband Providers	San Carlos Apache Telecommunications Utility, Inc. (AZ)
Representatives from Tribally Owned Broadband Providers	Standing Rock Telecommunications, Inc. (SD)
Representatives from Tribally Owned Broadband Providers	Warm Springs Telecommunications Co. (OR)
Representatives from Tribal Associations	Affiliated Tribes of Northwest Indians
Representatives from Tribal Associations	National Congress of American Indians
Representatives from Tribal Associations	National Tribal Telecommunications Association

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Category	Category member
Representatives from Tribal Associations	Native American Finance Officers Association (NAFOA)
Representatives from Tribal Associations	Southern California Tribal Chairmen's Association - Tribal Digital Village Network (CA)
Representatives from Companies Groups that Work with Tribes	AMERIND Risk
Representatives from Companies Groups that Work with Tribes	Mobius Legal Group PLLC
Cooperatives	Kit Carson Electric Cooperative
Regional Consortia	Middle Rio Grande Pueblo Consortium
Regional Consortia	North Central New Mexico Economic Development District
Community Access Providers	Northwest Open Access Network
Community Access Providers	REDI Net
Representatives from Providers and Trade Associations	Carlson Wireless
Representatives from Providers and Trade Associations	Century Link
Representatives from Providers and Trade Associations	Commnet
Representatives from Providers and Trade Associations	Connected Nation
Representatives from Providers and Trade Associations	Frontier
Representatives from Providers and Trade Associations	Inland Cellular
Representatives from Providers and Trade Associations	NTCA – The Rural Broadband Association
Representatives from Providers and Trade Associations	Pine Telephone Company
Representatives from Providers and Trade Associations	Rural Wireless Association
Representatives from Providers and Trade Associations	Verizon

Source: GAO. | GAO-18-682

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact

Mark L. Goldstein, (202) 512-2834 or goldsteinm@gao.gov.

Staff Acknowledgments

In addition to the contact named above, Sally Moino (Assistant Director); Tina Paek (Analyst in Charge); Rose Almoguera; Sharon Dyer; Hannah Laufe; Serena Lo; Cheryl Peterson; Malika Rice; Amy Rosewarne; Jay Spaan; James Sweetman, Jr.; Hai Tran; and Jade Winfree made key contributions to this report.

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