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NATIVE NATIONS COMMUNICATIONS TASK FORCE

Improving and Increasing Broadband Deployment on Tribal Lands

**Report to the Federal Communications Commission
from the Tribal Members of the Task Force**

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TABLE OF CONTENTS

I. EXECUTIVE SUMMARY 3
II. INTRODUCTION 3
III. OBSTACLES TO DEPLOYMENT ON TRIBAL LANDS 4
IV. DISCUSSION 6
A. Statutory Obstacles 6
1. Federal Funding Single-Use Restrictions 6
2. Impediments with Eligible Telecommunications Carrier Designations 9
B. Regulatory Barriers 11
1. Build-out Requirements Do Not Target Tribal Lands 11
2. Rate-of-Return Support for High Cost Rural/Tribal Areas Remains Insufficient 12
3. Lack of an Across-the-Board Tribal Priority for Services on Tribal Lands 14
4. Lack of a Standard Definition of Tribal Lands 15
C. Economic Barriers on Tribal Lands Raise Deployment Costs and Suppress Subscribership 16
1. Challenging Economic Conditions on Tribal lands Inhibit Broadband Deployment and Adoption 16
2. Tribes Are Limited in Their Ability to Collateralize Assets to Secure Loans 18
3. Geography and Demographics Make Broadband Deployment More Difficult on Tribal Lands 20
D. Tribes Are Impeded in Their Ability to Serve Their Communities by Lack of Access to Essential Broadband Building Blocks 22
1. Lack of Adequate Middle-Mile Connections 22
2. Lack of Access to Spectrum 24
3. Lack of Partnerships 24
E. Tribal Data Collection Difficulties Impede Broadband Deployment Efforts 25
1. State Census Block Definitions 25
2. Mapping and Data Collection Challenges 26
3. Data Ownership/Governance 27
F. Tribal Consultation and Engagement Efforts Should Be Improved 27
1. Tribal Consultation 27
2. Tribal Engagement 28
G. Accessibility 30
H. Adoption and Demand 31
VI. TRIBAL SUCCESS STORIES AND LESSONS LEARNED 31
VII. CONCLUSION AND RECOMMENDATIONS 35

I. EXECUTIVE SUMMARY

The Tribal members of the Native Nations Communications Task Force (Task Force) have developed the following report on deploying broadband in Indian country. The primary objective of the report is to inform policymakers about continuing obstacles to broadband deployment on Tribal lands, highlight Tribal success stories, and provide potential solutions that could benefit residents of Indian country.

The report identifies obstacles to broadband deployment and associated issues, including statutory obstacles; regulatory and economic barriers; geography and demographics; deployment barriers; mapping challenges; Tribal consultation and engagement issues; accessibility; and adoption and demand issues. It also discusses Tribal success stories where barriers have been overcome. Tribal members then offer policymakers in Congress and at the Federal Communications Commission (FCC or the Commission) recommendations aimed at removing the remaining obstacles and barriers to broadband deployment on Tribal lands identified in the report and closing the persistent digital divide between Indian country and the rest of America.

Key recommendations include statutory changes to remove or loosen single-use support restrictions; opening the role of Tribes in the designation of eligible telecommunications carrier (ETC) status and removing the outdated requirement that ETCs provide voice services; regulatory changes to ensure build-out on Tribal lands earlier in the build-out period; linking Tribal auction bidding credits to meeting deployment obligations on Tribal lands; and giving serious consideration to adjusting legacy-rate-of-return carrier support levels to better reflect the unique and higher costs of serving Tribal lands. Other recommendations focus on establishing an across-the-board Tribal priority for services on Tribal lands including a priority for federal subsidies or a Tribal right of first refusal for receiving federal subsidies, with the priority for subsidies including the right of Tribes to exercise oversight, determine what service is acquired and how services should be distributed on or over Tribal lands with respect to all communications services, regardless of delivery technology; establishing a standard definition of Tribal lands; and continuing to take account of economic barriers on Tribal lands in policymaking. In addition, the report makes recommendations for addressing the lack of Tribal access to essential broadband building blocks, including middle-mile connections and spectrum; for fostering partnerships between commercial providers and Tribes; regarding the need for continued consultation with Tribes on matters of significant Tribal interest; and for streamlining and improving the Tribal government-carrier engagement process. Finally, based on the experiences of Tribes who have successfully deployed networks to serve their communities, the report concludes that grant rather than loan funding is the optimal form of support for Tribes due to the unique Tribal land ownership issues and that Tribes need to be permitted to self-identify the service areas they intend to serve to better facilitate their ability to serve their communities.

II. INTRODUCTION

The Native Nations Communications Task Force (Task Force) is composed of elected or appointed leaders from federally recognized Tribal governments or governmental entities, or their designated employees and senior Commission staff.[1] The Task Force's mission is to make

[1] *FCC Seeks Nominations for Tribal Government Representatives to Serve on Renewed FCC Native Nations Communications Task Force*, Public Notice, 33 FCC Rcd 1264 (2018).

recommendations to the Commission on communications-related issues that affect Tribal interests. It provides an effective means for Tribal leaders to exchange ideas and develop recommendations to the Commission on, among other issues, the availability of communications facilities and services – including, but not limited to broadband – on Tribal lands. Tribal Task Force members are individuals with diverse professional backgrounds and first-hand experience with broadband and related Tribal issues.[2]

The Task Force met at Commission headquarters on December 4, 2018, and in Norman, Oklahoma on June 11, 2019. At its first meeting, Tribal Task Force members were asked to provide the Commission with a report on improving and increasing broadband deployment on Tribal lands to assist the Commission in fulfilling its responsibilities pursuant to Section 508(a)(1) of the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018 (RAY BAUM'S Act or the Act).[3] The Act directed the Commission to produce a report evaluating broadband coverage in Indian country and on land held by a Native Corporation pursuant to the Alaska Native Claims Settlement Act, and to initiate a proceeding to address unserved areas identified in the report.

More specifically, the Task Force was asked to provide input including, but not limited to:

- Identifying current obstacles and developing concrete recommendations to increase deployment on Tribal lands, such as geographic, demographic, economic, and regulatory obstacles, including broadband adoption and consumer demand;
- Identifying examples of Tribal lands with significant broadband deployment and the lessons learned from those successes.

This report reflects the Tribal Task Force members' perspective on challenges to deployment on Tribal lands, highlights Tribal success stories and the lessons learned from these cases, and makes concrete suggestions for addressing these challenges.

III. OBSTACLES TO DEPLOYMENT ON TRIBAL LANDS

The Commission has recognized that "members of federally-recognized American Indian Tribes and Alaska Native Villages and other residents of Tribal lands have lacked meaningful access to wired and wireless communications services."[4] In both its 2018 and 2019 Broadband Deployment Reports, the Commission has found that deployment of advanced telecommunications capability on Tribal lands continues to lag deployment in other, non-Tribal areas.[5] It has also recognized that Tribal lands are located disproportionately in rural areas, and

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[2] *Chairman Pai Announces New Appointments to the Native Nations Communications Task Force*, Public Notice, 33 FCC Rcd 10152 (2018).

[3] *See Consolidated Appropriations Act, 2018*, Pub. L. No. 115-141, Div. P—RAY BAUM'S Act of 2018, § 508(a)(1), 132 Stat. 348, 1095-96 (2018) (RAY BAUM'S Act of 2018).

[4] *See Improving Communications Services for Native Nations by Promoting Greater Utilization of Spectrum Over Tribal Lands*, WT Docket No. 11-40, Notice of Proposed Rulemaking, 26 FCC Rcd 2623, 2624, para. 1 (2011); *Transforming the 2.5 GHz Band*, WT Docket No. 18-120, Report and Order, 34 FCC Rcd 5446 (2019) (*2.5 GHz Order*).

[5] *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 18-238, 2019 Broadband Deployment Report, 34 FCC Rcd 3857, 3866-67, 3883-84, paras. 22, 44-46, Figs. 10 and 11 (2019) (*2019 Report*); *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely*

that rural Tribal areas tend to be less densely populated than rural non-Tribal areas.[6] The Commission has noted that the remote and often isolated nature of these areas, often combined with challenging terrain and lower incomes, increases the costs of network deployment and entry and reduces the profitability of providing service respectively.[7] Not surprisingly, it has found that "Tribal lands experience lower rates of both fixed and mobile broadband deployment as compared to non-Tribal areas of the United States, particularly in rural areas."[8] Thus, while it has found deployment on Tribal lands has increased in recent years, the Commission has also acknowledged that additional work is required.[9]

To better inform this effort, Tribal Task Force members have identified a wide range of regulatory and economic issues adversely affecting the deployment of communications facilities and services to Tribal areas that must be addressed. These issues, which impede deployment by commercial providers and/or by Tribes themselves, include:

1. Statutory constraints on federal funding programs such as E-Rate that restrict funding to single-use deployment, depriving Tribes of the ability to efficiently use connectivity for more than one Tribal purpose.
2. Regulatory barriers including buildout requirements for federally funded service providers that do not include Tribal buildout, funding constraints, lack of Tribal priorities and lack of a comprehensive definition of "Tribal lands" to cover Tribes that lack Tribal trust lands.
3. Economic obstacles to funding the operation and maintenance of broadband infrastructure owned by or serving Tribes.
4. Use of census blocks for determining broadband availability and funding, which fails to account for the needs of unserved remote or rural Tribes located within the same census block as nearby non-Tribal communities that enjoy expansive telecommunications services and infrastructure.

Fashion, GN Docket No. 17-199, 2018 Broadband Deployment Report, 33 FCC Rcd 1660, 1681-86, paras. 50-57 (2018) (*2018 Report*).

[6] *See Report on Broadband Deployment in Indian Country, Pursuant to the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018* (CGB/WCB/WTB May 1, 2019), *available at* https://docs.fcc.gov/public/attachments/DOC-357269A1.pdf (*Tribal Broadband Report*).

[7] *See, e.g.*, *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8870, 8967-8970, paras. 243-49 (2014); *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Report and Order, 33 FCC Rcd 6574 (2018); *Bridging the Digital Divide for Low-Income Consumers et al.*, WC Docket No. 17-287 et al., Fourth Report and Order, Order on Reconsideration, Memorandum Opinion and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, 32 FCC Rcd 10475 (2017).

[8] *Tribal Broadband Report* at 1; FCC, *Fixed Broadband Deployment Data from FCC Form 477*, *available at* https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477; FCC, *Mobile Deployment Form 477 Data*, *available at* https://www.fcc.gov/mobile-deployment-form-477-data.

[9] *Tribal Broadband Report* at 1. It is important to note that while deployment has improved for Tribes with available enterprise revenues and other critical infrastructure, such as power and roadways, it is not necessarily the case for the great majority of Indian country without access to discretionary revenues and infrastructure. *See* U.S. Government Accountability Office, GAO-19-75, Tribal Broadband: FCC Should Undertake Efforts to Better Promote Tribal Access to Spectrum at 1, n.2 (2019), https://www.gao.gov/assets/700/695455.pdf ("Levels of broadband access may vary between specific tribal lands, which may not be reflected in [FCC reported] nationwide figures. As such, it is possible that the percentage of Americans living on tribal lands that lack broadband access is higher than reported.").

5. Tribes' lack of access to spectrum, middle mile connections and public-private partnerships.
6. Barriers to the provision of telecommunications services to persons with disabilities.
7. Lack of meaningful consultation, engagement and collaboration regarding broadband deployment by both federal agencies and carriers with Tribal governments.

In this report, we have grouped our discussion of these issues into the following categories: statutory obstacles; regulatory and economic barriers; Tribal communities and demographics; deployment barriers; Tribal data collection; Tribal consultation and engagement; accessibility; and adoption and demand. We then report on Tribal success stories and lessons learned. Finally, we offer recommendations based upon our observations.

IV. DISCUSSION

Substantial and unique barriers to deployment exist throughout Tribal lands, giving rise to the need for significant federal involvement, investment and regulatory oversight to ensure that Native communities have access to broadband and advanced communications services "reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas."[10]

A. Statutory Obstacles

In this section, we identify statutory requirements that impede broadband deployment on Tribal lands that we recognize will require congressional changes to overcome.

1. Federal Funding Single-Use Restrictions

Although the Commission's Universal Service Fund (USF) and the United States Department of Agriculture's Rural Utilities Service (RUS) are the primary sources of federal funding for broadband deployment in high-cost areas, including Tribal lands, numerous federal entities provide such funding and each agency has regulations, requirements for matching funds, and restrictions that create barriers to broadband deployment initiatives on Tribal lands.[11]

The most significant barriers are statutory requirements restricting federal funding to single-use deployments, for example, health care, education, libraries, law enforcement, or housing. These statutory requirements prevent federal funds designated to support infrastructure deployment to specific types of facilities from being used to support wider community use, making it difficult for Tribes to recognize synergies and efficiencies. USF programs under Section 254 of the Communications Act such as E-Rate and the Rural Health Care program may only provide funding to eligible entities for eligible services that are being used for eligible purposes. This means that funding for these programs cannot directly support other community needs. For example, when a Tribal library resides within a community center, E-Rate can only be used to support the services and equipment used by the Tribal library, not

[10] 47 U.S.C. § 254(b)(3).
[11] As identified in the *GAO Barriers to Deployment* report, a very small portion of these federal funds are awarded to Tribes or to Tribally owned broadband providers. *See* U.S. Government Accountability Office, GAO-18-682, Tribal Broadband: Few Partnerships Exist and The Rural Utilities Service Needs to Identify and Address Any Funding Barriers Tribes Face at 16 (2018), https://www.gao.gov/assets/700/694810.pdf (*GAO Barriers to Deployment*).

the rest of the community center.[12] Similarly, under the Rural Health Care program, applicants may not use funding to deploy broadband to other Tribal entities or anchor institutions that are not eligible health care providers without allocating the costs associated with the use of the services by ineligible entities for ineligible purposes out of the request for funding.[13] Moreover, under both programs, services purchased using these USF funds may not be sold, resold, or transferred in consideration of money or any other thing of value.[14] In addition, while accounting software can help identify subsidized portions of the network, service may be purchased at a flat rate from a commercial provider and that provider may not track how the Tribe is using the service, leaving the Tribe responsible for documenting the shared use.

Tribal members recognize that despite the statutory funding limitations, Tribal communities can benefit from the infrastructure deployed using funding from these programs so long as they abide by specific program rules. For example, under the Rural Health Care program, there is a very limited exception to lease excess capacity in applicant-owned networks, but the revenue from that lease arrangement may only be used to pay the health care provider's required contribution toward the cost of the services or to sustain the health care network supported by the Health Care Connect Fund Program, and there are significant restrictions and requirements that must be satisfied for the exception to apply.[15] Further, the installation of the excess capacity may not increase the funded cost of the contemplated health care network in any way, *i.e.*, the health care provider must allocate the costs associated with the excess capacity (*e.g.*, the costs of additional facilities and services) out of its Rural Health Care Program funding request.[16] Under the E-Rate program, applicants requesting funding for construction projects can build additional infrastructure so long as all of the ineligible costs (*i.e.*,

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[12] *See* 47 U.S.C. § 254(h)(1)(B) and (h)(2) (requiring telecommunications carriers to provide discounts to schools for services provided for "educational purposes," and the Commission to establish competitively neutral rules "to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services for. . . school classrooms"); 47 CFR § 54.500 (defining "educational purposes" as "activities that are integral, immediate, and proximate to the education of students, or in the case of libraries, integral, immediate and proximate to the provision of library services to library patrons"); 47 CFR § 54.501 (designating schools, libraries, and consortia comprised of schools and libraries as eligible to receive E-Rate support). *See also Requests for Waiver and Review of the Universal Service Administrator by CCRC Community Link Breese, Illinois et al.*, CC Docket No 02-6, Order, 27 FCC Rcd 5326, 5326, para. 1 (WCB 2012) (upholding USAC's denials of E-rate applications when the petitioners failed to show that the entities listed on the applications were eligible for E-rate support). Section 254(h)(1) requires the Tribe to gain state or federal recognition for its Tribal library to qualify for E-rate funding, which presents an additional obstacle. 47 U.S.C. § 254(h)(1).

[13] *See* 47 CFR § 54.601 (limiting eligibility to public or non-profit health care providers); 47 CFR § 54.602(d) (requiring that services for which eligible health care providers receive support be reasonably related to the provision of health care services or instruction); *id.* at § 54.602(c) (requiring cost allocation to ensure that Rural Health Care Program support is only be used by eligible entities for eligible activities); *id.* at § 54.643(a)(5) (requiring applicants to provide a description of how costs will be allocated for ineligible entities as well as any agreements that memorialize such arrangements with ineligible entities

[14] *See* 47 CFR § 54.513(a) (E-Rate Prohibition on Resale); *id.* at § 54.671(a).

[15] 47 CFR § 54.633(d).

[16] 47 CFR § 633(d)(2) ("The applicant must pay the full amount of the additional costs for excess capacity facilities that will not be part of the supported health care network"); *id.* at § 54.633(d)(3) ("The additional cost of constructing excess capacity facilities may not count toward a health care provider's required contribution"); *id.* at § 54.633(d)(3) ("The inclusion of excess capacity facilities cannot increase the funded cost of the dedicated health care network in any way").

the costs of the additional equipment, services, or labor required to install additional capacity to service the community center) are removed from the E-Rate funding request and the ineligible costs are not 30% or more of the funding requested.[17] However, in many Tribal areas, there may be Rural Health Care funding supporting connectivity to a Tribal health facility, and separate E-rate funding supporting connectivity only for the educational facility.[18] Even when planning for such service is underway, grant deadlines and funding awards are not standardized making it difficult to plan additional infrastructure or expansion of the proposed project. As a result, Tribes generally cannot benefit from the federal "Dig Once" policy, which is recommended for fiber builds across Tribal lands, 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 multipurpose-facility.[19]

With limited exceptions, the services funded by USF programs cannot be shared or expanded to support other community uses.[20] These limited exceptions can prove too complex or too restrictive or both for many Tribes. The burden of documentation is on the Tribe; the service provider doesn't have to provide bandwidth reports, usage reports or access data and without this information the documentation is often manual, leading to errors and estimations. In addition, documenting the separation of federally funded work from the added work can be both difficult and time consuming. Tribes are well versed and creative when it comes to taking available resources further than initially intended or expected, but their ability to do so is hampered by statutory requirements restricting support funding to single-uses.

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[17] *See* 47 CFR § 54.504(b).

[18] In its recent Connected Care Notice of Proposed Rule Making, the Commission sought comment on existing uses of connected care technologies such as remote patient monitoring devices. *Promoting Telehealth for Low-Income Consumers,* WC Docket No. 18-213, Notice of Proposed Rule Making, 34 FCC Rcd 5620, 5628-29, para. 22 (2019). GRTI cautioned the Commission against adopting structural rules that have the effect of favoring "single purpose" connectivity over broadband Internet access services. *See* Gila River Telecommunications, Inc. Comments, WC Docket No. 18-213, at 2-3 (rec. Aug. 29, 2019).

[19] We note that under the Dig Once policy, where fiber is extended across Tribal lands, access points could be utilized for tribes or local communities. Many Tribes have experienced fiber deployment across their lands without the ability to utilize the benefits of the fiber deployment. If access points were provided when lines are extended, a reduction of cost to provide service to Tribal lands could be realized. See Testimony of Belinda Nelson, Chairperson for the Gila River Telecommunications, Inc., Before the Senate Committee on Indian Affairs and House Committee on Natural Resources, Infrastructure Roundtable (Mar. 15, 2017) (discussing significant savings that can be realized by deploying fiber optic cables for broadband during initial construction along with other utilities laying conduit).

[20] Commission rules allow schools to offer their E-Rate supported services to the greater community after school hours and during weekends and holidays so long as: (1) schools are not requesting funding for more services than are necessary for educational purposes to serve their current student population, *i.e.*, community use of the services purchased under the E-Rate program is incidental and does not increase overall costs to the E-Rate program; (2) community use is limited to non-operating hours of the school and to community members who access the Internet while on a school's campus; and (3) schools are not charging for the use of services and facilities purchased using E-Rate funds. *See Schools and Libraries Universal Service Support Mechanism, A National Broadband Plan for Our Future*, CC Docket No. 02-6, GN Docket No. 09-51, Sixth Report and Order, 25 FCC Rcd 18762, 18774-77, paras. 22-27 (2010). In that Order, the Commission left "it to schools to establish their own policies regarding specific use of their services and facilities," and declined to provide guidance on how schools should structure after-hours community use policies. *See id.*

For example, most remote and rural Tribes face high energy and Internet access connectivity costs, and some the absence of both. Tribes have proposed innovative solutions of collocating on transmission facilities conductors for electricity, wireline and fiber, however federal and state programs that fund deployment often prohibit program resources from use for anything but its single purpose.

An example is the Ewiiaapaayp Band of Kumeyaay Indians, a 5,470-acre reservation between the Laguna Mountains and In-Ko-Pah Mountains of east San Diego County, California. The Reservation is unconnected by transmission facilities to either the electrical or communications grids, resulting in the absence of access to Internet, cellular, wireless or radio, even though Internet service provider (ISP) maps show the area as fully served. Federal programs that would provide connection of the electrical grid are not funded. RUS broadband programs require high Tribal contributions and expert technical assistance for grant or loan applications. The Tribe has proposed colocation on transmission facilities of conductors for electricity, wireline and fiber conductors; however, no program permits intermingling of funds for such purposes.

Further, colocation of electrical and broadband conductors on shared transmission facilities serve the additional purpose of improving the financial feasibility of the shared interconnection, or middle-mile connection, to the backbone that could otherwise not be financed due to the low customer base. Shared deployment costs include rights-of-way/easements, transmission facilities, and debt service. For example, the island communities of (1) Annette Island (Metlakatla Indian Community), Prince of Wales Island (Organized Village of Craig, Organized Village of Kasaan, Organized Village of Klawock, Organized Village of Hydaburg), and City and Borough of Ketchikan, and (2) Wrangell Cooperative Association, Kake Cooperative Association, Hoonah Cooperative Association, Petersburg Cooperative Association, would all benefit from a tie line to the Province of British Columbia electrical grid (fueled by hydropower) and the communication grid. However, these tie lines have been proposed but not approved due to concerns about high construction costs and low consumer ratepayer bases. The colocation of fiber with electrical conductors would alleviate a significant share of these deployment costs. The addition of broadband would seed improvements to individual income and business revenue levels provided, however, that the federal and state governments are willing to invest in improvements to basic and essential services for Tribal and rural communities.

To address this problem with respect to FCC programs, Section 254 should be amended to give recipients the opportunity to 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 multipurpose-facility by removing or loosening single-use funding restrictions.

2. Impediments with Eligible Telecommunications Carrier Designations

From a Tribal perspective, there are two problems with the current way eligible telecommunications carriers (ETCs) are certified that require congressional action to remedy. First, Tribal governments do not have a role in the designation of an ETC provider on Tribal lands; this authority is reserved to the states and, in appropriate cases, to the Commission.[21]

[21] Section 214(e)(2) vests primary authority to designate a common carrier as an ETC within the jurisdiction of the State commissions. In the case of a common carrier not subject to the jurisdiction of a

Although we recognize that that the Commission has established a two-step framework for designating ETCs on Tribal lands,[22] we believe additional measures are needed to give Tribal governments a voice in the designation. To this end, there should be a statutory change to open the role for designation of ETC status to include Tribes to better reflect the sovereignty of the Tribe over Tribal lands. Second, Section 254 of the Communications Act continues to have the outdated requirement that an ETC must provide voice services.[23] This should be removed or broadened to also include broadband services without voice services.

If Tribes were given a significant role in designating which ETCs are able to operate on their lands, we believe there would be a higher likelihood build-out will occur as intended. Giving Tribes a role in the designation of ETCs also preserves and reflects their inherent sovereignty over their lands and furthers Congress's longstanding goal of fostering Tribal self-determination.[24] At the very least, the ETC designation process should include consultation with Tribal Nations regarding any plans to serve Tribal lands.

With regard to the second issue, Tribal governments that wish to deploy broadband services, but are not looking to be the voice provider, subject to regulatory requirements appropriate for commercial carriers but inappropriate for Tribal governments, are not able to qualify for USF programs that require ETC status, such as high-cost funding.[25] This model of requiring the provision of voice services to qualify as an ETC is outdated. Moreover, the complex and costly ETC regulatory regime prevents Tribes from serving their Tribal citizens and is a significant obstacle to Tribes seeking to improve the welfare of their Tribal citizens, improve their economies, and improve the quality of their government services. A statutory change is necessary to remove the requirement to provide voice services to permit funding for broadband-only deployment and services without requiring the carrier to take on additional regulatory requirements unrelated to the services the Tribe wishes to provide. In the alternative, eliminating the need for an ETC designation in the high-cost context would likely achieve the same goal.

State commission, Congress placed the authority to designate such a carrier as an ETC within the FCC's jurisdiction. 47 U.S.C. § 214(e)(6).

[22] *See generally*, *Federal-State Joint Board on Universal Service et al.,* CC Docket No. 96-45, Twelfth Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking, 15 FCC Rcd 12208, 12255, para. 93 (2000) (*Twelfth Report and Order*).

[23] 47 U.S.C. § 254(e).

[24] The National Broadband Plan recommended "Tribal governments should play an integral role in the process for designating carriers who may receive [universal service] support to serve Tribal Lands." FCC, Connecting America: The National Broadband Plan at 146 (2010), https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf. *See also Improving Communications Services for Native Nations,* CG Docket No. 11-41, Notice of Inquiry, 26 FCC Rcd 2672, 2680-87, paras. 13-32 (2011) (*Native Nations NOI*) (seeking comment on issues related to ETC designation on Tribal lands, including identification of Tribal lands served through low income and high-cost support programs and the nature of consultation with Tribal governments that should be included in the ETC designation process).

[25] Advanced communications capabilities today enable the provision of voice over Internet Protocol so that traditional circuit-switched voice service is no longer the sole option, so that traditional circuit-switched voice service is no longer the sole option. However, the Commission has previously rejected the availability of pure over-the-top VoIP as qualifying a provider for ETC status. See *WCB Reminds Connect America Fund Phase II Auction Applicants of the Process for Obtaining a Federal Designation as an Eligible Telecommunications Carrier*, WC Docket Nos. 09-197, 10-90, Public Notice, 33 FCC Rcd 6696 (2018).

B. Regulatory Barriers

The difficulties of deploying broadband and providing communications services in rural areas have been well documented by Tribes and rural telecom associations.[26] Although Tribes share many of the concerns and agree with many of the regulatory solutions articulated by rural providers and their associations, Tribes also face unique challenges that require unique solutions.

While the Commission has taken many steps in recent years to reform its USF support programs to better target broadband support to providers serving Tribal lands[27] and to increase opportunities for Tribes to access spectrum over their Tribal lands,[28] significant regulatory impediments remain. We discuss these below.

1. Build-out Requirements Do Not Target Tribal Lands

Under current federal funding models, funds have traditionally been allocated in a manner that allows carriers to choose to serve Tribal and rural areas at the end of the funding cycle;[29] these areas are often dropped entirely as build-out obligations are met. Thus, even when broadband providers serving Tribal lands receive federal support funding, Tribal Nations are frequently the last to be served, if they are served at all. For example, incumbent price cap carriers were given the offer of model-based support within eligible Connect America Fund (CAF) areas without input from Tribal governments with respect to which ETC should build out on Tribal lands. This created situations in which incumbent price cap carriers that had adversarial relationships with the affected Tribal governments were awarded statewide offers of rural broadband funding without specific deployment obligations covering Tribal lands.[30] ETCs

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[26] *See, e.g.*, Gila River Telecommunications, Inc. Comments, WC Docket Nos. 10-90 and 14-58, CC Docket No. 01-92 (rec. May 12, 2016) (Gila River Comments); NTCA - The Rural Broadband Association Comments, WC Docket Nos. 10-90 and 14-58, CC Docket No. 01-92 (rec. May 12, 2016).

[27] *See, e.g., Connect America Fund*; WC Docket No. 10-90, Report and Order, 33 FCC Rcd 3602 (2018) (*Tribal OpEx Relief Order*); *Promoting Telehealth in Rural America*, WC Docket No. 17-310, Report and Order, 33 FCC Rcd 6574 (2018) (Rural Health Care Funding Cap Increase); *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration, 33 FCC Rcd 11893 (2018) (A-CAM II Tribal Broadband Factor); *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139 (2016) (*Alaska Plan Order*); *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking; 26 FCC Rcd 17663 (2011), *aff'd sub nom. In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014) (Tribal Lands Bidding Credits for Mobility Fund Phase I and II Auction) (*USF/ICC Transformation Order*); *Modernizing the E-rate Program for Schools and Libraries; Connect America Fund*, WC Docket Nos. 10-90 and 13-187, Second Report and Order and Order on Reconsideration, 29 FCC Rcd 15538 (2014) (Tribal Schools and Libraries E-Rate Discounts); *Federal-State Joint Board on Universal Service et al.*, CC Docket No. 96-45, Twelfth Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking, 15 FCC Rcd 12208 (2000) (Lifeline Enhanced Support & Link Up).

[28] *See 2.5 GHz Order* at 5463, para. 47 (2.5 GHz Rural Tribal Priority Window); *Partitioning, Disaggregation, and Leasing of Spectrum*, WT Docket No. 19-38, Notice of Proposed Rulemaking, 34 FCC Rcd 1758 (2019) (exploring modifications to its rules on spectrum partitioning, disaggregation and leasing as a potential means to increase availability of advanced telecommunications services in rural areas and spectrum access by smaller carriers) (*Secondary Markets NPRM*).

[29] *See* 47 CFR § 54.308.

[30] In some areas, price cap carriers declined the FCC's offer of CAF II model-based support, with the result that support for those areas became available for competitive bidding through the CAF II auction.

using CAF II model-based support may be able to meet their build out requirements – *i.e.*, the requirement to deploy service to a set percentage of locations within eligible areas – without fully deploying to Tribal areas.[31]

Lack of build out requirements left Morongo without broadband Internet access for years after funding was made available. Morongo had been working with local representatives of Frontier/Verizon in 2009 and 2010 when funding was available to them for extending broadband in rural communities. Unfortunately, decisions made at the state, local and corporate level to use the funding for other areas left Morongo's reservation unserved until 2017. To secure service, the Tribe had to pay for the installation, guarantee a minimum number of households and pay monthly for their service.[32]

Regulatory build-out requirements should be modified so that Tribes are served earlier in the process and build-out to Tribal lands should be required for all programs going forward as the Commission did for carriers that elected the new model offer.[33] The Commission should also consider explicitly linking receipt of bidding credits in USF reverse auctions by providers serving Tribal lands to meeting deployment obligations on those Tribal lands. We also suggest considering the imposition of build-out requirements for spectrum licensees who have been holding spectrum without utilizing it for more than 10 years.

2. Rate-of-Return Support for High Cost Rural/Tribal Areas Remains Insufficient

It is well documented that areas served by Tribal carriers or carriers who serve Tribal lands have higher than average costs.[34] Tribal telecommunications providers have made

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Therefore, it may be less likely that Tribes will have adversarial relationships with the auction winners, who will be under more potentially stringent build-out requirements.

[31] We recognize that the Commission is considering changes in its Rural Digital Opportunity Fund rulemaking that would make these kinds of unserved areas eligible for support and would include a proposed Tribal Bidding Credit to incentivize participation. See *Rural Digital Opportunity Fund; Connect America Fund,* Notice of Proposed Rulemaking, 34 FCC Rcd 6778, 6779, para. 1 (2019) ("RDOF NPRM"). However, the problem would remain if winning bidders are provided flexibility to meet deployment obligations without deploying to Tribal lands.

[32] Although not directly related to build out requirements, Morongo notes that providers must apply for rights-of-way/easements through the BIA, not the Tribe. Many carriers lack experience in applying for rights-of-way/easements on Tribal lands and allotments and chose to go around Tribal lands rather than hire staff and pay the costs of the survey to utilize the BIA process. The unique challenges of access to rights-of-way, leasing and permitting of Tribal lands under the auspices of the Department of Interior's Bureau of Indian Affairs are summarized in a recent DOI report, U.S. Department of Interior, Connectivity in Rural America, Leveraging Public Lands for Broadband Infrastructure at 69-77 (2019), https://www.blm.gov/sites/blm.gov/files/DOI_Connectivity_in_Rural_America.pdf.

[33] *See Wireline Competition Bureau Provides Guidance Regarding Alternative Connect America Model Final Deployment Obligations,* WC Docket No. 10-90, Public Notice, 34 FCC Rcd 5337, 4 (WCB 2019) ("A carrier electing an A-CAM II offer that includes an adjustment based on the Tribal Broadband Factor must separately meet the deployment obligations for Tribal lands set forth in the A-CAM II offer in addition to the deployment obligations for the service area as a whole.").

[34] *See Tribal OpEx Relief Order,* 33 FCC Rcd at 3603-04, para. 5.

numerous filings with the Commission and elsewhere about the unique difficulties of serving Tribal lands with voice and data.[35]

They have demonstrated that their higher costs are due to unique geographic or terrain challenges, compliance with cultural laws, National Historic Preservation Act (NHPA), Archeological Resource Protection Act (ARPA), and the Native American Graves Repatriation Act (NAGPRA), and the unique challenges they face concerning access to rights-of-way through the federal process administered by the Bureau of Indian Affairs. Many rural Tribal lands are more rugged, more remote and more sparsely populated than non-Tribal rural lands. This makes construction of broadband infrastructure even more expensive than in non-Tribal rural areas. In addition, poor federal recordkeeping has left the location of other utilities on Tribal lands, such as water lines and gas lines, poorly documented or entirely unknown. As a result, construction of communications infrastructure on Tribal lands often causes inadvertent damage to these other utilities, requiring costly repairs and adds additional costs to survey the infrastructure for the exact location. Another common Tribal challenge is seeking approvals for facilities siting from landowners who own allotted lands.[36] In many cases, ownership of individual parcels of allotted land has been divided between many owners as a result of inheritance patterns occurring over several generations. Federal law requires that a provider must gain the consent of a minimum of 51% of those landowners for rights-of-way access, which vastly increases both the time and the costs of deployment.[37]

Once deployment occurs on Tribal lands, maintaining and upgrading the networks are also extremely and uniquely costly for the reasons listed and are a key reason Tribal lands remain unserved or underserved.

Although the Commission has made, and is considering additional adjustments, including a Tribal Broadband Factor (TBF) for legacy rate of return carriers,[38] its offers of model-based support were problematic for some rural Tribal Telcos. The Commission's A-CAM II version of the TBF for legacy rate-of-return carriers still represented a significant reduction of support for most National Tribal Telecommunications Association (NTTA) Tribal carriers when compared to legacy support levels. The proposed TBF places a funding cap on a per-location basis, which still resulted in a significant reduction of support as compared to non-ACAM model-based support.

Both Gila River Telecommunications, Inc. (GRTI) and NTTA filed comments pointing out the difference in the level of support as proposed by the Commission's TBF and the NTTA's TBF which petitions for changes to legacy support mechanism—an increase of 25% for High-Cost Loop Support (HCLS) and CAF Broadband Loop Support (CAF BLS).[39] NTTA's TBF

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[35] *See* Gila River Comments at 3-4; National Tribal Telecommunications Association Comments, WC Docket Nos. 10-90, 14-58, and 17-135, CC Docket No. 01-92 (rec. May 25, 2018).
[36] We discuss the different types of Tribal lands in Section II.C.2 and 3 of this report.
[37] *See* 25 U.S.C. § 324; 25 CFR § 169.4.
[38] See *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration, 33 FCC Rcd 11893 (2018) (seeking comment on whether to apply the Alternative Connect American Fund II (A-CAM II) Tribal Broadband Factor to the legacy rate-of-return program).
[39] *See* Gila River Telecommunications Inc. Comments, WC Docket No. 10-90 (rec. May 12, 2016); The National Tribal Telecommunications Association Comments, WC Docket No. 10-90 (rec. May 25, 2016).

proposal requires build out obligations over a 10-year period in exchange for the increased support.

Instead of providing additional support to address the unique and higher costs associated with serving Tribal lands, the Commission's TBF for ACAM II carriers, when compared to legacy levels, would have resulted in a substantial reduction of support for most carriers serving Tribal lands. Increasing broadband deployment with less support is not a business model that Tribal carriers can utilize.

To better address the unique and higher costs associated with serving Tribal lands, we recommend the Commission give serious consideration to GRTI and NTTA data and analysis in adjusting legacy rate-of-return carrier support levels.

3. Lack of an Across-the-Board Tribal Priority for Services on Tribal Lands

The Commission has recognized that because of their status as sovereign nations responsible for "maintaining and sustaining their sacred histories, languages and traditions," among other things, federally recognized Tribes "have a vital role to play in serving the needs and interests of their local communities."[40] In 2010, the Commission established a Tribal Radio Priority for use in allocating and assigning broadcast radio channels, finding that such a Tribal Priority would advance "the Commission's longstanding commitment 'to work with Indian Tribes on a government-to-government basis . . . to ensure, through its regulations and policy initiatives, and consistent with Section 1 of the Communications Act of 1934, that Indian Tribes have adequate access to communications services."[41] The following year, the Commission sought comment on "whether a Native Nations priority, analogous to the one adopted in the *Rural Radio Order*, should be adopted to make it easier for Native Nations to provide other communications services, such as wireless, wireline, or satellite services, to their communities."[42]

A Tribal Priority analogous to the Commission's Tribal Radio Priority would benefit Tribes and residents of Tribal lands by lowering regulatory barriers to entry into the provision of communications services to their communities. We suggest that a Tribal Priority be factored into all proceedings affecting Tribal lands. That is, Tribes should be given first priority or a right of first refusal for receiving federal funding and the priority for subsidies should include the right of Tribes to exercise oversight, determine what service is acquired and how services should be distributed on or over Tribal lands with respect to all communications services, regardless of delivery technology. For example, Tribes should be given priority to attain spectrum when deemed available by the Commission. This would allow Tribes, who are highly motivated to serve and advance economic development in their communities, to address digital divide issues for themselves.

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[40] *Native Nations NOI,* 26 FCC Rcd at 2677-78, para. 7; *see also Policies to Promote Rural Radio Service and to Streamline Allotment and Assignment Procedures,* First Report and Order and Further Notice of Proposed Rulemaking, 25 FCC Rcd 1583, 1587-88 (2010) (*Rural Radio Order*).

[41] *Rural Radio Order,* 25 FCC Rcd at 1588 (citing *Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes*, Policy Statement, 16 FCC Rcd 4078, 4079 (2000) (*Tribal Policy Statement*)).

[42] *Native Nations NOI,* 26 FCC Rcd at 2678, para. 8.

For example, in the event that an incumbent carrier serving Tribal lands wishes to divest its exchange, the Tribal Nation being served should be given priority or first right of refusal to acquire that exchange. Similarly, if a USF recipient serving Tribal lands can be shown to be failing to meet its obligations, the Tribe should have an opportunity to replace that carrier with a Tribally-owned entity. Along the same lines, if there is a Tribally-owned telecom capable of provisioning services on Tribal land it should be given priority over other non-Tribal carriers that are also capable of provisioning services.

Warm Springs' application to take over the local exchange on their reservation illustrates this point. The incumbent LEC serves only 10% of the reservation's population yet is designated to receive the available USF high-cost support. Warm Springs has built a telecom that serves 90% of the population but the Commission has yet to act upon its Incumbent Local Exchange Carrier Application.[43] A Tribal Priority would permit Warm Springs and other Tribes in similar circumstances to replace underperforming USF recipients.

4. Lack of a Standard Definition of Tribal Lands

The FCC's rules currently contain several different definitions of "Tribal lands," depending on the context.[44] For example, in determining eligibility for USF enhanced Lifeline and Link Up programs, Tribal lands are encompassed within the definition of "reservation," which in turn is defined as "any federally recognized Indian tribe's reservation, pueblo, or colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688), and Indian allotments."[45] In establishing priorities for radio licenses, Tribal lands are defined to include "American Indian Reservations and Trust Lands, Tribal Jurisdiction Statistical Areas, Tribal Designated Statistical Areas, Hawaiian [Home Lands], and Alaska Native Village Statistical Areas, as well as the communities situated on such lands."[46]

The Commission has twice considered adoption of definitions that would allow Tribes without significant land holding to demonstrate qualifications. In the radio context, the Commission considered, but did not adopt, modifications to the Tribal Priority that would extend it to Tribes without "Tribal lands" after finding "that the situations of different Tribes are extremely varied and are likely to require different showings, necessitating flexible standards." Instead, the Commission indicated its receptivity to waiver petitions by Tribes lacking substantial Tribal lands able to demonstrate that grant of the waiver would serve the goals of the Tribal Priority by enabling them to provide radio service uniquely devoted to the needs, language, and culture of the Tribal community because a majority of the proposed service would cover the functional equivalent of Tribal lands.[47]

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[43] *See* Petition of Warm Springs Telecommunications Company for Order Declaring it an Incumbent Local Exchange Carrier for the Warm Springs Reservation in Oregon, WC Docket No. 16-284 (filed August 16, 2016).

[44] *Native Nations NOI,* 26 FCC Rcd at 2683, para. 21.

[45] 47 CFR § 54.400(e). The Commission uses the same definition of Tribal lands for purposes of the Tribal Lands Bidding Credit. *See Extending Wireless Telecommunications Services to Tribal Lands,* WT Docket No. 99-266, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 11794, 11796, n.1 (2000).

[46] *See Rural Radio Order*, 25 FCC Rcd at 1587, n.15.

[47] *Rural Radio Order,* 25 FCC Rcd at 1587-88, para. 8.

In the Native Nations NOI, the Commission asked whether it should consider adopting a single definition of "Tribal lands," and, if so, precisely what that definition should encompass.[48] The Commission also asked whether it should "include a provision in the definition of Tribal lands that would encompass Tribes without significant land holdings," and, asked "the broader question of how the Commission's policies designed to bring communications services to Native Nations could be designed to benefit members who do not live on Tribal lands."[49]

The definition of "Tribal lands" or "trust land" or "reservation land" in program requirements that determine a Tribe's eligibility by its affiliation with reservation or Tribal trust lands are preclusive for landless Tribes, as are all but one Tribe in Alaska (Metlakatla Indian Community) and over a dozen California Tribes, because these terms of art may unintentionally constrain or limit the jurisdictional reach of Tribes. Tribal sovereignty should encompass the ability of any Tribe to serve its community whether it owns the land or is the beneficiary of trust land held by the federal government or whether it owns or is the beneficiary to no land at all.

The lack of a comprehensive definition of "Tribal lands" that would cover landless Tribes continues to be an obstacle to these Tribes' ability to provide access to broadband and other services to their citizens and promote self-governance in cases where eligibility for programs is based on a definition of Tribal lands. This is particularly true given that only 312 of the 573 federally recognized Tribes have reservations, and some Tribes have very small land holdings. The Commission should again consider how best to meet the needs of such Tribes either through modifications to its definitions of Tribal lands or by other means of regulatory forbearance or waiver to ensure that these Tribal communities are not left behind.

C. Economic Barriers on Tribal Lands Raise Deployment Costs and Suppress Subscribership

Native American communities historically have had less access to telephone and broadband service than other segments of the population for a number of reasons, such as the high build-out costs of the infrastructure necessary to provide ubiquitous telephone and broadband services to residents on Tribal lands and the limited financial resources of many Native Americans. The rural nature of many Tribal lands deters businesses of all kinds, including communications service providers, from investing in businesses on Tribal lands due to the lack of an adequate return on investment, which in turn contributes to high unemployment. Below we identify economic and related cultural factors raising broadband deployment costs and suppressing subscribership on Tribal lands that the Commission should consider in its policymaking activities.

1. Challenging Economic Conditions on Tribal lands Inhibit Broadband Deployment and Adoption

The Gila River Indian Community (GRIC or the Community), established by Congress in 1939 and located south of Phoenix, exemplifies this problem. It has a land area of 583,749 square miles and a 2010 Census population of 11,712.[50] By comparison, the City of Phoenix is

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[48] *Native Nations NOI,* 26 FCC Rcd at 2683-84, para. 22.

[49] *Id.*

[50] *See* Arizona Rural Policy Institute, Demographic Analysis of the Gila River Indian Community Using 2010 Census and 2010 American Community Survey Estimates at 6, https://in.nau.edu/wp-content/uploads/sites/156/2018/12/gila_river_indian_community_0.pdf (last visited Aug. 6, 2019).

518 square miles and had a population of 1,446, 914 in 2010.[51] Median household income on Gila River at the time of the 2010 Census was $24,771 (compared to roughly $50,080 for Phoenix[52]), and 48% of Gila River residents live below the poverty line, (compared to 21% in Phoenix).[53] Gila River is a young community with a median age of 25.3, compared to a median age of 35.9 for the State of Arizona. More than one-third (36.5 percent) are under the age of 18.

The GRIC Community Council created Gila River Telecommunications, Inc. in 1988 to provide service tailored to the economic profile of the Community. GRIC was not participating in the gaming industry at this time and secured a Rural Electrification Administration (now RUS) loan to finance the network. Since the establishment of GRTI, 100% of the Community has been afforded the ability to receive voice as well as broadband services.

GRIC is located between Phoenix and Tucson and Interstate 10 dissects the GRIC. Wireless carriers submit proposals to the GRIC's leasing entity, for communications sites along the I-10 corridor, which is highly marketable. In addition, a new freeway, the Loop 202 South Mountain Freeway, is under construction. Loop 202 South Mountain Freeway traverses the northern boundary of GRIC, just off the Community's land. The Freeway is tentatively scheduled to open in late 2019. The Gila River Cellular General Partnership serves AZ RSA-5, which includes the Community and surrounding areas. In addition, GRTI (not a part of the GRCGP) owns two communications sites which lease spaces to wireless carriers. Although wireless carriers are not incented to serve the residents (low population density) of GRIC, they are interested in providing service along the I-10 corridor.

The Nez Perce offers another example.[54] The current Nez Perce Reservation now encompasses 770,453 acres or 1,208 square miles across north central Idaho – an area close to the size of Rhode Island. Reservation land is rugged and remote, a territory of extreme temperatures, steep mountains, precipitous canyons, scenic rivers and narrow winding roads. Portions of the reservation are classified as 'frontier' by the federal government due to geographic isolation and a sparse population of less than six persons per square mile.

There are currently 3,554 enrolled Nez Perce Tribe members with an estimated 2,781 who reside on the reservation, among a total population of 18,790 persons living on the reservation including Tribal members, non-Tribal Indians, and non-Indians. The reservation encompasses all or part of five expansive counties. Of the 13 communities on the reservation, all have populations of less than 1,000 persons, except for Lapwai (pop. 1,148), Kamiah (pop. 1,320) and Orofino (pop. 3,087).

Like so many Tribal governments throughout the United States, the Nez Perce must confront poverty and its collateral damage of crime, unemployment, family disruption, and lack of educational opportunities for its members. The Tribe operates two small casinos, but revenue is extremely limited. Economic distress impacts tax revenues that were already low due to the limited area tax base. County and city governments within the reservation are also confronted with region-wide, persistent problems of extreme poverty, high unemployment, and lack of economic opportunity. Major employers on or near the Reservation are the Tribal

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[51] *See* U.S. Census Bureau, *Quick Facts, Phoenix City, Arizona*, https://www.census.gov/quickfacts/phoenixcityarizona (last visited Jul. 24, 2019).
[52] *Id.* (based on 2013-2017 data).
[53] *Id.*
[54] Material in this discussion of the Nez Perce was provided by the Nez Perce Grants Office.

government, Tribal enterprises and a paper mill in Lewiston, Idaho, but these are insufficient to absorb the available workforce. Labor force participation among American Indians on the Nez Perce Reservation between 2012-17 averaged 52.2 percent. The State of Idaho's poverty rate has remained stagnant for several years with 15.3 percent of all residents living in poverty (U.S. Census). American Indians on the Reservation overall consistently have a poverty rate of 30 percent, with pockets of the reservation have as many as 35.95% of all Indians living below the federal poverty level. The average median household income of all residents on the Nez Perce Reservation in 2017 was $41,423 and for American Indians it was $40,278 – only 66 percent of the national average of $62,175. In 2017, the average per capita personal income of all residents on the reservation was $21,338 and for American Indians on the reservation it was $13,735 - far below the average U.S. mean per capita income in 2017 of $31,786

The Commission has recognized that "[h]igh poverty rates and low-income levels on Tribal lands, as well as cultural and language barriers, further inhibit the widespread availability of broadband to Tribal residents."[55] We encourage the Commission to continue to take these economic and related cultural factors into account in all policymaking activities that significantly affect Tribal interests.

2. Tribes Are Limited in Their Ability to Collateralize Assets to Secure Loans

In addition to challenging economic conditions for Tribal residents, Tribes have limited financial resources to call upon due to their inability to collateralize federal trust assets to secure loans for infrastructure deployment and maintenance, as required by financial institutions.[56] This leaves Tribes uniquely dependent on federal aid programs for broadband deployment and service provisioning.

According to BIA, there are only three types of reserved federal land in the United States: military, public, and Native American. During the late 1700's and early 1800's, the United States government made a series of treaties with individual Native American nations that are indigenous to the area. These "contracts among nations" recognized and established unique rights, titles, and benefits for the Tribes who ceded millions of acres of land to the US government and accepted its protection.

Today, there are five different types of Native American lands, most of which are ineligible for collateralization due to their legal status:[57]

1. Reservation – A reservation, probably the most well-known type of Native American lands, "is an area of land reserved for a tribe or tribes under treaty or other agreement with the United States, executive order, or federal statute or

[55] *Tribal Broadband Report* at 1; *Rate-of-Return Reform Order,* 31 FCC Rcd at 3224, paras. 368-69; *Tribal OpEx Relief Order*, 33 Rcd at 3602-03, para. 2.

[56] The Department of the Interior's Bureau of Indian Affairs controls Tribal trust and restricted lands. *See* Bureau of Indian Affairs, *Trust Services*, https://www.bia.gov/bia/ots (last visited Aug. 5, 2019).

[57] Material in this section is drawn from BIA FAQs and a brochure produced by the Office of Indian Energy and Economic Development. *See* Bureau of Indian Affairs, *Frequently Asked Questions*, https://www.bia.gov/frequently-asked-questions (last visited Aug. 5, 2019); U.S. Department of the Interior Office of Indian Energy and Economic Development, Division of Capital Investment: Helping Guarantee the Future of Indian Country (2019), https://www.bia.gov/sites/bia.gov/files/assets/as-ia/ieed/pdf/DCI-WhoWeAre-2019-broch_R3web%20%281%29.pdf.

administrative action as permanent tribal homelands, and where the federal government holds title to the land in trust on behalf of the tribe." There are approximately 56.2 million acres of reservation land held in trust by the United States government for Native American Tribes across the nation. The largest reservation is the approximately 16 million-acre Navajo Reservation in Utah, Arizona, and New Mexico. The smallest reservation is the Pit River Tribe's approximately 1-acre cemetery in California.

2. Allotted Lands – Allotted lands are former reservation lands that have been distributed to individuals, usually in 40, 80, and 160-acre parcels. Those who are given this land have an undivided interest in the land, which is unlimited in its duration, meaning the land can be divided among their heirs. Originally, the federal government held all allotted lands in trust for the benefit of the allottees and their heirs. As of today, there are approximately 10 million acres of individually owned allotted land still held in trust. Tribal Trust Lands are exempt from restrictions such as property taxes, however Tribal Lands require BIA approval for loans, easements and leases such as agriculture or development. Tribes and Tribal members purchasing land outside or adjacent to Reservations and inherited allotments can make application through the BIA to bring the land into trust for the Tribe or Individual Tribal Member. If they decide not to place that land into trust then the land is subject to taxes and restrictions.
3. Restricted Fee Lands – This category of land includes land to which title is held by an individual person or Tribe, the status and use of which can only be changed by the owner with the approval of the Secretary of the Interior. This includes limitations on how these individuals and Tribes can use the land, including building on the land, renovating existing buildings, and being able to take out home mortgages. Fee lands are subject to county, state, and federal taxes and this land can be used as collateral for a loan, unlike trust lands.
4. State Indian Reservations – Another major type of Native American lands are lands held in trust for Tribes by a state. These trust lands are mostly within reservation boundaries but there are some that are off-reservation, which can be religious sites or pieces of land allotted to individuals. The land is not subject to state property tax and government but is under the jurisdiction of state law.
5. Unrestricted Fee Lands – Many Tribes have purchased additional land in fee. In some cases, the Tribe makes application to the BIA to bring these land into trust status for the benefit of the Tribe, but other Tribes may hold the property in Fee for the purposes of housing, economic development, consolidation, *etc.*, and may use the land without restrictions from the BIA however they do have to comply with local jurisdictions.

Of the foregoing, both federal and state reservation lands, as well as allotted lands still held in trust, may not be collateralized. Allotted lands that are no longer held in trust are owned by individuals, rather than a Tribe, and so are not a source of collateral for Tribal governments. Consequently, most Native American lands today cannot be used to secure loans and lines of credit needed for Tribes to self-fund broadband deployment, or to qualify for spectrum auctions.[58]

[58] Due to this situation, the Commission has shown a willingness to provide "greater flexibility regarding letters of credit for Tribally-owned and -controlled winning bidders." *See Connect America Fund, ETC Annual Reports and Certifications, Rural Broadband Experiments*, WC Docket Nos. 10-90, 14-58, and 14-

3. Geography and Demographics Make Broadband Deployment More Difficult on Tribal Lands

The challenges of providing communications services in rural America are well known.[59] Ninety-seven percent of the United States land mass is rural; twenty percent of the U.S. population lives in rural America.[60] Tribal lands are a subset of the demographic of rural America and Tribes face both common and unique challenges in serving their rural and remote communities. These include geographic challenges such as difficult terrain and lack of power, roads and communications backhaul resources. Rugged terrains often make buildout more difficult and expensive on Tribal lands, where elevations can go from between 300 to 4000 feet above sea level.

For example, the City and Borough of Yakutat (Central Council of Tlingit and Haida Indian Tribes of Alaska, Yakutat Tribe, Yak-Tat Kwaan, Inc.) is geographically isolated, with no road or rail access to the mainland, an airport, and a once-a-week marine ferry service. The City and Borough of Yakutat broadband services ranks 153rd among Alaska cities, with 100 percent of residents (all 600) without access to wired Internet or 25 Mbps broadband. Three ISPs serve Yakutat, with only HughesNet providing satellite Internet download speeds averaging 1.1 Mbps, and service provided at high costs averaging $3.80 per Mbps ($0.31 to $0.43 for typical cities with broadband infrastructure).[61] Bandwidth is allocated among all users, and when fully subscribed at any time during the day bandwidth will be reduced or unavailable to additional users for a period of time. These constraints on Internet access severely and significantly limit the operational capacity of government, healthcare, public utilities, public safety, and schools, and the economic opportunity of businesses.

Generally speaking, Tribal communities face the following deployment challenges, some of which may be shared by other rural and remote areas:

- Many Tribal communities lack adequate roads and power supplies, in most cases because they must rely on the Tribal Government as the primary source of funding for infrastructure deployment.
- In many cases, aging terrestrial communications networks installed, often decades prior, by commercial providers are becoming degraded, leading to poor service. In addition, equipment at the central office can be outdated or simply incapable of supporting newer technologies because of hardware limitations.
- Some towers on Tribal lands are federally owned and have stipulations that prohibit use by others.
- In addition, tower facilities can be in various states of dilapidation or abandonment due to issues noted above and can pose security and safety risks.

259, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 5949, 5999, para. 140 (2016). But the impediment remains for other sources of funding.

[59] *See e.g.,* CostQuest Associates, Inc., Rural Broadband Economics: A Review of Rural Subsidies at 9-13 (2018), https://www.ntca.org/sites/default/files/documents/2018-07/CQA-RuralBroadbandEconomics-AReviewofRuralSubsidies_FinalV07112018R2.pdf.

[60] Press Release, U.S. Census Bureau, New Census Data Show Differences Between Urban and Rural Populations (2016), https://www.census.gov/newsroom/press-releases/2016/cb16-210.html.

[61] Given these economic and demographic characteristics, deployment of broadband to Tribal communities is not economic for commercial providers without federal funding assistance for both middle-mile and last mile networks.

- In terms of tower infrastructure, there can be right-of-way issues or colocation. limitations. If, for example, the tower construction and operation costs were covered by an outside owner, the Tribe may have very limited ability to increase coverage, expand service or negotiate colocation agreements.

Discussed below are certain problems unique to Tribes involving land ownership and authorizations for land use for communications facilities deployment.

As noted in the previous section, Tribal lands generally fall into one of five categories. Similarly, Tribal communities typically fall into one of the following three categories, discussed in more detail below: trust-land based, checkerboard, or reservation-less. Complications resulting from the nature of each of these community types present unique challenges to infrastructure deployment.

Trust Land-Based Tribes – The term trust land-based Tribes refers to Tribes located on reservations that are wholly held in trust for the benefit of the Tribe.

Trust land-based ownership is typically classified in the following terms:

- Tribal Unit: in trust and fee
- Tribal Allotment: in trust, restricted fee, public domain or fee simple
- Tribal Lands: in trust, restricted fee and fee simple (potentially not required to pay property taxes)

The complex status of Tribal land parcels sets Tribal trust lands apart from other real property because official land records are held by the Federal government (generally, the Department of the Interior's Bureau of Indian Affairs and Bureau of Land Management), rather than county or local government offices. This structure presents significant barriers to broadband deployment on Tribal lands because it greatly complicates the process of securing rights-of-way for facilities deployments. It also complicates gaining access to capital, as discussed in the preceding section, because reservation-based Tribes are unable to collateralize lands held in trust, and so can only collateralize the land they hold in fee, if any. However, we doubt Tribes would give up their sovereignty by taking out loans, even if they could. For this reason, most Tribes are unable to participate in federal assistance programs for broadband deployment that require Tribes to take out loans.

Checkerboard Reservations – Checkerboard reservations consist of both lands held in trust for the entire Tribe and lands held in fee or trust for the benefit of individuals, who may be either Tribal or non-Tribal. This checkerboard of Tribal and individual lands was typically produced by the allotment process discussed in the previous section. Checkerboard land ownership is typically classified in the following terms:

- Tribal Unit: in trust and fee
- Tribal Allotment: in trust and fee;
- Tribal Lands: in trust and fee (potentially not required to pay property taxes);
- Federal: Forest Service, Bureau of Land Management, Historical Park, *etc.*;
- State, County, City Ownership;
- Private citizen ownership: non-Native either in- or out-of-state resident, Tribal descendant not enrolled, Native but not enrolled.

Nez Perce is an example of a checkerboard reservation. Today the reservation consists primarily of non-Indian, privately owned land that is interspersed with public and Tribally owned lands. Half of the landmass of the reservation lies within Nez Perce County, of which 11.5 percent of the county's population is American Indian. Just over 140,000 largely non-contiguous acres (19 percent) within the reservation boundaries, are owned by the Tribe or Tribal members.

This greatly divided land ownership characterizing checkerboard reservations adds significant complexity to implementation of Tribal programs and infrastructure projects. For example, checkerboard ownership makes it more difficult and time consuming to build communications infrastructure due to the many different right-of-way access permissions needed, while routing lines only through Tribally owned lands may mean that a smaller area can be served. In some cases, the land may be bordered on two or more sides by water, which causes additional issues for infrastructure build-outs.

Reservation-less Tribes – Many Tribes have no reservation at all. Such Tribes that wish to self-provision broadband and other services to their communities may need to build infrastructure in areas where they do not hold title to the land. Reservation-less Tribes may be serving a large population but need to rely on partnerships or other agreements within the areas they live to do so.

Once deployment has occurred, the cost of operating and maintaining communications facilities are higher on Tribal lands and, due to the smaller number of subscribers per square mile in rural versus urban areas, it is impossible to secure full cost recovery from subscribers. This inability to produce an adequate return on investment deters private investment. Simply put, the cost to serve each customer increases as customer density decreases. This leads to either a far longer period to see a return on investment or much higher prices for services than in more densely populated areas.

D. Tribes Are Impeded in Their Ability to Serve Their Communities by Lack of Access to Essential Broadband Building Blocks

1. Lack of Adequate Middle-Mile Connections

Most of Tribal America lacks adequate middle-mile connectivity. Although ETCs may use USF funding for middle-mile deployment, the United States Department of Agriculture only provides funds for last mile connectivity. On Tribal lands, unfortunately, there is no market-based solution for this problem due to the lack of return on investment.

The largest contributors to costs associated with providing service to Tribal lands are middle-mile costs. GAO has recognized this as a barrier to serving Tribal lands and while middle-mile connectivity problems are not unique to these areas, the costs of middle-mile access on Tribal lands are uniquely high.[62] Lack of funding and a deployment plan to sustainably support infrastructure for the middle mile, which connects high-speed backbone transmission to last-mile connectivity for Tribal end users, must be overcome to resolve the barriers presented by remote Tribal communities located in rugged topologies.

[62] U.S. Government Accountability Office, GAO-16-222, Additional Coordination and Performance Measurement Needed for High-Speed Internet Access Programs on Tribal Lands at 10 (2016).

Middle-mile build out is extremely costly for remote and rural Tribes. The high capital cost of middle-mile build between Internet backbone facilities and Tribal last-mile facilities requires federal funding support because the anticipated rate base is too small to shoulder the entire burden of network deployment for both middle- and last-mile build out together with operations and maintenance.

The Commission has also recognized that "Alaska faces uniquely challenging operating conditions," and that "national solutions may require modification to serve the public interest in Alaska."[63] Accordingly, when adopting various reforms in the USF/ICC Transformation Order, the Commission ensured the approach was "flexible enough to take into account the unique conditions in places like Alaska," and made a "number of important modifications to the national rules . . . to account for those special circumstances."[64] These unique middle-mile challenges to serving native communities in Alaska must be overcome to ensure adequate access to broadband connectivity for Native Alaska communities.

Tribal governments' primary purpose is to improve the general welfare of its tribal citizens. Tribes can and will manage the build out and operating and maintenance for last-mile networks if they have the assistance of federal grants and loans for middle-mile facilities.[65] But it is unreasonable to assume that all Tribes can shoulder the high capital costs of middle-mile deployment together with the costs of last-mile build out and operating and maintenance costs given the economic constraints faced by most of them.

To resolve barriers to broadband deployment presented by remote Tribal communities, the Commission should develop a plan for funding and deployment to sustainably support middle-mile connectivity. This plan should include flexible funding approaches, such as the Alaska Plan, to account for unique middle-mile challenges in serving Tribal lands.

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[63] *USF/ICC Transformation Order,* 26 FCC Rcd at 17829, para. 507.

[64] *Id.* In the dissenting statement of former Commissioner Ajit Pai to the *Alaska Plan Order*, he stated, "But when it comes to broadband, Alaska has a problem that most of the United States doesn't: high-capacity, terrestrial middle-mile connections between communities are few and far between. That's because the distances in Alaska are vast—the state is larger than Texas, California, Florida, and New York combined—and most remote villages are not accessible by road. As such, those living in the Alaskan Bush often connect to the Internet through performance-limiting satellite links at speeds of less than 1 Mbps. Those are the speeds at which most Americans accessed the Internet more than a decade ago." *Alaska Plan Order*, 31 FCC Rcd at Dissenting Statement of Ajit Pai at para. 2. Challenges are most acute for Alaska tribes, whose barriers are not solved by the Connect America Fund - Alaska Plan, because it "dedicates no funding to solve the middle-mile problem. Even of this plan is implemented over the next ten years, 21,871 rural Alaskans won't have access to 4G LTE mobile broadband (and of those, 10,202 won't even have 3G service). 46,650 rural Alaskans won't have access to the 25 Mbps fixed broadband that is the Commission's benchmark (of those 5,971 won't even have 4 Mbps fixed broadband—the standard from 6 years ago). In other words, tens of thousands of Alaskans will have to wait at least a decade before being connected with the broadband speeds that most Americans take for granted." *Id.* at para. 4.

[65] There are opportunities to collocate broadband conductors with energy conductors on the same transmission facilities to share the capital cost of build out. This would be a double win for financial efficiency given that the great majority of Tribes suffer from high cost and unreliable energy utilities, and many are off-grid, so that improving energy and broadband services for Tribes would provide an appreciable benefit to Tribal citizens and boost Tribal economies. The boost to Tribal economies alone would assure sufficient revenues would be available to Tribal governments to support the last-mile build out and operating and maintenance costs for both electric and broadband utilities.

2. Lack of Access to Spectrum

Although Tribes can deploy and maintain broadband networks, finding access to spectrum for fixed and mobile services is a significant problem. Very few Tribes have licensed spectrum over their reservations. Out of 573 federally recognized Tribes in the United States, only 18 hold spectrum licenses.

Spectrum auctions are costly and, as discussed above, access to a Line of Credit is extremely difficult for Tribes because a Tribe cannot collateralize federal assets. Tribes want access to spectrum over their lands, but simply cannot compete with commercial carriers in spectrum auctions. The Commission's recent decision on establishing a Tribal Priority Window for licensing of Educational Broadband Service spectrum in the 2.5 GHz band is a big step in the right direction for providing access to spectrum without the need for Tribes to participate in a spectrum auction.[66] Consistent with our recommendations about broader use of Tribal Priorities, we recommend use of Tribal Priority windows in future spectrum allocation decisions.

Partitioning licensed service areas through secondary markets could also provide an opportunity for Tribes to gain access to spectrum.[67] Currently, when Tribes seek spectrum from commercial licensees, the licensees typically give implausible excuses for why they are not interested, such as wanting to avoid the risk of radio frequency interference. Commission encouragement of negotiations between spectrum license holders and Tribes would also be highly beneficial.[68] Tribes also have difficulty gaining information on who owns spectrum licenses, which presents an obvious barrier to even beginning discussions. A process needs to be established for federal oversight of spectrum disaggregation and partitioning discussions or negotiations for subleasing. There also should be a fair leasing option where spectrum holders are not interested in building out but want to continue holding the license or other approaches such as build-or-divest.[69]

We also support establishment of Tribal Lands Bidding Credits for use where spectrum is auctioned to encourage wireless carriers to serve Tribal lands,[70] and giving a credit to the bid amount during auctions as an incentive to build out of a wireless network to underserved or unserved Tribal lands. Going forward, we recommend that the Commission include in any Tribal Bidding Credits specific, enforceable requirements for the scale and timing of build-out on Tribal lands, including giving Tribal entities more say in these matters. Consistent with our earlier recommendation, we support equal treatment of future build-out requirements for those who have held spectrum for more than 10 years and have failed to build out.

3. Lack of Partnerships

GAO has identified the lack of Tribal broadband partnerships with commercial carriers as a barrier to deployment.[71] In many cases, when Tribes are interested in partnering with

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[66] *See 2.5 GHz Order.*
[67] See *Secondary Markets NPRM,* 34 FCC Rcd at 1758.
[68] *See id.* at 1765-66, para. 25 (seeking comment on incentives to encourage licensees to lease or sell spectrum to covered small carriers or unaffiliated carriers that will serve rural areas).
[69] *See Improving Communications Services for Native Nations by Promoting Greater Utilization of Spectrum over Tribal Lands,* WT Docket No. 11-40, Notice of Proposed Rulemaking, 26 FCC Rcd 2623 at 2640-43 (2011).
[70] *See id.*
[71] *See GAO Barriers to Deployment* at 16.

commercial providers on broadband deployment, they are told by industry that the topic will be revisited in the last two years of deployment, leaving Tribal needs unmet while that census block is considered served. Satellite carriers have now obtained CAF II funding, and while Tribes have a strong interest in knowing when satellite deployment will occur over hard-to-serve regions of their reservations, they are facing difficulties engaging satellite awardees about entering into potential partnerships. These providers lack a local presence and tend to see Tribes only as potential customers but not as potential partners for terrestrially based broadband deployment that would use satellite broadband for backhaul.

Many Tribes have been able to work with both regional and national carriers to develop or enhance communications on their reservations through public-private partnerships. Tribes have become adept at looking for resources to expand services lacking in Tribal communities. The evolution of these can sometimes take unexpected routes but ultimately using all Tribal resources has brought true engagement by some industry partners who see the value of the Tribe's partnership. Tribes are very resourceful and extremely talented at leveraging assets to build in very difficult regions using the very best technologies available to accomplish the buildout. Tribes are also willing to work with industry partners to accomplish Tribal goals, but it is often difficult to find carriers willing to partner. In some cases, local managers are willing to enter partnerships but do not have the authority to execute agreements with the Tribe.

The Commission should consider how it can foster broadband partnerships between commercial providers and Tribes. For example, giving incentives to lease unused spectrum or to allow access to spectrum for Tribes to build infrastructure will give Tribes an opportunity to foster such partnerships.

E. Tribal Data Collection Difficulties Impede Broadband Deployment Efforts

The Commission has recognized that accurate broadband deployment data is critical to its efforts to bridge the digital divide.[72] Nowhere is that truer than on Tribal lands, where deployment data collection is particularly difficult due to problems with the definition of census blocks, and mapping, data-ownership and data-access challenges specific to Tribes. Because many federal funding sources are based on providing service to specific census blocks, difficulties with data collection based on census blocks can lead to loss of funding opportunities.

1. State Census Block Definitions

The Census Bureau determines census block geographies (not states), and boundaries are redrawn at least every 10 years (with some annual updates). Generally, a carrier providing voice and broadband services does not have to serve all locations in a block to report that block as served and thus ineligible for federal high-cost universal service support. This limits what funding is available to some of the most remote and rural areas because census blocks in these areas are typically very large. In such census blocks, one house served means there is no further federal funding available to address the larger less populated regions of the block, which typically fall on reservation lands.

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[72] *See RDOF NPRM,* 34 FCC Rcd at 6778, para. 1; *Modernizing the FCC Form 477 Data Program,* WC Docket No. 11-10, Further Notice of Proposed Rulemaking, 32 FCC Rcd 6329, 6331, para. 6 (2017).

2. Mapping and Data Collection Challenges

Some Tribes face a lack of street names, street level mapping and home addressing, which leave Tribal communities enormously underrepresented in census data. If the Tribe itself does not have this data it becomes difficult to challenge the State census data in making a case in applying for funding based on census blocks covering Tribal areas. Even when a Tribe has street names and addressing, the data collection process can be difficult.

The Commission and others have recognized that the current use of census blocks for Form 477 to gather data on broadband deployment is insufficiently granular to convey an accurate picture of broadband deployment.[73] Due to the varying geographic sizes of census blocks and the methodology of inputting information to Form 477, deployment to one household within one census block can show that broadband is deployed to an entire census block. This leads to over-reporting of served census blocks, particularly in rural and remote areas.[74] We understand that the Commission is beginning to address these problems by establishing a new data collection program which will be known as the Digital Opportunity Data Collection for use in connection with federal funding programs that will gather geospatial broadband service availability data from fixed broadband providers in the areas they serve, specifically targeted toward advancing universal service goals.[75] This program will require submission by providers of more granular data of where they have broadband-capable networks and make service available, and will incorporate use of crowdsourcing and input from state, local and Tribal governments to improve the accuracy of broadband data. We are encouraged by the Commission's attention to this pressing problem, but have concerns that, in the interim, funding decisions will continue to be based on flawed Form 477 data.

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[73] *See Establishing the Digital Opportunity Data Collection*, WC Docket No. 19-195, Report and Order and Second Further Norther of Proposed Rulemaking, 34 FCC Rcd 7505 (2019) (*DODC Report and Order*) (establishes a new data collection that will gather granular and precise broadband deployment mapping); U.S. Government Accountability Office, GAO-18-630, Broadband Internet FCC's Data Overstate Access on Tribal Lands (2018) (*GAO Tribal Broadband Report*).

[74] The California Interactive Broadband Map shows the Ewiiaapaayp Band of Kumeyaay Indians' Ewiiaapaayp Indian Reservation (1065R) with a broadband adoption rate of 20% to 40%. *See California Interactive Broadband Map*, http://www.broadbandmap.ca.gov/. The map shows AT&T Mobility as the provider of services with a predicted mobile service offering downstream of 3-6 Mbps and predicted mobile upstream service of 1-3 Mbps. Yet, there is *no* mobile service actually available to the Ewiiaapaayp Indian Reservation. The map shows the Reservation is adjacent to California Advanced Services Fund (CASF) Infrastructure Eligible Areas and the Connect America Fund Broadband Map shows approximately 40 CAF II Funded Locations Deployed; however, the Ewiiaapaayp Indian Reservation has no broadband services or even wireline services. There are no CASF Approved Middle Mile Projects or CASF Last Mile Projects or CASF Proposed Projects. The Reservation is within the Southern Border Broadband Consortium, which is below the goal of 98% served. Inconsistencies and inaccuracies between the broadband services Tribes actually have access to and the services represented to be available to Tribes is prevalent, and in many instances is due to the reliance on census tracks that span Tribal lands without services and non-Tribal lands with services. Depictions of broadband services available to Tribes should be based upon actual reports from Tribes, a change that can easily be achieved by asking Tribes to report the level and quality of its wireline and wireless services (again, whether or not a Tribe enjoys Tribal lands).

[75] *See DODC Report and Order.*

3. Data Ownership/Governance

The availability of good and granular data is essential to identifying gaps in fixed and mobile broadband coverage in Indian country so that assistance can be better targeted to those areas. Tribal data are kept by many sources: Tribal, federal, state and county. Tribal data is included in all these sources for statistics on members, health, family, income, education, physical address, mailing address, blood degree, legal information such as law enforcement encounters, court (Tribal, county or state) and welfare. In some cases, Tribes may not own the data collected, used, or presented on their behalf. When a Tribe does take ownership of its data, there must be documented permission for access, use and distribution.

To receive services from the federal government, a Tribe or Tribe member must reside within a geographic area designated by the Tribe and approved by BIA, known as a "tribal service area."[76] The National Congress of American Indians has reported that as a result, the majority of Tribal data collection efforts are aimed at collecting demographic and information on Tribal members (similar to the data collected by the U.S. Census) to meet the federal reporting requirements associated with these programs, but the data collected is not standardized and tends to be kept in separate databases consistent with the varying requirements of the different federal programs.[77]

Many Tribal Nations are developing their own data governance policies. They would benefit from having the federal government provide census office funding directly to the Tribes rather than only to the states. Much of our Tribal data is not correctly collected in the state census. This happens for many reasons, but if the Tribes had adequate data collection funds, they would be able to collect the most accurate data themselves.

There are Tribal-specific data software systems and many Tribes are deploying these types of data systems to manage their Tribal data more effectively. Nonetheless, Tribes continue to face significant funding and staffing issues when it comes to data collection and management.

F. Tribal Consultation and Engagement Efforts Should Be Improved

1. Tribal Consultation

As domestic dependent nations, Indian Tribes exercise inherent sovereign powers over their members and territory. The federal government has a federal trust relationship with Indian

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[76] *See* U.S. Department of the Interior Bureau of Indian Affairs, *Housing Improvement Program*, https://www.bia.gov/bia/ois/dhs/housing-improvement-program (last visited Aug. 8, 2019); *see also* 25 CFR § 20.100 (BIA definition of "service area"); National Congress of American Indians Policy Research Center, The Geospatial Dimensions of Tribal Data (2017), http://www.ncai.org/policy-research-center/initiatives/Tribal_Data_Capacity_Geospatial_Data__10_31_2017_FINAL.pdf (a Tribe's "service population" – *i.e.*, a tribe's estimate of those living on or near a tribe's reservation that are eligible to receive services funded by the BIA – will vary based on the definition and geographic scope of a defined "service area," which often includes not only reservation land, but also nearby land outside of the official reservation boundaries).

[77] *See* National Congress of American Indians Policy Research Center, Meeting the Reporting Requirements of Federal Agencies (2017), http://www.ncai.org/policy-research-center/initiatives/Federal_Reporting_Requirements_FINAL_10_31_2017.pdf.

Tribes,[78] and this historic trust relationship requires the federal government to adhere to certain fiduciary standards in its dealings with Indian Tribes.[79] Federal law and various executive directives call for federal agencies to consult with federally recognized Tribes on activities that may have Tribal implications.[80]

The Commission has recognized the unique legal relationship that exists between the federal government and Indian Tribal governments, as reflected in the Constitution of the United States,[81] treaties, federal statutes, Executive Orders, and numerous court decisions.[82] As stated in the Tribal Policy Statement, it is the Commission's policy to consult with federally recognized Tribal Governments prior to implementing any regulatory action or policy that will significantly or uniquely affect Tribal governments, their land, and their resources.[83]

Government-to-government consultation, including consultation mandated by virtue of federal statute, such as the National Environmental Protection Act (NEPA) and the National Historic Preservation Act (NHPA) is a specialized from of Tribal engagement and outreach. We encourage the Commission to continue to consult with Tribal governments early in the rulemaking process to ensure that Tribal perspectives are reflected in proposals to change existing rules or adopt new rules.

2. Tribal Engagement

In 2011, the Commission established a process for Tribal engagement for ETCs serving Tribal lands that accept high-cost support from the Universal Service Fund,[84] and has more recently issued a Public Notice seeking comment on the effectiveness of compliance guidance issued in 2012.[85] When the Commission's Tribal engagement requirement is taken seriously by the carriers, Tribes see significant benefits in terms of build-out and service provisioning. Through the engagement process, Tribes are able to bring services to their Native and non-Native communities. Partnerships have developed through the Tribal engagement process that bring benefits to all parties. For example, Verizon has had meaningful engagement with some

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[78] *See, e.g.*, *Seminole Nation v. United States*, 316 U.S. 2S6, 296 (1942) (citing *Cherokee Nation v. State of Georgia*, 30 U.S. 1 (1831)); *United States v. Kagama*, 118 U.S. 375 (1886); *Choctaw Nation v. United States*, 119 U.S. 1 (1836); *United States v. Pelican*,232 U.S. 442 (1914); *United States v. Creek Nation*, 295 U.S. 103 (1935); *Tulee v. State of Washington*, 315 U.S. 681 (1942).

[79] *See, e.g.*, *U.S. v. Mitchell*, 463 U.S. 206 (1983).

[80] See U.S. Government Accountability Office, GAO-19-22, Tribal Consultation, Additional Federal Actions Needed for Infrastructure Projects at 7-11 (2019), https://www.gao.gov/assets/700/697694.pdf.

[81] The U.S. Constitution cedes to the federal government all power "to regulate commerce . . . with the Indian Tribes." U.S. Const. art. I, § 8, cl. 3.

[82] *See* U.S. Department of the Interior, Indian Affairs, *FAQs*, https://www.bia.gov/frequently-asked-questions (last visited August 6, 2019).

[83] *Tribal Policy Statement*, 16 FCC Rcd at 4081. *See also Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79, Second Report and Order, 33 FCC Rcd 3102, 3108, para. 17 (Mar. 30, 2018).

[84] *USF/ICC Transformation Order*, 26 FCC Rcd at 17663.

[85] *See* Consumer and Governmental Affairs Bureau Seeks Comment on Effectiveness of its Tribal Engagement Guidance and to Refresh the Record on Related Petitions for Reconsideration, WC Docket No. 10-90, DA 19-1055 (CGB rel. Oct. 21, 2019) ("*Tribal Engagement PN*"). Although Tribal members intend to submit comments responding to this Public Notice, we include the following observations on Tribal engagement as part of this report to emphasize the importance role this plays in the expansion and improvement of broadband deployment on Tribal lands.

Tribes in bringing communications services and broadband to areas unserved by other mobile carriers. Conversely, lack of meaningful engagement and collaboration with Tribal governments is a barrier to expansion of and access to enhanced broadband services. Tribes have found that the Tribal engagement obligation has been treated as a mere formality by many carriers and that this acts as a barrier to infrastructure deployment and service provisioning on Tribal lands. Below, we discuss several of these problems.

Points of Contact. As recognized in the *Tribal Engagement PN*, there have been difficulties reported in finding the correct point of contact to initiate and pursue Tribal engagement.[86] Tribes have found that some problems with the way the Tribal engagement obligation is observed are due to the nature of communication coming to the Tribes through a "Dear Tribal Chairman" letter. Like states, counties and local government's elections, Tribal elections can produce changes in Tribal leadership, sometimes annually, and the point of contact can change regularly. In cases where a Tribe has a telecommunications or zoning code or ordinance, the communication is clear and that letter will get to the appropriate offices and staff. However, for Tribes that lack these codes or ordinances, it can be very difficult to reach the appropriate offices and staff. In these situations, rather than a generic "Dear Tribal Chairman" letter going to one individual who may not be in office any longer, it might be more beneficial to send to the Tribal administration, leasing office or office of general counsel. These engagements are necessary to build relationships, and to expand services on reservations. Tribes want the expanded services and are looking for the meaningful engagement, especially for buildout to their communities.

Lack of Tribal Regulatory Codes. The Tribal engagement process can be complicated if a Tribe lacks Tribal regulatory codes. Where Tribes have a zoning or utility provision in their law-and-order code, land-use code or other such regulatory code, the engagement process can be very straightforward. This can make deployment easier for carriers as well as Tribes as there are established regulations, but this can also mean that the engagement must occur much earlier in the telco deployment process. For example, one Tribe may have a twenty-four month infrastructure process and another two months. Although this means engagement may differ from Tribe to Tribe, it is not unique to Tribes, as many states and local governments will also have these types of regulations in place, which industry is already required to adhere to. When a Tribe does not have such established regulations, engagement can be much more cumbersome because each request or contact for infrastructure is treated as an isolated incident and that can leave carriers feeling that it is more difficult to serve those lands.

A first step in addressing this issue could be the collection of existing Tribal codes, with an eye toward developing a model Tribal code for infrastructure deployment that each Tribe could either adopt or tailor to its own circumstances. In either case, we believe it would move the process forward for providers by establishing certain baseline requirements for securing approvals for infrastructure deployments on Tribal lands. This could be a project taken on by the Tribal members of the Task Force.

Lack of Adequate Notice. As noted above, many high cost recipients serving Tribal lands discharge their Tribal engagement obligation through a standard "Dear Tribal Chairman" letter. Such letters often identify all areas where the carrier is planning deployment, rather than specifying Tribal areas only, or, in the worst case, fail to identify any specific deployment area.

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[86] *Tribal Engagement PN* at 3-4.

Where letters do not identify the specific Tribal area at issue, Tribes must request additional information. They are often met with immediate requests from the carrier for the Tribe to specify the areas about which the Tribe would like additional information.

It should not be left to Tribes to determine what industry is doing and where to acknowledge a company is conducting business on or over Tribal lands. As an example, a satellite company is sending a notice of service over Tribal lands to every Tribe in the nation to meet its Tribal engagement obligation. The company could be waiting a very long time for responses because it has not provided enough specifics about its planned service. Since the technology could be deployed potentially anywhere, it is difficult for a Tribe to respond to such a notice.

Tribal engagement from industry should include mapping of Tribal areas they plan to build or expand into. Such mapping is almost never provided with the initial contact but must be requested by the Tribe. Meeting deadlines for response can be difficult when all materials are not provided within those timelines.

Tribal engagement letters that are addressed simply to the Tribal Chairman or are insufficiently detailed may float around a Tribal Government for several months, going from person to person because the letter fails to provide enough information regarding the intent of the contact. In such cases, providers can say Tribes are non-responsive but the truth is they are unable to respond because the provider has failed to provide enough detailed information.

When it comes to true engagement, there are specific things Tribes expect: documentation or meeting minutes, identification of all parties present or participating, and, once concluded, distribution of the meeting minutes with attendees' names, titles, and contact information to facilitate follow-up. This may require preplanning to ensure the correct representatives are present with adequate subject-matter expertise.

G. Accessibility

Tribes are facing new challenges in serving their diverse and aging populations as the types of broadband service or speed they need and expect has changed. Tribal broadband providers are tasked with providing persons with disabilities access to service that must be accessible and interoperable with service and equipment provided by other entities. For example, hearing disabled residents have access to accessible equipment at little or no cost through federal programs, but this equipment may have connection requirements that may or may not be supportable over the Tribe's existing broadband service. Where the service or speeds are not available, the equipment provided is not usable and these individuals are left behind completely left out. Tribes want to ensure that the broadband service they provide is available to and can support individuals with disabilities at the connection speeds necessary for the equipment or applications being utilized. This affects both new deployment and also enhancements or upgrades to existing infrastructure.

The same challenges exist when broadband service is provided by non-Tribal carriers. In some cases, mobile service and equipment providers might make accessible equipment available but not deploy facilities or services over the Tribal lands. Lack of broadband facilities and services acts as a barrier to providing advanced services to Tribal members with disabilities.

H. Adoption and Demand

It is difficult to separate broadband adoption and demand: they are symbiotic.

The adoption challenges facing Tribes are not necessarily shared by other rural regions. Language barriers, extremely high poverty rates and low education levels are all factors that negatively correlate to broadband adoption – even in cases where service is available. Many Tribal homes lack the electricity needed to power connectivity. Service agreements are difficult to understand, particularly for Tribal members who speak something other than English as their first language and may not speak English at all. Computer literacy and support, and access to peripheral consumer premises equipment such as routers and modems, are lacking among residents of Tribal lands. Tribal communities often overpay for communications services because they lack an understanding of what service is actually being provided and expertise to bargain with their carriers.

For Tribes, the crucial adoption problem is affordability. Key questions include:

- How much technology can be purchased for the lowest cost when financial resources are so tight?
- What should the right pricing be? The correct pricing structure should not only support the network but also should support reinvestment.
- What is the breakeven point for actual deployment that includes further sustainability?

These are questions Tribal Nations and industry face at the same time. The significant difference is that Tribal Nations not only want to build but are also willing to invest, even with a financial loss, where industry will not. Commercial providers, in contrast, build new infrastructure in rural and Tribal areas only when they receive generous federal financial support. If commercial carriers do deploy on Tribal or rural lands, actual coverage tends to be limited. Tribal providers and their partners are investing in the communities they serve, without equal levels of support, but are challenged in providing services at a price-point that meets demand in their communities.

Demand is never for less broadband. As the "Internet of Things" becomes more prevalent for smart homes and smart communities, it is a challenge for Tribal providers to offer the required speeds. Current Tribal providers do not have the funding to continue to advance the networks that these smart homes and communities require. The demand is always greater than the availability of resources.

There will continue to be financial balances that must be met as members of Tribal Nations typically sit below poverty level. Tribes are continuously trying to be creative in developing opportunities for improving broadband access. Being connected today is seen by Tribes as a necessity as critical as running water and power.

VI. TRIBAL SUCCESS STORIES AND LESSONS LEARNED

Tribes are utilizing a wide array of technologies to build out on their reservations: cellular, microwave, fiber, and satellite. For mountainous terrain, or water locked locations, microwave is the most cost-effective and can be the fastest deployment.

In some cases, Tribes are committing their limited resources to overcome the barriers themselves. In others are they are partnering with governmental agencies and some have also

developed successful public/private partnerships with commercial providers. Many factors influence the decisions for broadband deployment and development on Tribal lands; however, one key common thread is the need for access. Residents on Tribal lands everywhere want and need access to broadband and demand is only growing with technological advances. Tribes are serving not only their populations but their regions benefiting all people living in and around Indian country.

Although Tribes are seeing some success, there is still a significant degree of continued challenge within each success. Tribal telcos can be exceptional deployers of broadband even when faced with continued limitations on financial support. Several Tribes benefited from the American Recovery and Reinvestment Act of 2009 (ARRA)'s Broadband Opportunities Grant and Loan Programs.[87] Under ARRA funding, Tribes had an advantage because they were allowed to determine their service delivery areas, eliminating the use of census blocks as the determining factor, giving the Tribes an opportunity to truly meet the needs of their communities. Below we highlight a handful of Tribal broadband deployment success stories. While the following will highlight successes for relevancy to the document, this is only representative of a handful of Tribal situations. The challenges for the great majority of Tribes vary considerably according to their individual circumstances.

The Chickasaw Nation has demonstrated its willingness to work towards bridging the digital divide in Indian country by self-funding the construction of a fiber loop that encompasses its territorial boundaries in south central Oklahoma. Trace Fiber Networks, LLC, a wholly-owned subsidiary of the Chickasaw Nation, leads the effort of constructing 300 miles of new fiber builds, while utilizing an additional 200 miles of existing fiber from the Oklahoma Community Anchor Network (OCAN). The network will be installed along state rights-of-way in addition to Chickasaw Nation trust lands, and Trace Fiber Networks has worked extensively with the Oklahoma Department of Transportation (ODOT) to secure appropriate construction permits. Upon completion, this fiber network will allow Trace Fiber Networks the ability to serve over 100 Chickasaw Nation facilities, including educational facilities, health clinics, senior and community centers, and gaming facilities. Furthermore, Trace Fiber Networks has registered with the Universal Service Administration Company (USAC) as a service provider for the E-Rate Program, and Rural Health Care program. Through these programs, Trace Fiber Networks hopes to provide last-mile connections to educational facilities and healthcare locations in rural America.

In addition to serving its own Tribal facilities, the fiber network also provides the Chickasaw Nation with a new revenue-generating asset capable of diversifying its financial investments. Leasing fiber to businesses, private entities, and other service providers creates an opportunity for Trace Fiber Networks to generate additional revenue that can then be used to expand the fiber network's reach. To complement its fiber project, Trace Fiber Networks plans to utilize the Tribal Priority Window to secure available licensed spectrum in the 2.5 GHz band. By acquiring wireless spectrum licenses, Trace Fiber Networks hopes to deploy a fixed wireless

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[87] Pub. L. No. 111-5, 123 Stat. 115, 118-119 (2009). RUS previously administered the Broadband Initiatives Program (BIP) authorized by ARRA to expand high-speed Internet service in unserved areas. BIP funding included $2.2 billion dedicated to deploying broadband infrastructure. The National Telecommunications and Information Administration (NTIA) administered a prior program also authorized by ARRA called the Broadband Technology Opportunities Program (BTOP) and made available through BTOP $3.1 billion in funding to deploy broadband infrastructure. *See GAO Barriers to Deployment* at 8-9.

solution in many of its rural communities. Trace recognizes that a successful broadband solution is one that involves both wireline and wireless connections and looks forward to future opportunities to expand its overall network.

Coeur D'Alene has been able to build with RUS funding allowing it to deploy an extensive fiber network.

Colville has successfully developed a land-use and wireless telecommunications facilities permitting process for all industry telco operators that streamlines the deployment process for both industry and the Tribe. Even with this streamlined process, the Tribe is encountering difficulties getting industry compliance with respect to bringing their out-of-date Tribal property leases into compliance and to renew cellular tower leases.

Gila River established its telecom, Gila River Telecommunications, Inc. (GRTI), as a Tribal corporation separate from Tribal government. GRTI is now a 30-year old telecommunications service provider to the Gila River Indian Community. First established as a 49/51 percent partnership, Gila River Indian Community partnered with a group of rural telephone companies based in Oklahoma. GRTI established a charter as a tribal corporation, obtained its ETC designation, and obtained REA (now RUS) loan financing, which it subsequently paid off. The telco acquired by purchase USWest facilities on the reservation, engineered and constructed its network and also entered into a cellular lottery. GRTI now has a cellular partnership with Verizon Wireless, serving two Arizona counties, Gila and Pinal. In its first three years of existence, GRTI hired and trained employees, and established its mission to provide voice service together with E911 services to its community members. Today the organization has subsidiaries operating as a competitive local exchange carrier (CLEC) in the competitive market. It also operates a low-voltage structured cable company providing services in the Phoenix metropolitan and within the state of Arizona. It also owns a low-power commercial television station serving the Gila River Indian Community. Despite facing numerous regulatory challenges, Gila River has been able to build out and successfully grow their business by taking advantage of whatever opportunities exist.

Makah Tribe uses a combination of microwave and fiber. Makah faced a 19-mile fiber gap when the local telecom refused to build, which left some schools without any broadband connectivity. The Tribe established a partnership with the state school district and was able to build out its fixed microwave network to connect the schools within four months.

Navajo Nation partners with a Tribally owned entity, the Navajo Tribal Utility Authority (NTUA), to provide broadband service to residents and households. Although the Navajo Nation has a vast, diverse and challenging terrain, which makes it difficult to provide broadband service to Tribal residents, the Nation has completed a full inventory of the tower facilities. Navajo's broadband deployment issues are compounded by the fact that their reservation resides in four states and also includes the reservation of another Tribal Nation, the Hopi. NTUA received a BTOP grant of $32 million to deploy broadband infrastructure covering 15,000 square miles across three states and by 2013, leveraged that grant to deploy 570 miles of fiber and wireless infrastructure covering 775 miles, for a total of 1,345 new network miles. The partnership with NTUA allowed Navajo Nation to increase broadband deployment and for NTUA to partner with a private broadband provider, Commnet, to deploy wireless broadband infrastructure enabling Tribal citizens to receive 4G LTE service. This relationship benefitted from NTUA's established rights-of-way on the Navajo Nation's reservation. Navajo has gone on

the record and provided testimony about broadband deployment challenges they face due to a lack of rural addressing, and the lack of roads and power infrastructure.

Nez Perce has built out its broadband communications facilities as a government utility operating as a wireless Internet service provider. The Tribe was able to secure federal funding that requires all the revenues to be reinvested in the network. It also received a public works grant but was not able to implement those funds based on difficulties in securing state right of-way access and service agreements with the state. Prior to 2010, there was no broadband service available on its reservation. Nez Perce received a BTOP grant of $1.6 million for the Nez Perce Enhancement Project and completed this work in 2013. With that grant money, the Tribe has deployed 216 miles of broadband (wireless) infrastructure enabling to provide broadband service in four Northern Idaho counties. As part of the project, the Tribe has partnered with Inland Cellular, which enabled it to expand broadband coverage on the reservation. Nez Perce used its BTOP funding to target infrastructure build out in areas in need of connectivity; Inland Cellular focused its efforts on building out to more populous areas. The partnership resulted in broadband service being provided to previously unserved rural communities and 17 Tribal community institutions. The Tribe has benefitted from its public-private partnership with Inland Cellular. Inland Cellular also co-locates on Nez Perce towers and pays the Tribe for backhaul services. The Tribe is also extending its fiber network to towers owned by Nez Perce, which will increase its revenue stream. Nez Perce has found reaching additional communities to be impeded by funding sources utilizing census data as the basis for funding allocations. Another barrier to build out on Nez Perce are non-compete clauses for some federal funding such as for Rural Development. Finally, because the Tribe is not looking to be a voice provider, it is unable to benefit from some USF funding resources.

The Salt River Pima-Maricopa Indian Community (SRPMIC) has been very successful in bringing advanced communications capabilities to its people and to over 400 business customers located on its community. SRPMIC established Saddleback, its Tribally owned telecom, in 1997. It is the incumbent local exchange carrier (ILEC) serving all community residents and businesses. Saddleback has benefitted from its desirable location next to Scottsdale, Tempe and Mesa Arizona. In 2010 the company launched a separate company, Reinvent Telecom, a nationwide hosted Voice over IP (VoIP) subsidiary and CLEC. Reinvent offers hosted VoIP on a wholesale basis to resellers who then private label the services in their home markets. Establishing Reinvent diversified and grew Saddleback's revenues. In fact, today monthly recurring revenues from the Reinvent business exceed Saddleback's monthly recurring revenues. Even though successful Saddleback still faces some challenges with respect to last mile deployment, including home ownership and title issues.

St. Regis Mohawk Tribe received a $10.5 million USDA Broadband Initiatives Program (BIP) grant in 2010 to complete a large broadband project expanding access to unserved areas. The Tribe completed a $15 million broadband infrastructure project with 68 miles of fiber connecting 1,500 Tribal households and community institutions. In 2015, the Tribe established a Tribally owned provider, Mohawk Networks, LLC, which currently provides high-speed Internet to Tribal homes and businesses. This successful partnership with Mohawk Networks led to the creation of a Tribal subsidiary, North Country Broadband Service, Inc. to deploy wireless infrastructure to neighboring counties, generating new revenue for Mohawk Networks. Grant monies were instrumental in the Tribe's ability to successfully deploy broadband infrastructure. However, the Tribe is experiencing long term sustainability issues for its broadband services

due to demographic and economic conditions. Although this may not be an issue that can be addressed by the Commission, long-term sustainability issues do create barriers to continued deployment and limit the broadband speeds that can be achieved because the network cannot be expanded without the funds necessary to upgrade infrastructure and Mohawk is unable to afford those based on subscriber revenues alone. While Mohawk Networks is definitely a success story in several ways, such as deployment, coverage, technology, and physical infrastructure, Mohawk Networks has not been the financial success it had hoped when originally applying for the grant. If it were to become financially stable, Mohawk Networks would likely have to nearly double its current rates; current rates are priced to be competitive with local outside markets.

Tohono O'odham Utility Authority (TOUA) is a Tribal entity of the Tohono O'odham Nation. TOUA Telephone was established in 1986 after acquiring the telephone plant that was owned and maintained by Mountain States (Bell). The Tohono O'odham Nation is approximately 4400 square miles, comparable to the State of Connecticut. TOUA is an ILEC serving approximately 3,600 residential and business customers (roughly two customers per square mile) and was a recipient of two ARRA loan/grants in 2010. Its service territory is along 70 miles of US/Mexican border to the south – the reservation is south of Phoenix and west of Tucson. TOUA has fiber built into every village (approximately 65 sites) and about 60% the fiber continues on to the premise. TOUA resells cellular service for Verizon and has several co-location agreements with other wireless carriers such as T-Mobile and Commnet (ANTI). TOUA hires and trains its employees to deploy copper and fiber services from construction to installation, splicing to fusing. TOUA has three major divisions, one of which is the Telephone Department – providing telephone voice service, cellular and broadband. The others are Electric Department and the Water Department, which also provides wastewater and propane services to all business and residences of the Tohono O'odham Reservation.

Alaska Native communities have found that deployment of subsea fiber across the Arctic Ocean and into the Bering Sea has improved connectivity to the North Slope. Carrier-to-the-home options are in their infancy stages. A recent announcement from Matanuska Telephone of fiber connecting Alaska with the lower 48 states across land through Canada will improve accessibility and redundancy options as well as add additional capacity for broadband. Alaska Communications Systems (ACS) recently started deploying fixed wireless broadband capability to those along the road system capable of speeds of 50MB down and 15MB up, but users must be within three miles of the cell phone tower site to access this capability. This service is also only being offered in less densely populated areas. ACS has also signed a Memorandum of Understanding with a low earth orbit (LEO) satellite provider (One Web) to provide low-latency signals to those in Alaska not reached by a road system or capable of receiving terrestrially based traditional broadband services. This service is still several years from being available, as it requires the deployment of thousands of low-earth satellites. Even with these advancements Alaska is still years behind the services needed to provide telehealth services and to extend broadband services to those not near the few roads running through Alaska.

VII. CONCLUSION AND RECOMMENDATIONS

This report is intended to highlight areas of progress as well as obstacles yet to be overcome in expanding and improving broadband in Indian country. Based on the foregoing, we offer to the Commission and other policymakers the following recommendations aimed at

removing remaining obstacles and barriers to broadband deployment on Tribal lands that we have identified and closing the persistent digital divide between Indian country and the rest of America.

Recommendations for Improving and Increasing Broadband on Tribal Lands

Statutory Obstacles

Single-Use Funding

- To address the problem of single-use deployment funding restrictions Section 254 of the Communications Act should be amended to give recipients the opportunity to 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 multipurpose-facility by removing or loosening single-use funding restrictions.

ETC Status

- Section 214 of the Communications Act should be amended to open the role for designation of eligible telecommunications carrier (ETC) status to include Tribes to better reflect the sovereignty of the Tribe over Tribal lands. At the very least, the ETC designation process should include consultation with Tribal Nations regarding any plans to serve Tribal lands.

- The outdated requirement that an ETC must provide voice services in Section 254 should be removed or broadened to also include standalone broadband services.

Regulatory Barriers

Build-Out Requirements

- Regulatory build-out requirements should be modified so that Tribes are served earlier in the process rather than at the end of the build-out period and build out to Tribal lands is required.

- The Commission should consider explicitly linking receipt of Tribal bidding credits in USF reverse auctions by providers serving Tribal lands to meeting deployment obligations on Those Tribal lands.

Bidding Credits

- Receipt of bidding credits in USF reverse auctions by all providers serving Tribal lands should be explicitly linked to meeting deployment obligations on those Tribal lands.

Legacy Rate-of-Return Support

- The Commission should give serious consideration to the data and analysis provided by Gila River Telecommunications, Inc. and the National Tribal Telecommunications Association in adjusting legacy rate-of-return carriers support levels to better reflect the unique and higher costs of serving Tribal lands.

Lack of Tribal Priority for Services

- A Tribal priority should be factored into all proceedings affecting Tribal lands.
- Tribes should be given a priority for federal subsidies or a Tribal right of first refusal for receiving federal subsidies, with the priority for subsidies including the right of Tribes to exercise oversight, determine what service is acquired and how services should be distributed on or over Tribal lands with respect to all communications services, regardless of delivery technology.

Lack of a Standard Definition of Tribal Lands

- The Commission should again consider how best to meet the needs of landless Tribes either through modifications to its definitions of Tribal lands or by other means of regulatory forbearance or waiver to ensure that these Tribal communities are not left behind.

Economic Barriers

- The Commission should to continue to take account of the high poverty rates and low-income levels on Tribal lands, as well as cultural and language barriers that inhibit the widespread availability of broadband to Tribal residents that it has previously recognized in all policymaking activities that significantly affect Tribal interests.

Lack of Tribal Access to Essential Broadband Building Blocks

Middle-Mile Connections

- To resolve barriers to broadband deployment presented by remote Tribal communities, the Commission should develop a plan for funding and deployment to sustainably support middle-mile connectivity. This plan should include flexible funding approaches, such as the Alaska Plan, to account for unique middle-mile challenges in serving Tribal lands.

Access to Spectrum

- Tribal Bidding Credits should come with specific, enforceable requirements for the scale and timing of build out on Tribal lands, with Tribal entities having more say in these matters.

- Tribal Priority windows should be used in all future spectrum allocation decisions. We also support establishment of Tribal Bidding Credits for use where spectrum is auctioned to encourage wireless carriers to serve Tribal lands and giving a credit to the bid amount during auctions as an incentive to build out of a wireless network to underserved or unserved Tribal lands.

- The Commission should establish a process for federal oversight of spectrum disaggregation and partitioning discussions, negotiations and ultimately an agreement.

Partnerships

- The Commission should consider how it can foster broadband partnerships between commercial providers and Tribes.

Tribal Data Collection

- Tribal Nations developing their own data governance policies would benefit from having the federal government provide census office funding directly to the Tribes, rather than only to the states, to ensure the accuracy of the Tribal data.

Tribal Consultation and Engagement

Consultation

- The Commission should continue to consult with Tribal governments early in the rulemaking process to ensure that Tribal perspectives are reflected in proposals to change existing rules or adopt new rules.

Tribal Engagement

- To streamline the Tribal engagement process, it would be beneficial to collect existing Tribal codes with Tribal zoning or utility provisions, with an eye toward developing a model Tribal code for infrastructure deployment that each Tribe could either adopt or tailor to its own circumstances. The Tribal members of the Task Force are willing to take on the task of collecting existing Tribal codes.

- The Tribal engagement process can also be improved by having pre-planning so that the correct representatives on each side are present with adequate subject matter expertise and by providing Tribes with carrier mapping of the Tribal areas they plan to build or expand into in their initial contacts with the Tribe and by greater documentation of the engagement such as having meeting minutes that include the names of all parties present or participating in the engagement, and, once the engagement is concluded, distributing the meeting minutes with attendees' names, titles, and contact information to facilitate follow-up.

Tribal Success Stories

- Grant rather than loan funding is most beneficial to Tribes seeking to deploy broadband to serve their communities due to unique Tribal land ownership issues.

- Permitting Tribes to self-identify the service areas they intend to serve better facilitates their ability to serve than having to commit to service areas defined by the government, such as census blocks.