

Evaluating the Critical Need for Broadband Sustainability Funding on Rural Tribal Lands

A White Paper

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Executive Summary

The vision of the National Broadband Plan to bring broadband equality and digital equity to Tribal lands faded quietly since its release in March 2010. It took more than a decade and a worldwide pandemic to open eyes of lawmakers to act on policies vital to the well-being, survival, and continued thriving of Native Americans. This White Paper focuses on framing the case for critically needed “sustainability funding” in an effort toward resolving the digital divide¹ that currently exists between broadband availability on Tribal lands and broadband availability throughout the rest of the United States.² For decades, the Federal Communications Commission

(FCC) and telecommunications industry stakeholders alike have recognized that broadband deployment has been sorely lacking in Indian Country. This of course impedes a Tribal Nation's ability to stay at parity with the rest of the United States, and even the rest of the world. Factors related to inferior socioeconomics, education, commerce, and access to tools such as telemedicine to combat serious health issues continue to plague Tribes without adequate broadband speeds and connectivity. In preserving their culture, including obtaining access to robust internet connectivity, Tribes continue to exercise sovereignty and promote self determination to improve their quality of life for their elders, children, and overall Community members. Reflecting on the COVID 19 pandemic, statistics point to tragedies faced by members living on Tribal lands resulting from the lack of broadband access to information with which to educate themselves:

While much of the country throughout the pandemic was able to transition to receiving health care services through telehealth, Christensen says large areas throughout Indian Country still have no broadband internet access, which forced many people to conduct telehealth visits by phone.³

¹The term "digital divide" refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities
<https://stats.oecd.org/glossary/detail.asp?ID=4719>

²See FCC broadband reports related to broadband deployment, availability, and adoption in Tribal areas since inception of the report: <https://www.fcc.gov/reports-research/reports/broadband-progress-reports>

³USNews, March 30, 2022 <https://www.usnews.com/news/health-news/articles/2022-03-30/whats-fueling-the-disparity-in-covid-deaths-for-native-americans>

On July 11, 2019, the FCC adopted a Tribal Priority Window allowing Tribes “to obtain unassigned EBS spectrum to address the communications needs of their communities and of residents on rural Tribal lands, including the deployment of advanced wireless services to unserved or underserved areas.”⁴ The Order goes on to read, “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.”⁵ This single act has paved the way for hundreds of Tribes to build

state of the art fixed wireless broadband networks and has provided an unprecedented opportunity for those living on Tribal lands. Furthermore, the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 established nearly \$1B in funding for eligible Tribal entities through the Tribal Broadband Connectivity Program (TBCP) for broadband deployment, digital inclusion, workforce development, telehealth, and distance learning. In addition, the 2021 Infrastructure Investment and Jobs Act (IIJA) provides an additional \$2B to the current TBCP, which again directs funding to Tribal governments to be used for broadband deployment, telehealth, distance learning, and digital inclusion on Tribal lands.⁶ The combination of these three events represents a once-in-a-lifetime opportunity for Tribes to truly exercise self determination and help close the digital divide while creating and modernizing broadband networks. This would seemingly be a “fix” for Tribal broadband deployment and availability. However, the billions of dollars in appropriations targeted to Tribal broadband programs and deployment have generated a new need that has previously been unaddressed until now. In the spirit of making Tribal broadband availability and adoption a reality, the need for funding necessary to maintain those networks is unequivocally vital to the long-term viability of these

⁴ *In the Matter of Transforming the 2.5 Ghz Band*, Report and Order, WT Docket No. 18-120, (FCC 19-62, rel. Jul. 11, 2019) at 47

⁵ *Id*

⁶ <https://broadbandusa.ntia.doc.gov/news/latest-news/ntias-role-implementing-broadband-provisions-2021-infrastructure-investment-and>; NTIA will add \$1 billion of this amount to the first TBCP funding opportunity, with the rest (\$1 billion) going to a yet-to-be-announced funding opportunity (see <https://broadbandusa.ntia.doc.gov/news/latest-news/tribal-high-speed-internet-grant-program-adds-1-billion-funding-bipartisan>)

networks. There are arguably many oversights that are not readily apparent that adversely affect the attempts at closing the digital divide on Tribal lands and getting Tribes up to speed with the rest of the nation. This White Paper delves into these issues and recommends that sustainability funding be provided for Tribes to begin closing the digital divide and keep it closed.

I. Sustainability and Tribal Telecommunications

In the broadest sense, sustainability refers to the ability to maintain or support a process

continuously over time.⁷ In the context of deploying voice & broadband networks while establishing affordable pricing for all consumers, sustainability refers to maintaining and keeping these networks viable for future generations. To this end, the concept of universal service was developed and implemented in the Communications Act of 1934 to ensure that all citizens of the United States have access to communications services. The Telecommunications Act of 1996 expanded the traditional goal of universal service to include increased access to both telecommunications and advanced services – such as high-speed Internet – for all consumers at just, reasonable, and affordable rates. The Act established principles for universal service that specifically focused on increasing access to evolving services for consumers living in rural and insular areas, and for consumers with low incomes.⁸

In the beginning and to address the need for keeping telephone service affordable in low income and high-cost areas, a mechanism now called the Universal Service Fund (USF) was created by the FCC and subsidized by interstate long distance providers. The federal USF is now a multi-billion-dollar fund designed to support the high cost of building and maintaining voice and broadband networks in an effort to keep rates affordable.⁹ This is a mandate of the Telecommunications Act of 1996. An illustration of the need for the USF to support both capital infrastructure as well as maintain networks was recently provided by NTCA: “USF has historically provided (and even today continues to provide) support funds over a period of time to help

⁷<https://www.investopedia.com/terms/s/sustainability.asp#:~:text=In%20the%20broadest%20sense%2C%20sustainability,available%20for%20the%20long%20term.>

⁸<https://www.fcc.gov/general/universal-service>

⁹<https://www.fcc.gov/general/universal-service>

recover a portion of both the capital costs of deploying networks and the ongoing costs of operating them and delivering and upgrading services for rural Americans that are reasonably comparable in quality and price to those available in urban areas.”¹⁰ Indeed, the FCC itself recognizes the need to “*sustain* robust, scalable broadband in high cost areas.”¹¹ Recognizing the need for sustainability applicable to Tribal telecommunications, the FCC adopted an annual Tribal engagement obligation in the *2011 USF Transformation Order*, noting “We, therefore, will

require that, at a minimum, ETCs to demonstrate on an annual basis that they have meaningfully engaged Tribal governments...” and that “such discussion must include...feasibility and *sustainability planning*.”¹² In December 2020, nearly a decade after the release of the *Transformation Order* adopting the Tribal engagement requirement, the Native Nations Communications Task Force again reiterated, “The 2012 Further Guidance PN recognized that this element affords the service providers and Tribal governments the opportunity to exchange perspectives, information and chart a path forward to address the feasibility and *sustainability of providing service on Tribal lands*. It recognized the particular challenges with service sustainability on Tribal lands, and noted that ‘[i]ncreased coordination between Tribal governments and communications providers on specific elements of feasibility will heighten the chances of ultimate *sustainability for communications business models on Tribal lands*.’”¹³ The common theme to closing the digital divide is clear: allowing for digital equity and creating parity with broadband availability on Tribal lands rests not only in building the necessary telecommunications infrastructure but also, and equally as important, in providing for network sustainability.

As noted earlier, in 2019 the FCC adopted a Tribal Priority Window allowing Tribes to obtain unassigned EBS spectrum to address the communications needs of their communities and of residents on rural Tribal lands. This spectrum, allocated to tribes from the 2.5 Ghz band, is

¹⁰ Report on the Future of USF, WC Docket No. 21-476, Comments of NTCA (filed Feb. 17, 2022) at 5-6

¹¹ FCC Transformation Order, FCC-11-161, at 24

¹² *Id.*, at 637

¹³ Native Nations Communications Task Force, Report to the FCC from the Tribal Members of the Task Force, adopted Dec. 30, 2020 at 9 (available at https://www.fcc.gov/sites/default/files/nnctf_tribal_engagement_report_12.30.20.pdf)

suitable for providing broadband applications.¹⁴ While the notion of apportioning this spectrum to Tribes is truly a once-in-a-lifetime opportunity, the reality is that using this spectrum to build out robust broadband networks on Tribal lands is only part, and arguably a smaller part, of the

equation. As discussed throughout this paper, current congressional appropriated funding to deploy broadband networks on Tribal lands is an enormous step to bring digital equity to Indian Country, however the “missing piece” to this equation lies in the lack of necessary funding to sustain those networks. Thus, as was envisioned in the National Broadband Plan, the concept of inadequate funding specific to Tribal telecommunications was again captured by the Government Accountability Office (GAO), quoting a stakeholder that stated “Tribes often have limited access to credit. Consequently, even if tribal entities could gain access to spectrum in the 2.5 GHz band, they may still be unable to deploy infrastructure necessary to use this spectrum due to a lack of funding. To address funding constraints, several tribal entities we interviewed suggested that FCC establish a broadband fund specifically for tribal lands, by, for example, setting aside 5 percent of the USF to support and maintain broadband infrastructure on tribal lands.”¹⁵

¹⁴ https://www.selectspectrum.com/assets/documents/pdf/2.5%20GHz_SpectrumSummary210901CL.pdf;
<https://www.fcc.gov/25-ghz-rural-tribal-window>

¹⁵ *Telecommunications: FCC Should Enhance Performance Goals and Measures for its Program to Support Broadband Service in High-Cost Areas*, GAO-21-24 (October 2020) (<https://www.gao.gov/assets/gao-21-24.pdf>) p. 25

II. Affordability of Broadband Service on Tribal Lands

It is well documented in the telecommunications world that there are increased costs associated with providing service and maintaining networks in rural Tribal areas. In November 2016, for example, the Navajo Nation filed reply comments referencing numerous examples of the high cost of providing telecommunications and broadband service in Indian Country.¹⁶ Years later, in a Report & Order released April 5, 2018 the FCC acknowledges and notes:

“We are persuaded based on the record before us that there is good reason to increase the opex limitation for carriers receiving legacy high-cost support that primarily serve Tribal lands because of the increased costs of providing service on Tribal lands. Both NTTA and Gila River Telecommunications, Inc. (GRTI) cite a number of unique costs faced by carriers serving Tribal lands. They explain that carriers generally must invest significant time and financial resources in securing rights-of-way and easements to install new broadband facilities on Tribal lands due to the number of permissions that must be obtained. Such permissions include the consent of multiple owners of allotted lands, as well as the consent of Tribal authorities, the Bureau of Indian Affairs (BIA), and other administrators and managers of Native trust lands. In some cases, letters of support from Tribal villages in or near the construction areas are also required. NTTA and GRTI represent that the process of obtaining Tribal cultural clearances, as well as the cost of compliance with the Archeological Resources Protection Act of 1979 and the National Historic Preservation Act of 1966, and coordination of National Environmental Protection Act compliance with BIA, are often significant. Commenters also point out that Tribal sovereignty issues require additional negotiation and legal review, that many Tribes require that qualified members of the Tribe be given preference in hiring and promotion, and that some Tribal authorities require construction observation by a Tribal member. In sum, we are persuaded based on the record before us that there are unique costs associated with serving Tribal lands that warrant revisiting the opex limit adopted by us for this subset of carriers.”¹⁷

Throughout the COVID-19 pandemic, public policy in the form of federal legislation has also recognized the unique nature of broadband adoption on Tribal lands and recognized the need for additional necessary subsidies for qualifying Tribal community members. Under the

¹⁶ Reply Comments of the Navajo Nation Telecommunications Regulatory Commission to Comments Filed by Smith Bagley, Inc., and the National Tribal Telecommunications Association, WC Docket No. 10-90 (Nov. 10, 2016) (available at <https://www.neca.org/docs/default-source/wwpdf/public/111016nntrc.pdf>)

¹⁷ In the Matter of Connect America Fund, Report and Order, WC Docket No. 10-90 (FCC 18-37, rel. Apr. 5, 2018) at 5

Consolidated Appropriations Act of 2021, Congress implemented the Emergency Broadband Benefit (EBB) program. With this program, Congress notes “The term “emergency broadband benefit” means a monthly discount for an eligible household applied to the actual amount charged to such household, which shall be no more than the standard rate for an internet service offering and associated equipment, in an amount equal to such amount charged, but not more than \$50, or, if an internet service offering is provided to an eligible household on Tribal land, not more than \$75.”¹⁸ And while the EBB program transitioned into what is now called the Affordable Connectivity Program (ACP), it should be noted that Congress continued to recognize the same discount and special circumstances experienced on Tribal lands even while scaling back this subsidy to qualifying households in non-Tribal areas.¹⁹

To further promote federal policies for telecommunications affordability, the federal Lifeline program exists to offset the cost of monthly telephone and internet service for qualifying low-income consumers. Importantly, this program once again recognizes that customers residing on Tribal lands require additional support to maintain affordable service under the program.²⁰

The reason for the additional Tribal discount is simple: Tribal nations lag behind the rest of the United States in telecommunications and broadband adoption while sound public policy promotes supporting access to and adoption of telecommunications service in the spirit of providing nationwide universal service. The FCC reiterates this notion, stating “We agree with commenters and find that the disproportionately low adoption of telecommunication services on Tribal lands, especially those in remote and underserved areas, makes clear that there is much more progress to be made in increasing penetration and adoption of Lifeline services.”²¹

¹⁸ <https://www.congress.gov/116/plaws/publ260/PLAW-116publ260.pdf>, p. 951

¹⁹ <https://www.fcc.gov/acp>, noting “The benefit provides a discount of up to \$30 per month toward internet service for eligible households and up to \$75 per month for households on qualifying Tribal lands”

²⁰ See 47 C.F.R. §54.403(a)(3) “Additional federal Lifeline support of up to \$25 per month will be made available to an eligible telecommunications carrier providing facilities-based Lifeline service to an eligible resident of Tribal lands...”

²¹ FCC 16-38, released April 27, 2016, para 205

The need to have affordable telecommunications and internet access on Tribal lands is also clear. The Lifeline program alone provides vital connectivity to over 225,000 customers residing in Tribal areas.²² In fact, the purpose of the Lifeline program is “to help make communications services more affordable for low-income consumers.”²³ As it relates to the scope and scale of the Lifeline program and its essential applicability to Tribal lands, the National Tribal Telecommunications Association (NTTA), whose members generally serve rural Tribal lands, filed comments noting the significant percent of Lifeline customers being served by their member companies, stating “By virtue of serving some of the highest cost, lowest density areas of the country, coupled with historically depressed economies, NTTA member companies serve customer bases that are highly dependent upon the federal Lifeline program for vital communications services. In a sample of recent NTTA member statistics, over 50% of NTTA member residential customers are Lifeline participants, with the high end of the range being around 90%.”²⁴ Thus as the purpose of the Lifeline program is to make telecommunications services more affordable for low-income consumers, and a general assessment of the use of this program on rural Tribal lands likely ranges above 50% of Tribal residents, it is clear that many Tribal consumers rely heavily on this program. In addition, the Government Accountability Office (GAO) recently released a report to congress depicting a National Strategy Needed to Guide Federal Efforts to Reduce Digital Divide.²⁵ In the report, the GAO outlines in granularity an inventory of federal broadband programs, of which numerous programs included in Appendix II²⁶ pertain not only to Tribal broadband connectivity but also to addressing affordability as an integral part of those programs.

²² Report on State of the Lifeline Marketplace, WC Dockets 09-197; 11-42; 20-437, submitted by WCB to FCC June 2021, p. 18

²³ <https://www.fcc.gov/lifeline-consumers>

²⁴ NTTA Comments, WC Docket No. 11-42, filed Aug. 31, 2015, at 2 (available at <https://www.neca.org/docs/default-source/wwpdf/public/9215ntta.pdf>)

²⁵ <https://www.gao.gov/assets/gao-22-104611.pdf>

²⁶ Id, beginning at p. 44

While the information included in this White Paper has numerous references to the lack of broadband on Tribal lands, there is little information available related to those customers that *lack of any kind of telecommunications service whatsoever*. In this respect, it is likely the case that the affordability picture currently painted on Tribal lands is worse than measured. In other words, while programs are available to help offset the cost of telecommunications and broadband service, it simply may not be enough if there are consumers that still cannot afford service even after applying available discounts. The Arizona State University American Indian Policy Institute (ASU AIPI) released a “Tribal Technology Assessment” research study in the fall of 2019.²⁷ In this research study, the AIPI notes, “For residents of Tribal lands, the Digital Divide has persisted for decades starting initially with the *absence of traditional landline telephones and followed by the lack of terrestrial and mobile phone internet services.*”²⁸ Similarly, the National Congress of American Indians (NCAI) notes, “Tribal communities still *lag behind the rest of the United States in access to radio, wireless, and broadband services*. This disparity underscores the critical opportunity to ensure the advancement of telecommunications access throughout Indian Country.”²⁹ In the Quinault Indian Nation, the lack of a reliable landline or wireless connection is prevalent. An article released on June 28, 2021 states, “In total, it’s a 40-minute drive to reach her tribe’s headquarters where she can access a reliable landline.”³⁰ The article goes on to note, “One example we have is Tohajiilee, which is 20 minutes away from Albuquerque, New Mexico’s largest city, and there is only one bar of cellular service,” Navajo Nation President Jonathon Nez told *Tribal Business News*.³¹ Examples such as this continue to question the reality that some living on Tribal have access to basic telecommunications, let alone the notion that this sparse access is affordable. As it relates to having access to basic broadband service, the FCC’s 2021

²⁷ https://aipi.asu.edu/sites/default/files/tribal_tech_assessment_compressed.pdf

²⁸ Id at 4

²⁹ <https://www.ncai.org/policy-issues/economic-development-commerce/telecomm-and-tech>

³⁰ <https://tribalbusinessnews.com/sections/economic-development/13538-no-signal-systemic-challenges-plague-broadband-development-in-indian-country-despite-massive-influx-of-spending>

³¹ Id

Broadband Progress Report (BPR) notes that only 64.5% of rural Tribal areas have access to fixed terrestrial 25/3 Mbps service and 5/1 Mobile 4G LTE.³² While this statistic is telling as it stands, the availability of broadband service at the aforementioned speeds on Tribal lands is overstated in these reports.³³ The reason for this claim is that the FCC currently utilizes Form 477 with which to populate information included in the BPR, of which Form 477 recognizes that if one location in a census block is considered served, all locations in that same census block are considered served. For example, if a census block on Tribal lands has 25 serviceable locations, and only 5 of those locations have access to 25/3 Mbps service, the entire 25 locations is reported to have 25/3 Mbps service in the BPR. The above synopsis also seems to be supported by a Navajo Nation article, which notes, “Recent testimony by the president of the Navajo Nation confirms that this figure is even worse in the Navajo Nation, where **over half** of Navajo chapters lack any broadband access.”³⁴ If the availability of telecommunications and broadband service on Tribal lands is overstated, it can be inferred that the lack of affordable service options must be a large contributor to this situation.

A. Affordability and High Cost

As demonstrated above, telecommunications and broadband services in Tribal areas are more costly to deploy - the record is clear on this point. To address both high cost and affordability concerns for certain carriers serving rural Tribal lands³⁵, and as noted above, the federal USF was designed to support the high cost of building and maintaining voice and broadband networks to keep rates affordable. To request participation in this program, telecommunications and broadband providers must apply for and be designated an Eligible Telecommunications Carrier (ETC). As an ETC, carriers authorized to draw from the USF are

³² FCC 21-18, Figure 9, p. 29. See also Exhibit A to this paper

³³ *Broadband Internet: FCC's Data Overstate Access on Tribal Lands*, GAO-18-630 (September 2018) (<https://www.gao.gov/assets/gao-18-630.pdf>)

³⁴ <https://www.newamerica.org/oti/reports/cost-connectivity-navajo-nation/>

³⁵ <https://www.neca.org/docs/default-source/wwwpdf/public/6122ntca.pdf>, para 2, approximating the number of carriers receiving USF funding that serve rural Tribal lands

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allowed to receive support dollars to help defray the high cost of providing service while keeping rates affordable. As noted in this White Paper, the USF supports both the cost of buildout (i.e. infrastructure) as well as the cost to maintain networks. The main issue to help close the digital divide therefore comes down to this: there are 574 recognized Indian Tribes³⁶ yet only about 100 carriers serving [mostly smaller amounts and rural] portions of Tribal lands receive ongoing operational support to help defray the cost of providing and sustaining service on these Tribal lands. The magnitude of this issue is further demonstrated in that while 54% of American Indians and Alaska Natives live in rural areas and small towns³⁷, there is no sustainability funding available to most of these areas. As will be discussed later in this paper, while the federal government is currently providing substantial infrastructure funding via grants to construct broadband networks, this very act is also setting many Tribes up for failure since no funding is available to sustain these networks.

³⁶ <https://www.usa.gov/tribes#:~:text=for%20Native%20Americans-,Federally%20Recognized%20Indian%20Tribes,contracts%2C%20grants%2C%20or%20compacts>. See also Exhibit B to this Paper

³⁷ <https://www.usetinc.org/wp-content/uploads/bvenuti/WWS/2017/May%202017/May%208/ Twice%20Invisible%20-%20Research%20Note.pdf>

III. Infrastructure Deployment vs. Sustainability Costs

In the Infrastructure Investment and Jobs Act (IIJA), Congress is investing \$65 billion in broadband, in various ways, to help close the digital divide and provide high speed broadband access for all Americans to receive reliable, high speed, and affordable internet access.³⁸ To start, infrastructure is defined as “...the basic physical systems of a business, region, or nation.”³⁹ In the business world, physical systems are associated with capital investments, structures, facilities, networks, etc. In other words, infrastructure pertains to assets and equipment that are purchased, constructed, or used to construct systems under which society functions. Examples include machinery, roads, bridges, buildings, communications networks, power plants, schools, sewage/water/electric facilities, airports, railways, and the list goes on and on. In the context of the IIJA and the associated expansion of broadband and internet access and availability, \$42.5 billion is related to infrastructure deployment, i.e. developing and constructing broadband networks which will be the medium used to deliver internet access to consumers.

For companies providing telecommunications and broadband services, the purchase of and accounting for infrastructure is treated as an asset nearly 100% of the time. This treatment therefore requires all of this investment to be “capitalized”. In accounting for infrastructure, a primary requirement for an item to be capitalized is that the useful economic life of the asset or system extends beyond one year. On the other hand, an item that has a useful economic life of less than one year is expensed, not capitalized, and is therefore not usually considered

infrastructure. This differentiation is critical to the understanding of how capital (i.e. infrastructure) and expense (i.e. sustainability) interplay with one another as it relates to developing and pricing out any telecommunications service. As a useful example of how costs of communications services are determined in the rate-of-return (RoR) regulated telecommunications world, most all pricing for services is comprised of two components: “Rate

³⁸ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/06/fact-sheet-the-bipartisan-infrastructure-deal/>

³⁹ <https://www.investopedia.com/terms/i/infrastructure.asp>

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Base” (i.e. infrastructure) ⁴⁰ and “Operating Expenses” (i.e. annual costs of operating, maintaining, and sustaining networks and the provision of service). The combination of these two components also generates a formula known as “revenue requirement”. Revenue requirement “...is defined as the amount of money that a public utility must receive from its customers to cover its operating costs, interest paid on debt, taxes (if applicable) and earn a reasonable return (profit).”⁴¹ As it relates to rate base, it is also noteworthy that while the traditional methods of acquiring infrastructure are through a financing arrangement (i.e. taking out a loan) or using internally-generated cash from the company, the IIJA provides for infrastructure to be acquired by offering federal government appropriated grant funding. On Tribal lands, this may seem like a perfect solution, however as noted above there are two components to pricing any telecom service.

A. Rate Base

In each telecommunications network, rate base represents assets (aka capital investments) such as buildings; motor vehicles; a central office switch; broadband equipment; carrier equipment related to electronics and equipment used to transmit digital, analog, & internet protocol (IP) signals; and cable & wire facilities (copper, fiber). As with all capital investments, companies constructing and deploying networks rightfully expect these assets to produce a “return on investment”. This concept is no different than someone who invests in a

mutual fund and is expecting that mutual fund to produce a rate of return on the money invested. Today, under RoR regulation the FCC allows a rate of return on invested telecommunications capital.⁴² This means that when developing the costs required to provide a telecommunications service, companies are allowed to include a rate of return element into the overall pricing of that service. What is likely not evident to the general public is that this rate of return component is applied to rate base (net of accumulated depreciation and other offsetting liabilities to these assets) and this result is what is included in the annual pricing of services, not the full amount of

⁴⁰ [47 C.F.R. §65.800](#)

⁴¹ <https://www.nwtpublicutilitiesboard.ca/sites/nwtpub/files/phase-1-revenue-requirement.pdf> ⁴² FCC

16-33, Report and Order, Order on Reconsideration, FNPRM, Released March 30, 2016, paragraph 326

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the rate base/infrastructure. As an example: if a company invests \$20 million in rate base to construct its network and the network depreciates at a rate of \$1 million per year, the formula to determine the rate of return on invested capital that goes into the overall annual pricing of the service is as follows: $\$20,000,000 - \$1,000,000 = \$19,000,000 \times 9.75\% = \$1,852,500$.⁴³ This demonstrates that the full \$20 million of investment is not used in the pricing of the service but instead the rate of return allowed on the \$20 million is what is included in the annual pricing of the service.

B. Operating Expenses

Telecommunications companies incur a wide range of operating costs necessary to run their respective businesses on a daily basis. For businesses that receive USF support necessary to offset the high costs of running their operations, the FCC promulgates rules for these operating costs⁴⁴ and how they should be accounted for not only to conform with generally accepted accounting principles (GAAP) but also not to mislead management, boards of directors, auditors, and regulators to the financial health and integrity of the companies. For companies that do not receive USF support, the aforementioned FCC rules represent an excellent resource from which to see what types of operating costs companies will be incurring

to run their businesses. The types of costs sustained and noted within FCC rules are extremely important to understand because these costs illustrate the complexity of operating a telecommunications company, especially on Tribal lands. To operate a Tribal telecommunications company, consideration must be given to the types of necessary job functions and positions; associated employee skills; labor costs; benefit costs; vehicle costs; office supplies; computer systems; internal networks; tools; test equipment; customer service including billing systems, payments, collections, front office, back office; management; board oversight; accounting; human resources; legal; compliance reporting; BIA rights of way issues; cultural clearances; and environmental issues, among other items.

⁴³ <https://regulationbodyofknowledge.org/glossary/r/rate-of-return-regulation/>

⁴⁴ See 47 C.F.R. Part 32

The importance of all of this is to note that in the spirit of deploying networks on Tribal lands, including the right acknowledged by Congress and the courts for Tribes to exercise self determination⁴⁵, the highly technical, complicated, and ever-evolving telecommunications world requires expertise that can only be garnered through training and education. This is acknowledged by a number of federal government agencies that have in-depth knowledge of Tribal telecommunications issues. The GAO, for example, notes “About half of the tribes GAO interviewed also said that the lack of sufficient administrative and technical expertise among tribal members limits their efforts to increase highspeed Internet access.”⁴⁶ Similarly, years ago even the National Broadband Plan (NBP) states, “Many Tribal communities face significant obstacles to the deployment of broadband infrastructure, including high buildout costs, limited financial resources that deter investment by commercial providers and a shortage of technically trained members who can undertake deployment and adoption planning.”⁴⁷ The NBP goes on: “Congress should consider additional annual funding for the FCC to expand the Indian Telecommunications Initiatives’ Tribal workshops and roundtables to include sessions on education, technical support and assistance with broadband initiatives.”⁴⁸

In summary, the second component included in pricing RoR regulated telecommunications services is operating expenses, which as noted above includes a wide variety of costs necessary to run the day-to-day operations of the communications company. Reflecting on Tribal lands specifically and the incurrence of additional operating costs necessary to provide telecommunications services, the FCC notes, "...we increase the amount of operating costs that

⁴⁵ Twelfth Report and Order, CC Docket No. 96-45 (FCC 00-208, rel. June 30, 2000) at 22 (available at https://transition.fcc.gov/Bureaus/Common_Carrier/Orders/2000/fcc00208.pdf)

⁴⁶ *Telecommunications: Additional Coordination and Performance Measurement Needed for High-Speed Internet Access Programs on Tribal Lands*, GAS-16-222 (January 2016, available at <https://www.gao.gov/assets/gao-16-222.pdf>)

⁴⁷ National Broadband Plan, box 8-4

⁴⁸ *Id.*, p. 184-185

carriers that predominantly serve Tribal lands can recover from the universal service fund (USF) in recognition that they are likely to have higher costs than carriers not serving Tribal lands."⁴⁹

C. Basis for Ratemaking

As defined above, revenue requirement is the amount of money that a public utility must receive from its customers to cover its operating costs, interest paid on debt, taxes (if applicable) and earn a reasonable return (profit). As a formula, revenue requirement looks like this:

Rate Base
Less: Accumulated Depreciation
Less: Other Rate Base Offsets (Certain Deferrals and Liabilities) = Net Rate
Base
x Rate of Return
= Return on Rate Base
Plus: Operating Expenses (including taxes if applicable)
= Revenue Requirement

To reiterate then, the two components used to develop pricing for telecommunications and broadband services are return on rate base (aka return on investment) and operating expenses. Let's now analyze the approximate percentage of a telecommunications service pricing that is associated with each of the rate of return and operating expense components.

D. National Exchange Carrier Association (NECA)

NECA is a membership association of small, local telecommunications providers nationwide. NECA plays a critical role in the rural telecommunications industry, including administering and filing access charge tariffs with the FCC. And as previously noted in this document, there are about 100 small, rural, telecom providers serving Tribal lands⁵⁰, of which many undoubtedly subscribe to and participate in NECA's tariff filings with the FCC. NECA is required to file certain cost of service data from their members with the FCC, which ultimately

⁴⁹ FCC 18-37, para 1

⁵⁰ See footnote 35 *supra*

flows through NECA's developed revenue requirements. This is critical to one purpose of this White Paper, which is to estimate the percent of operating expense (i.e. sustainability costs) to the overall cost structure of a given telecommunications service price. Based on a previous NECA filing, for example, the rate of return component of NECA's revenue requirement represents 13.9% of the overall cost structure while operating expenses (Total Expenses and Taxes) represent 86.1% .⁵¹ And since operating expense is synonymous with sustainability, the most significant portion of telecommunications pricing equates to maintaining the network, with the return on infrastructure investment being the smaller component.

E. Cost Per Connection in Indian Country

Under the direction of the FCC, the Universal Service Administrative Company (USAC) administers the federal universal service fund. Included in this process is the responsibility of overseeing, developing, and maintaining the various databases that depict the many facets and programs that this fund contains. Of particular importance to the purpose of this paper is the

fact that USAC maintains a database of cost information⁵² as part of the High Cost Loop (HCL) Program. ⁵³ HCL USF support provides funding for the “last mile” of connectivity (i.e. the connection between a customer premise and the central office that serves that customer premise) for small, rural, and Tribal companies in service areas where the cost to provide this service exceeds 115 percent of the national average cost per line. To illustrate how per connection costs on Tribal lands compares to the rest of the rural industry, NTTA prepared an analysis using cost information contained in the HCL database reference above. This analysis showed that in Tribal areas, the average annual cost per line to provide telecommunications service on Tribal lands is \$2,587 while the same cost per line on non-Tribal lands is \$1,631.⁵⁴

⁵¹ <https://pscdocs.utah.gov/telecom/14docs/1405101/262411RedacExAExSF-112-8-2014.pdf>; \$314,389/\$2,262,662 and \$1,948,273/\$2,262,662, respectively

⁵² <https://www.neca.org/member-services/usf/current-results>

⁵³ <https://www.usac.org/high-cost/funds/high-cost-loop/>

⁵⁴ NTTA Ex Parte communication, filed April 28, 2022 in FCC Docket No. 10-90 (available at <https://www.neca.org/docs/default-source/wwwpdf/public/42822ntta.pdf>)

Therefore, and using both this cost data and NECA’s operating expense percentage portion of revenue requirement as an example, \$2,227 of the Tribal cost per line pertains to sustaining and maintaining a network while \$360 of the cost is associated with the return on investment applied to the capital infrastructure.

F. Consensus for Sustainability Funding

As established thus far, infrastructure investment, while essential, is only a small part of the equation when determining the overall pricing of a telecommunications service. This is important to understand because by default, then, sustaining and maintaining networks is the larger consideration. Most recently, the focus in the industry has centered around the ongoing necessity to maintain networks and the associated need for sustainability funding. For example, Public Knowledge explains, “Networks do not run themselves; they require people, equipment, maintenance, and upgrades. These are the operating expenses a provider will incur in delivering

service to their community. The Commission rightly recognizes that these expenses will still play a critical role in ensuring rural and Tribal communities remain served. The Commission must take these substantial expenses into account as it seeks modification to the Commission’s rules so that any changes do not result in a shock to the system as the quantile regression and other reforms of the past decade did. Discipline and accountability are critical elements of a sustainable program, but not at the expense of extracting the marrow out of the bones of our communications networks.”⁵⁵ The concept and practical consideration of the need for ongoing funding to sustain and maintain networks can be summed up in a simple analogy: you can buy a brand new state of the art vehicle and if you have no gas money to operate the car then this shiny new automobile will set idle and essentially be of little use. NTCA – The Rural Broadband Association continues to make the case: “Specifically, we noted that the Commission should consider the high-cost USF program first and foremost as a “sustainability” initiative, aimed both at getting customers connected and, just as importantly, keeping them connected.”⁵⁶ In a similar

⁵⁵ <https://publicknowledge.org/wp-content/uploads/2022/02/Public-Knowledge-USF-Report-Comments.pdf>

⁵⁶ NTCA Ex Parte Notice, filed June 23, 2022 in WC Docket No. 21-476 at 1-2 (available at <https://www.neca.org/docs/default-source/wwwpdf/public/062322ntca.pdf>)

statement, US Telecom notes, “Throughout the record there are several calls to focus high cost support on the sustainability of both current networks and those created by BEAD funding. USTelecom agrees that this is a critical issue the Commission must address over the long term.”⁵⁷ The consensus in ideology to the necessity of support for sustaining networks is further supported by WTA Advocates for Rural Broadband, noting “The key consideration here is that the upgrade of a rural broadband network to the 100/20 Mbps/FTTH level is not the end of the story. Rather, there must be continuing support for the high per-customer costs of maintenance and other operating expenses (including personnel, training, regulatory, accounting, customer service, office, and vehicle costs) if the services provided by the network are going to remain available, reliable, and sustainable.”⁵⁸ The above comments are in response to the FCC’s current proceeding inquiring about what the future of USF should look like. While much of the feedback to date in this proceeding concentrates on contribution reform⁵⁹, substantial attention has been

paid to the vital need for continuing to provide USF funding and ensuring networks remain viable with their ongoing operations. In addition to the above comments this notion is also reiterated by many other commenters in the current proceeding.⁶⁰ To be clear, the above comments are made in the spirit of signaling to the FCC that USF funding for ongoing maintenance and upkeep of networks is not only necessary but also critical for these networks to remain viable, and ultimately for consumers to benefit from the [seemingly endless] advantages of broadband internet access. For comparative purposes and to put things in perspective, it should also be noted that thousands of companies receive funding from the federal USF High Cost Support program. As a whole, these companies draw down hundreds of millions, even billions, of dollars

⁵⁷ Reply comments of USTelecom, filed March 17, 2022 in WC Docket No. 21-476, at 3 (available at <https://www.neca.org/docs/default-source/wwpdf/public/31722ustelecom2.pdf>)

⁵⁸ WTA Comments filed February 17, 2022 in WC Docket No. 21-476 at 15 (available at <https://www.neca.org/docs/default-source/wwpdf/public/21722wta.pdf>)

⁵⁹ <https://www.fcc.gov/general/contribution-methodology-administrative-filings>; overview of and discussing contribution into the USF generally

⁶⁰ <https://www.neca.org/docs/default-source/wwpdf/public/21722usfcomment.pdf>; see also ACA; Connected Nation; Incompas; Sacred Wind

from High Cost Support to help them sustain networks and assist with operational expenditures. Because of this, it therefore cannot be justified from a public policy perspective, given the federal government's trust responsibility and recognition of Tribal sovereignty, that Tribal lands are the most costly to serve; have the lowest telecommunications and broadband adoption rates; are the most economically challenged; are the least connected; experience the highest affordability obstacles; yet do not have access to similar resources with which to assist, care for, and modernize their Communities with vital broadband connectivity at pace with the rest of the United States. This issue is raised in a recent report by the GAO.⁶¹ The report begins with the following statement: "Federal funding from 2015–2020 has increased broadband access for people living on tribal lands, but access continues to lag behind the rest of the country.

Nationwide, conservative estimates show more than 18 percent of people living on tribal lands remain unserved by broadband as of 2020, compared to about 4 percent of people in non-tribal areas.” This fact has been, is, and continues to be unacceptable. The GAO cites several problems, as well as some recommendations, for helping bridge the broadband gap in Indian Country. Of the problems observed, the GAO specifically addresses the lack of sustainability funding: “While many federal programs can support broadband on tribal lands, most are not exclusive to tribes and thus tribes compete with other communities and broadband providers for funding. We have previously reported on the challenges tribes and carriers face in accessing broadband funding and improving service in tribal communities, including demonstrating financial sustainability of a network and obtaining matching funds.”⁶² Continuing to the heart of the problem, the GAO goes on to report, “According to many stakeholders, broadband providers are generally unable to operate and maintain networks on tribal lands by generating revenue from the subscriber base alone. For instance, a non-tribally owned provider we spoke to relies on FCC High Cost programs to sustain its network on tribal lands. Similarly, a tribally owned provider we spoke to relies on tribal subsidies to sustain its network but said that not all tribes have alternate sources of income that can subsidize the operational expenses of a broadband network.”

⁶¹ *Tribal Broadband: National Strategy and Coordination Framework Needed to Increase Access*, GAO-22-104421 (June 2022) (available at <https://www.gao.gov/assets/gao-22-104421.pdf>)

⁶² *Id.*, at 2

As evidenced above from several of the most inciteful experts and authoritative guidance in the Tribal telecommunications industry, the theme is clear: now is the time to fix this problem once and for all. Sustainability funding is arguably the most critical missing piece to finally close the digital divide that exists between Indian Country and the rest of the United States.

G. Deployment Without Sustainability

The FCC recently released its Report on the Future of the Universal Service Fund to Congress, as required by the IJA.⁶³ In this report, the FCC recognizes the influx of broadband funding from federal programs such as the Broadband Equity, Access, and Deployment (BEAD) program and the potential effects this funding could have on universal service programs.

However, the FCC also notes that the Infrastructure Act, for example, “will not achieve all of the universal service goals for broadband, and as such, the Commission should not abandon its universal service programs.”⁶⁴ Further, the FCC also recognizes the need to support deployed broadband networks when it states the “Commission should consider if, when, and under what circumstances continuing support is necessary to develop, sustain, and improve broadband operations...”⁶⁵ This can be done by creating “a process to support operating costs that are not recoverable from revenues earned when prices are set at just, reasonable, and affordable levels and from other sources of income, e.g., governmental grants.”⁶⁶

The FCC’s discussion of the need for High Cost Support post-deployment is indicative of a larger issue: the need to ensure broadband networks funded with government resources are provided the support they need to thrive. To ignore the need for sustainability funding is to risk the deployment funding being invested in these networks and would doom many Tribal broadband startups to fail. To put this phenomenon another way, a lack of sustainability funding

⁶³ See Report on the Future of the Universal Service Fund, WC Docket No. 21-476, released August 15, 2022 (available at <https://www.fcc.gov/document/fcc-reports-congress-future-universal-service-fund>) (*Future of USF Report*)

⁶⁴ *Id.*, at 22

⁶⁵ *Id.*, at 41

⁶⁶ *Id.*, at 42

would risk wasting the resources devoted by the IJJA, among other programs, to broadband deployment.

It is not difficult to envision how waste may become a by-product of deploying billions of Congressional appropriated dollars in broadband infrastructure on Tribal lands. Recognizing that grant monies are used solely for building networks and telecommunications infrastructure (generally absent a de minimus percent for administrative costs), it raises the question of how, exactly, Tribes are to maintain these networks, without sustainability funding or USF-equivalent support, given that over 80% of the cost of annually running the network is related to operating

expenditures. It has been noted herein that an annual average per-connection cost of providing telecommunications service on rural Tribal lands is \$2,587⁶⁷ and of this amount, over \$2,200 pertains to operating and maintenance costs.⁶⁸ Thus on average, \$215.58 is the total cost per month while approximately \$183 is apportioned each month exclusively for sustaining and operating the network for each line or connection in service. For comparative purposes, each year the FCC conducts a survey of the fixed voice and broadband service rates offered to consumers in urban areas. The FCC uses the survey data to determine the reasonable comparability benchmarks for fixed voice and broadband rates for universal service purposes.

The 2022 urban rate survey for monthly fixed voice and broadband services notes that the U.S. reasonable comparability benchmark for 25/3 Mbps service unlimited capacity is \$75.93.⁶⁹ This data shows: 1) the urban rate survey represents a retail end-to-end service pricing whereas the cost to provide service on rural Tribal lands represents a wholesale cost. In other words, retail pricing on Tribal lands will be even higher than \$215.58 per month on average; 2) urban customers enjoy much lower pricing resulting from economies of scale, demographics, density & proximity of housing, number of homes passed per square mile, etc; 3) the percent of Lifeline eligibility on rural Tribal lands is significantly higher than the U.S. taken as a whole.⁷⁰ This

⁶⁷ See footnote 56 *supra*

⁶⁸ P. 19 *supra*

⁶⁹ <https://www.fcc.gov/general/urban-rate-survey-orders-and-public-notice>, 12/16/21 release

⁷⁰ See footnote 24

accentuates the burden of providing service on rural Tribal lands as customers in those areas are generally the least able to afford telecommunications and broadband service; and 4) since only a handful of the 574 federally recognized Indian Tribes⁷¹ receive universal service funding to help offset the cost of providing telecommunications & broadband service, the rest of the Tribes residing in rural areas have no recourse (or incentive) with which to make a [financially viable] business case to provide these services. Even a state-of-the-art broadband network constructed with Congressional-appropriated grant money is doomed to fail since over 80% of the cost to run

the network annually is related to maintaining and sustaining this network. Looked at another way, broadband service provided in rural Tribal areas will never be affordable given the operational cost to provide this service paired against the prices that must be charged absent sustainability funding. Consequently, the question of how *waste* may become a by-product to the honorable gesture of deploying billions of Congressional appropriated dollars in broadband infrastructure on Tribal lands can be summed up as:

- providing infrastructure funding to build networks on rural Tribal lands without any associated assistance in the form of sustainability funding is setting Tribes up for failure;
- providing infrastructure funding to build networks on rural Tribal lands without any associated assistance in the form of sustainability funding does not address the affordability of pricing on Tribal lands due to the lack of operational considerations;

⁷¹ <https://www.usa.gov/tribes#:~:text=for%20Native%20Americans-.Federally%20Recognized%20Indian%20Tribes,contracts%2C%20grants%2C%20or%20compacts.>

- providing infrastructure funding to build networks on rural Tribal lands without any associated assistance in the form of sustainability funding will undoubtedly waste billions of dollars of taxpayer money as these networks are doomed to collapse absent a funding mechanism created to allow for financial support in running these networks into the future.

IV. Options for Sustainability Funding

Given the above evidence demonstrating the critical need for broadband network sustainability funding on Tribal lands, the issue becomes how this type of support will be funded. Following is a discussion of some funding vehicles that could be utilized.

A. Congressional Appropriations

Through the COVID 19 pandemic, the federal government stepped in to offer financial assistance to citizens, businesses, organizations, and Indian Tribes via a variety of funding sources: the Coronavirus Preparedness and Response Supplemental Appropriations Act of 2020 (\$7.8 billion); the Families First Coronavirus Response Act (\$15.4 billion); the Coronavirus Aid, Relief, and Economic Security Act (\$2.1 trillion); Paycheck Protection Program and Healthcare

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Enhancement Act (\$483 billion); the Coronavirus Response and Relief Supplemental Appropriations Act (\$900 billion); the American Rescue Plan of 2021 (\$1.9 trillion);⁷² and the Infrastructure Investment and Jobs Act (\$1.2 trillion). Indeed, with funding set aside from the above programs specifically for Tribal broadband deployment, the Biden Administration is committed to bridging the gap for Tribal internet connectivity. “The pandemic demonstrated just

how difficult it is to participate in our modern economy without access to reliable high-speed internet. These grants will provide crucial resources to tribal communities working to ensure everyone can use the internet to attend classes, visit a doctor or run a business,” said Secretary of Commerce Gina Raimondo. “We look forward to supporting these Tribal Nations in building capacity and expanding their communities’ access to the internet.”⁷³ As NTIA is intricately involved in making sure that appropriated funding gets disbursed efficiently, justifiably, and fairly, its role and passion to assist Tribal Nations is also prevalent: “Across the country, Tribal Nations have been disconnected from essential internet services for far too long,” said Alan Davidson, Assistant Secretary of Commerce for Communications and Information. “These awards will allow Tribal communities to provide the necessary resources their members need to thrive in our evolving digital economy.”⁷⁴ The pandemic taught us how critical broadband connectivity is and it is enlightening to see Congress taking steps toward making progress in Indian Country in closing the digital divide.

B. Affordable Connectivity Program

The Infrastructure Act provides \$14.2 billion to modify and extend the Emergency Broadband Benefit Program (EBB Program) to a longer-term broadband affordability program called the Affordable Connectivity Program (ACP).⁷⁵ In this program, eligible customers can receive a discount on internet service up to \$30 per month for non-Tribal and \$75 per month on

⁷² <https://www.pandemicoversight.gov/>

⁷³ <https://broadbandusa.ntia.doc.gov/news/latest-news/biden-administration-awards-nearly-77m-additional-grants-tribal-groups-seeking>

⁷⁴ Id

⁷⁵ <https://www.fcc.gov/affordable-connectivity-program>

Tribal lands. Inherent in this program is the monthly end-to-end retail service, which includes both broadband and internet connectivity. As the federal government [rightfully] saw fit for the need to assist low income and disadvantaged customers with this program, it again raises the question why the federal government wouldn’t offer similar assistance specifically to Tribal

Nations in the spirit of sustaining broadband networks given that Tribal lands are the most costly to serve; have the lowest telecommunications and broadband adoption rates; are the most economically challenged; are the least connected; experience the highest affordability obstacles; yet do not have access to similar resources with which to assist, care for, and modernize their Communities with vital broadband connectivity at pace with the rest of the United States.

C. Bureau of Indian Affairs (BIA)

The BIA offers numerous grant programs and opportunities,⁷⁶ including a National Tribal Broadband Grant. According to this program, “Our Division of Economic Development provides the opportunity for tribes to receive funding to explore the possibility of developing or extending broadband services in their communities to:

- Spur economic development and commercial activity
- Create opportunities for self-employment
- Enhance educational resources and remote learning opportunities
- Meet emergency and law enforcement needs⁷⁷

As the BIA is intricately involved in “everything Indian Country”, this agency may be a natural choice with which Congress can provide the capital funding necessary for broadband buildout on Tribal lands, and then have BIA administer those funds. As noted above, there is precedence and experience within the BIA’s purview to oversee grant funding.

D. Universal Service Funding

As noted throughout this paper, the USF plays a critical role in helping to build and sustain networks to keep voice and broadband rates affordable. With a multi-billion-dollar annual

⁷⁶ <https://www.bia.gov/topic/grants>

⁷⁷ Ibid

budget⁷⁸, the USF has a history of assisting the highest cost, most rural, and sparsely populated areas of the United States. In addition, the FCC has recognized the dire need to modernize

broadband deployment in areas that, according to their rules, are unserved and underserved. Over the past few years, using USF funding, the FCC sought to improve broadband availability via an auction process called the Rural Digital Opportunity Fund (RDOF).⁷⁹ From a public policy perspective, the RDOF was developed with the public interest in mind as its main goal was to increase broadband deployment to unserved and underserved areas. To accomplish this goal, the FCC funded the RDOF with support previously provided to price cap carriers and the as-yet undeveloped Remote Areas Fund, and \$440 million per year was added to the budget.⁸⁰ This point is further illustrated with another example where USF funding is used for aiding areas deemed the neediest and disadvantaged. For example, the 2017 hurricanes left Puerto Rico devastated, destroying infrastructure on the island, and leaving telecommunications connectivity in the balance. Resulting from this, “For Stage 2, the FCC in 2019 allocated \$950 million to rebuild, expand and harden fixed and mobile voice and broadband networks across Puerto Rico and the Virgin Islands to ensure that communications systems on the islands are capable of withstanding future storms. Stage 2 included a budget of \$504.7 million to support investment in fixed networks over 10 years and \$254.4 million to support investment in mobile networks over three years in Puerto Rico, and a budget of \$186.5 million to support investment in fixed networks over 10 years and \$4.4 million to support investment in mobile networks over three years in the Virgin Islands.”⁸¹ Federal regulators in this instance found it to be in the public interest to help the citizens of Puerto Rico, and rightfully so. The common goal of this example and bridging the gap on Tribal lands is the same, however: the neediest and most disadvantaged areas of the United States should have access to funding for the same cause. While building Tribal broadband

⁷⁸ See footnotes 9 and 10, *supra*

⁷⁹ <https://www.fcc.gov/auction/904>

⁸⁰ FCC RDOF Report and Order, rel. February 7, 2020 (FCC 20-5) at 7; FCC RDOF Notice of Proposed Rulemaking, rel. August 2, 2019 (FCC 19-77) at 17

⁸¹ <https://www.usac.org/high-cost/funds/bringing-puerto-rico-together-uniendo-a-puerto-rico-fund-and-the-connect-usvi-fund/>

networks can be accomplished, at least in part, through infrastructure funding, sustaining those networks and providing ongoing, stable, and viable internet connectivity on rural Tribal lands should be given the same level of attention given that Tribal lands possess the lowest telecommunications and broadband adoption rates; are the most economically challenged; are the least connected; and experience the highest affordability obstacles. Given that the USF has and continues to be a funding tool for not only the ongoing programs within the fund but also special funding considerations outside of the traditional programs, it stands to reason that the USF is certainly an option to be used as a funding source for ongoing network sustainability funding on rural Tribal lands.

V. Necessary Funding Levels

It will be vital to determine the amount of funding all Tribal areas will require to sustain ongoing operations and maintenance once broadband networks are deployed. In its Report to Congress on the Future of the Universal Service Fund, the FCC recognizes the general type of analysis that may be needed: “The Commission could consider developing a standard business case analysis that accounts for a provider’s total costs and revenues, includes incoming funding from other government grants, and estimates the required level of support for the provider to

continue operating profitably...”⁸² This type of process could be adapted for Tribal broadband providers by recognizing the differences in how service is provisioned in Tribal areas and how that service can be maintained over time given the unique circumstances that exist.

Another option involves using the approximate number of households on Tribal lands and determining a reasonable level of Tribal network sustainability funding necessary. According to the Administration for Native Americans, there were 1,122,043 American Indian and Alaska Native family households based on 2012 census bureau numbers.⁸³ Assuming half of this household count is located on rural Tribal lands and applying a generalized operating cost per line as noted above, the annual sustainability funding necessary to provide support for rural Tribal housing units would be roughly \$1.25 billion (1,122,043 / 2 x \$2,227 cost per line developed herein).

Lastly, the GAO noted some Tribal entities they interviewed suggested that 5% of the current USF should be set aside for a Tribal broadband fund.⁸⁴ This is the same recommendation of proposed Senate Bill 3264, which states “Not later than 180 days after the date of enactment of this Act, the Commission shall promulgate regulations under which the Commission, on and after the effective date of the regulations, shall (1) set aside 5 percent of the amounts allocated for each Federal universal service support program established under section 254 of the Communications Act of 1934 (47 U.S.C. 254), including each program carried out under subparts D through G and J through M of part 54 of title 47, Code of Federal Regulations, or any successor regulations; and (2) with respect to the amount set aside from each program under paragraph (1), distribute that amount for the purpose of expanding access to broadband service on Tribal land, in accordance with the otherwise applicable requirements of the program.”⁸⁵ Using roughly

⁸² *Future of USF Report* at 43

⁸³ <https://www.acf.hhs.gov/ana/fact-sheet/american-indians-and-alaska-natives-numbers#:~:text=While%20there%20are%20currently%20566,Oklahoma%20tribal%20statistical%20areas%2C%20tribal>

⁸⁴ See footnote 15 *supra*

⁸⁵ <https://www.congress.gov/116/bills/s3264/BILLS-116s3264is.pdf>

\$8 billion as an annual fund size for the USF, this equates to a Tribal broadband sustainability fund of \$400 million.

Conclusion

The time is now to end the broadband gap that exists between Indian Country and the rest of the United States. With Congressional funding available for network infrastructure on Tribal lands, the clear path forward to bridge the digital divide is to provide ongoing, stable, sustainability funding for qualifying carriers serving rural Tribal lands. This White Paper delves into the complicated minutia of the interplay between infrastructure versus sustainability, and the ensuing critical need of sustainability funding. In addition, affordability issues continue to haunt the adoption of broadband services on Tribal lands, of which sustainability funding will help enlist Tribal members to finally enjoy all the benefits an internet connection will deliver. Furthermore, this paper goes into detail of funding options available, some of which mirror or closely resemble current funding vehicles overseen by Congress, the FCC, or the Universal Service Program. Lastly, this paper takes a deep dive into the support levels necessary, and the accompanying reasons therein, to provide the tools essential for the successful construction and ongoing sustainability of Tribal broadband networks. Settling for anything less than this, or solely by infrastructure investment alone, will result in failure for Tribal entities wishing to exercise self determination and operate their own broadband networks for future generations, which is unacceptable. The record is clear that Tribes have suffered too long at the hands of inadequate

public policy related to the deployment of broadband in Indian Country. Let's work together to end this deficiency once and for all for the betterment of Indian Country and for the United States as a whole.

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About the Authors

Douglas K. Kitch, CPA, has been a financial consultant for rural telecommunications and broadband carriers for over thirty years. Doug's role emphasizes: Federal and State regulatory involvement, including considerable advocacy experience; Universal Service; Jurisdictional Cost Separations; Financial Forecasting; Solution-oriented Strategic Planning; and Rate of Return Regulation. Doug's true passion, however, resides in assisting and advocating telecommunications policy for Tribal Nations and carriers serving those areas. Doug is known to be highly adept in this area, having spent the majority of his career delving into the intricacies and complexities of Tribal telecommunications policy. Doug participates or has participated in the following venues:

- Consultant for the National Tribal Telecommunications Association (NTTA) • Vice Chair of NTCA's Tribal Advisory Committee
- Assist with WTA's Tribal Affairs Committee
- Served on Advisory Committee of Tribal Telecom
- Assisted numerous Tribes with ARRA applications
- Aided Tribes in the recent RDOF auction process
- Involvement in numerous Tribal-related Federal Communications Commission proceedings

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Christopher S. Barron is regulatory consultant for small rural communications companies and has been in the communications industry for over 25 years. In that time, he has helped companies navigate state and federal legislative and regulatory issues, and has worked with the National Tribal Telecommunications Association for over 10 years.

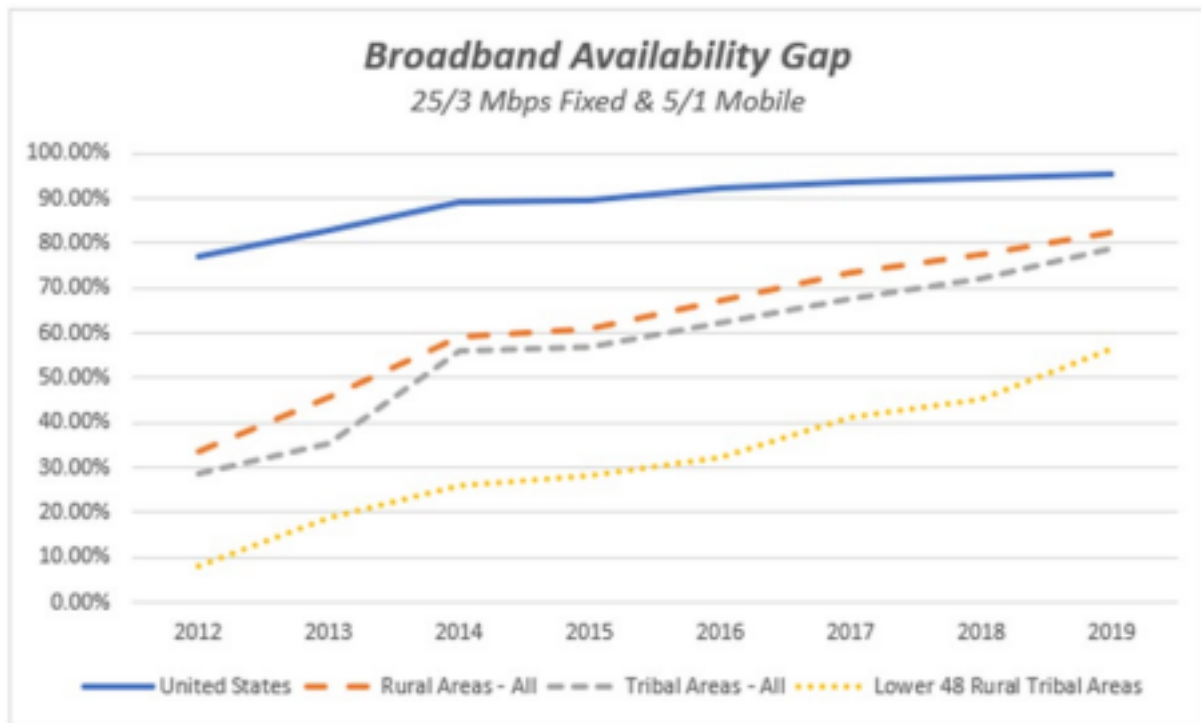
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About NTTA

NTTA consists of Tribally-owned communications companies and broadband providers including Cheyenne River Sioux Telephone Authority, Fort Mojave Telecommunications, Inc., Gila River Telecommunications, Inc., Hopi Telecommunications, Inc., Mescalero Apache Telecom, Inc., Mohawk Networks, Nez Perce Tribe, Saddleback Communications, San Carlos Apache Telecommunications Utility, Inc., Sacred Wind Communications, Siyeh Communications, Tohono O'odham Utility Authority, Warm Springs Telecom, and Yukon-Kuskokwim Delta Tribal Broadband Consortium, as well as associate members Alaska Tribal Broadband and Spokane Tribe Telecom Exchange. NTTA's mission is to be the national advocate for telecommunications service on behalf of its member companies and to provide guidance and

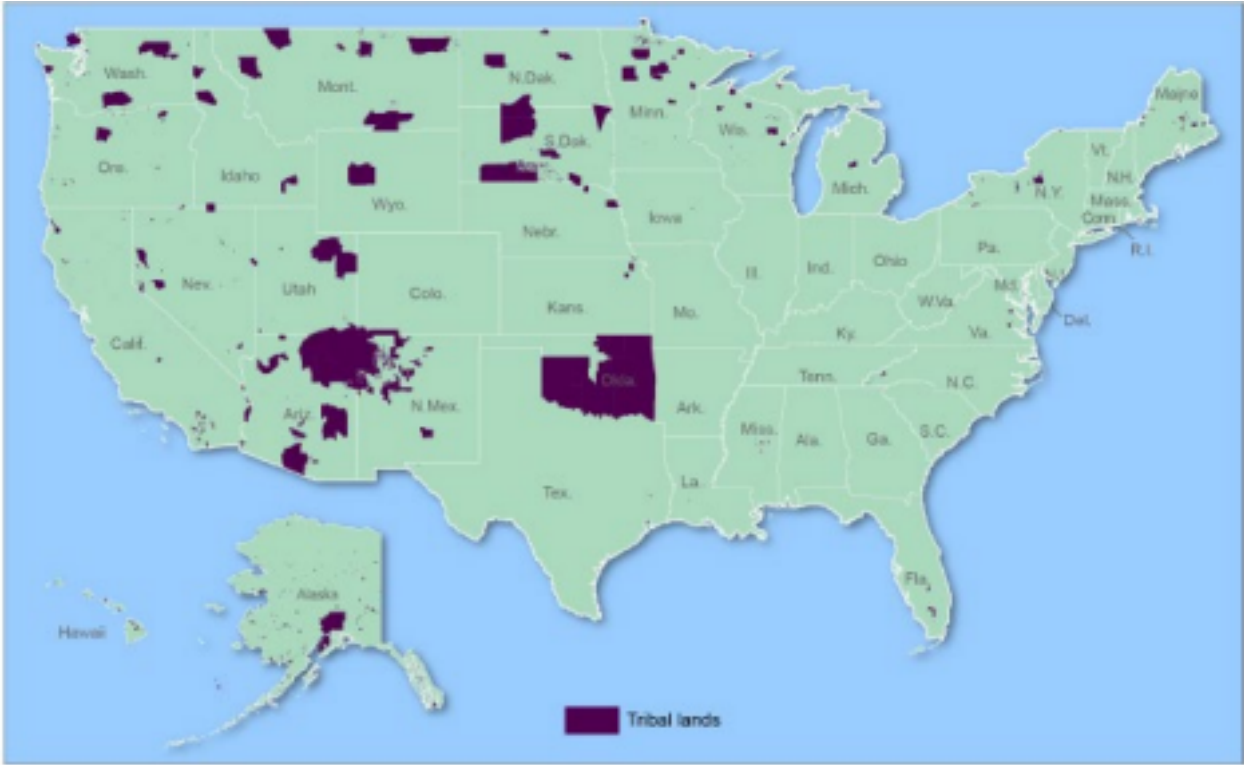
assistance to members who are working to provide modern telecommunications services to Tribal lands.

EXHIBIT A: Broadband Availability in the United States



Source: FCC Broadband Deployment Reports

EXHIBIT B: Tribal Lands in the United States



Source: GAO Report 22-104421