Building Indigenous Future Zones: Four Tribal Broadband Case Studies

With support from the Internet Society

Community Networks

By H. Trostle

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Internet Society

ILSR Institute for Local Self-Reliance

About the Institute for Local Self-Reliance

The Institute for Local Self-Reliance (ILSR) is a 46-year-old national nonprofit research and educational organization. ILSR's mission is to provide innovative strategies, working models, and timely information to support strong, community rooted, environmentally sound, and equitable local economies. To this end, ILSR works with citizens, policymakers, and businesses to design systems, policies, and enterprises that meet local needs; to maximize human, material, natural, and financial resources, and to ensure that the benefits of these systems and resources accrue to all local citizens. More at **www.ilsr.org**.

About the Author

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They took time to discuss the details of these networks and the future of tribal broadband. I greatly appreciate that they also reviewed the case studies that we wrote about their communities' networks. Thank you!

Thank you also to the editors of the full report: Christopher Mitchell and Sean Gonsalves at the Institute for Local Self-Reliance. They took my writing to the next level.

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We know the Internet is a powerful tool for change. Connectivity has a direct impact on socioeconomic benefits in Indigenous communities, including self-determination, governance, improved health outcomes, economic development, and culture and language preservation. For rural and remote Indigenous communities, the Internet is a lifeline to an increasing number of essential services online, and even sovereignty. As Brandon Makaawaawa, Deputy Head of State of the Nation of Hawaii, said after partnering with the Internet Society on the Nation's first Internet infrastructure build, "In order for our sovereign Nation to evolve independently, it is critical that we have control over our connectivity. We consider this national infrastructure, and in many ways, these are our first roadways."

Table of Contents

Introduction

The COVID-19 pandemic has brought to the forefront the importance of infrastructure, especially in Native Nations. The most important pieces of physical infrastructure that COVID-19 responses require are running water and Internet access. Many communities still do not have adequate access to these necessities. Internet access is critical for working from home or accessing social safety net programs in this time of crisis.

This paper intends to offer insight into Internet infrastructure development in the more than 574 Native Nations across the U.S. According to our last count, there are approximately 40 tribally owned networks across the lands of 65 Native Nations, and there are another 37 Native Nations working in partnerships with private providers. For readers unfamiliar with Native Nations, we have provided an incredibly brief history of colonialism and economic development before laying out the inequities of Internet access. This history is necessary to understand the rise of the movement for Spectrum Sovereignty and Network Sovereignty, which are key to meeting Internet infrastructure needs in Native Nations.

Spectrum Sovereignty:
This refers to the sovereign right of Native Nations to access and use radio frequencies. There is a growing movement to recognize the spectrum that covers Indian Country as a federal trust responsibility (a natural resource that is managed by the federal government on behalf of Native Nations).

Network Sovereignty:
Dr. Marisa Duarte uses this term to describe how infrastructure for Internet access supports Native Nations' sovereignty through self-determination.

Learn more at MuniNetworks.org/content/indigenous-networks

Public policy should learn from the errors of the past and find solutions to bridge the digital divide that will help create wealth in Native Nations. There are many ways to address the digital divide, but not all of them lead to economic development or recognize the importance of sovereignty. Native Nations are sovereign over their data, and have the obligation to protect that information and use it for the betterment of tribal citizens. Past US federal public policy in Indian Country has often been rooted in paternalism and led to more problems.

Select case studies in this report highlight the many different ways that Native Nations have built their own Internet Service Providers (ISPs). The goal is not just to address the digital divide, but to encourage development and enact sovereignty. Improving Internet infrastructure has the opportunity to provide a new boost to local economic development initiatives. Owning and operating this infrastructure also supports Native Nations' sovereignty by keeping power and data within the communities rather than relying on an external provider. Imagine a community with 20,000 families each with a $50/month Internet connection – that is more than $1 million each year that could be leaving the community or staying local to build wealth.

Land Acknowledgement

ILSR's offices are located on land that was, and is, stewarded by Indigenous peoples. ILSR recognizes, supports, and advocates for the sovereignty of Native Nations.

Minneapolis, Minn.: Bdote, the land where the two rivers meet, is part of the traditional territory of the Dakota people and has served as a gathering place for many Indigenous peoples.

Washington, D.C.: The traditional territory of the Anacostan and Piscataway peoples.

Portland, Maine: The traditional territory of the Wabanaki Confederacy, which is currently comprised of the Penobscot, Passamaquoddy, Maliseet, Abenaki, and Micmac nations.

Welcome to Indian Country

Native Nations are Indigenous communities whose relationship with this land stretches long into the past. They are self-governing, but, contrary to common belief, they do not all have reservations. There are 574 federally-recognized tribes in the U.S., and more than 60 state-recognized tribes. There are also many unrecognized tribes, which may choose to seek state or federal recognition.

Colloquially, Indian Country refers generally to Native Nations in the United States. Legally, it mainly refers to allotted lands and lands within reservation boundaries. This legal term, however, excludes many communities in Hawaii and Alaska: Hawaiian homelands, tribal statistical areas and Alaska Native Villages. The term tribal Lands is used by the Federal Communications Commission (FCC) to account for all of these differences.

Reservations were created through treaties with the federal government. Resources and land are often held in trust by the federal government, which means that the land is not subject to state

jurisdiction, though federal laws and policies do apply. Moreover, the land cannot be collateralized for loans. Allotted land refers to land that was formerly part of a single community land base that was then given directly to Native American families. Many of these allotted lands were then sold to non-Natives, which has created a patchwork effect on many reservations. These many variations in land policies are just one example of the ways in which Native Nations have been harmed by the long history of U.S. settler colonialism.

Settler colonialism includes the death and displacement of many Native Nations, including the Trail of Tears in the 1830s and the Dakota War of 1862. The Dawes Act (1887) attempted to force Western lifestyles and individual land ownership onto members of Native Nations. It also encompasses the period of boarding schools in the 1800s and 1900s that attempted to socially assimilate Native Americans by removing access to community and culture. In 1934, the Indian Reorganization Act attempted to force Native Nations to adopt Western systems of governance and economic development under the control of the federal government. Settler colonialism further includes the legal termination of many Native Nations, such as the Amah Mutsun, in the 1940s through 1960s. This is when the federal government declared that some Native Nations were so assimilated and doing sufficiently well economically that treaties no longer applied. The 1960s also featured a push to move Native Americans into cities, away from reservations, and further assimilate them into the U.S. economy.

It is only recently in U.S. history that the federal government has followed consistent policies that attempt to support Native Nations. In 1975, the U.S. Congress adopted the Indian Self-Determination and Education Assistance Act, which enabled Native Nations to have an active role in economic development in the era of self-determination. The federal government created the Office of Native Affairs & Policy within the FCC in 2010 to work with Native Nations on developing Internet infrastructure.

Economic Development

This history of settler colonialism has created challenges for economic development initiatives in Indian Country. Economic development that respects culture and promotes community is effective, and every Native Nation is different. But there are three broad areas of economic development policy that are helpful for Native Nations. These are 1) Natural Resources, 2) Gaming, and 3) E-commerce & Microbusinesses. Understanding this background is important context for getting Internet access right.

This should be taken as only the most basic overview of economic development in Indian Country. Every Native Nation has its own unique history and culture. These broad generalizations are provided to contextualize the role of Internet infrastructure in Indian Country's economic development.

Natural Resources

The federal government had little interest in economic development in Native Nations until the 1900s, but the focus was often then on extracting natural resources through logging, fishing, and mining. For many Native Nations, this type of economic development did not necessarily align with cultural values, and it created a tension between economy and tradition that did not previously exist. In the early 1900s, Native Nations' economic development policy was largely controlled by the U.S. government.

Even democratizing projects of that era had a goal of resource extraction. The 1934 Indian Reorganization Act (IRA), also called the Indian New Deal, enabled Native Nations to adopt constitutions and formalize governance structures. The U.S. government provided example constitutions, which were similar to governing documents used by corporations. In general, these IRA constitutions made it easier for the U.S. government to form deals regarding natural resource development in Native Nations. Natural resource markets, however, are not always predictable, and decades of federal management created issues in terms of environmental stewardship.

Native Nations began to take back control of their economic policy in the 1970s with the 1975 Indian Self-Determination and Education Assistance Act. Native Nations had the ability to

contract with and receive grants from the federal Indian bureaucracy. Instead of the funding going to a federal agency that then provided services to Native Nations, Native Nations received the funding and provided the services themselves. This meant that Native Nations could begin to set their own economic development agenda.

Gaming

In the mid-1970s, a U.S. Supreme Court case about state and tribal regulatory power set the legal groundwork for gaming to take off as a new avenue of economic development. Native Nations began to operate bingo halls and casinos, while state governments pushed back. In 1987, the U.S. Supreme Court upheld the legality of tribal gaming.

In 1988, U.S. Congress then implemented a complete system of regulation regarding these gaming operations with the Indian Gaming Regulatory Act dividing them into Class I (traditional, small prizes), Class II (bingo), and Class III (slot machines and other gambling). The law stipulates that, if a state allows commercial casinos or gaming operations, a federally recognized tribe can pursue gaming in which Native Nations and state governments negotiate State Compacts concerning the type and number of gaming operations in each state. The National Indian Gaming Commission, established by the 1988 Act, supports more than 240 federally recognized Native Nations in 29 states with their gaming operations.

Native gaming is a multi-billion-dollar industry. The National Indian Gaming Commission valued the 2018 gross revenue of Indian Gaming at $33.7 billion.[1] Revenue has been slowly increasing over the past decade,[2] but not every gaming operation has seen the same amount of growth. Many Native Nations are far from cities, and gaming operations have to be conducted on tribal land.

To learn more, check out these resources:

The National Congress of American Indians' video series on Economic Development[20]

The Office of Native American Affairs at the U.S. Small Business Administration[21]

Native governments use these funds to support tribal governance and social services as well as reinvest in gaming operations to grow the industry. Some tribal governments also channel some of the revenue into per capita payments, or per cap. Native Nations that do have per cap may give a small sum every year or larger payments monthly – It depends on the particular economic situation of each Native Nation. These funds, however, are not guaranteed. The COVID-19 pandemic has shown that gaming operations may need to be closed for a significant period of time and there are signs that changes to state and federal law over time may allow other entities to also build gaming operations that would likely cause a decline in revenues for Native Nations. Some have viewed the opportunity to build a broadband network as not only providing a vital service, but diversifying future revenues. However, gaming operations are only one part of the economy on Native Nations and many do not have gaming operations at all.

E-Commerce & Microbusinesses

Recently, there has been a rise in e-commerce and microbusinesses. Microbusinesses are very small businesses. Some examples are: local roadside stands, new graphic designers, and Etsy craft makers. These startups may rely on Internet infrastructure to sell their work.

The federal government offers some support to Native American small businesses. The U.S. Small Business Administration has an Office of Native American Affairs that provides technical support to small businesses and offers entrepreneurial empowerment workshops. The Indian Arts and Crafts Act of 1990 is also very important to microbusinesses because it prevents false advertising of work as Native American made if it was not made by a federally recognized tribe.

Native Nations are encouraging the growth of small businesses and microbusinesses to boost their local economies. Small businesses are an engine for economic growth in the United States: they account for 47.3 percent of all jobs and 99.9 percent of all businesses in the U.S.[3] In Native Nations, there is a concern of economic leakage, where people spend their money outside of their local community because there are few small businesses.

Internet Infrastructure

It is within this historically charged and changing environment that infrastructure development has taken place in Native Nations. The U.S. government did not focus on ensuring infrastructure

development in Native Nations until recently. Basic infrastructure is still lacking on many reservations. In 2017, the National Congress of American Indians submitted a report to Congress and the Administration stating that "only 88 percent of Native people received drinking water that met all applicable health-based standards."[4] They also found that "14.2 percent of Tribal households do not have access to the most basic electric services."[5]

It is no wonder that Native Nations also face challenges getting high-speed Internet access. The minimum broadband speed set by the FCC is only 25 Mbps download and 3 Mbps upload on a fixed (non-satellite) connection. High-speed Internet access in Native Nations has long trailed that of rural and urban areas in the U.S. (Figure 1). The rural-urban digital divide is well-known. What is less well-known: tribal lands have not seen an increase in high-speed Internet access at the same rate as rural areas.

High-Speed Internet Access Deployment

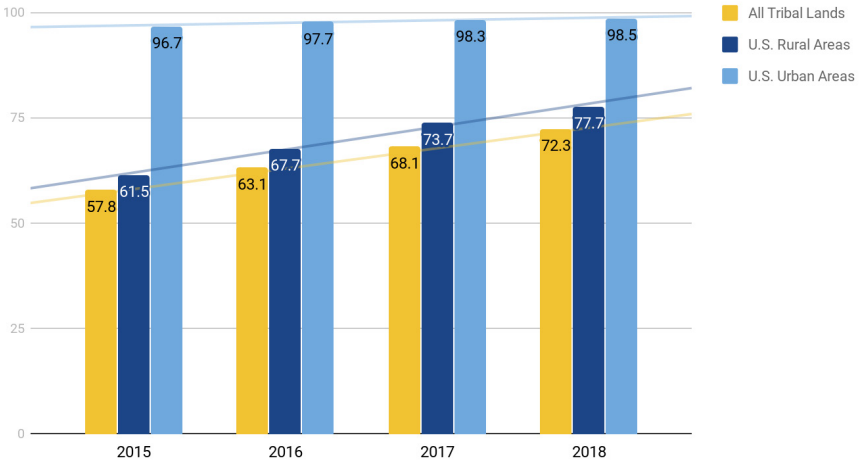


Figure 1: High-Speed Internet Access Deployment in Tribal Lands 2015 - 2018 (2020 FCC Broadband Deployment Report)

This tribal lands data also understates the problem in the lower 48 states because it accounts for more highly connected areas including the Hawaiian Homelands. As of December 2018, only 56.9 percent of tribal lands in the lower 48 states had high-speed Internet access (Figure 2).[6]

2018 Tribal Lands Data Disaggregated

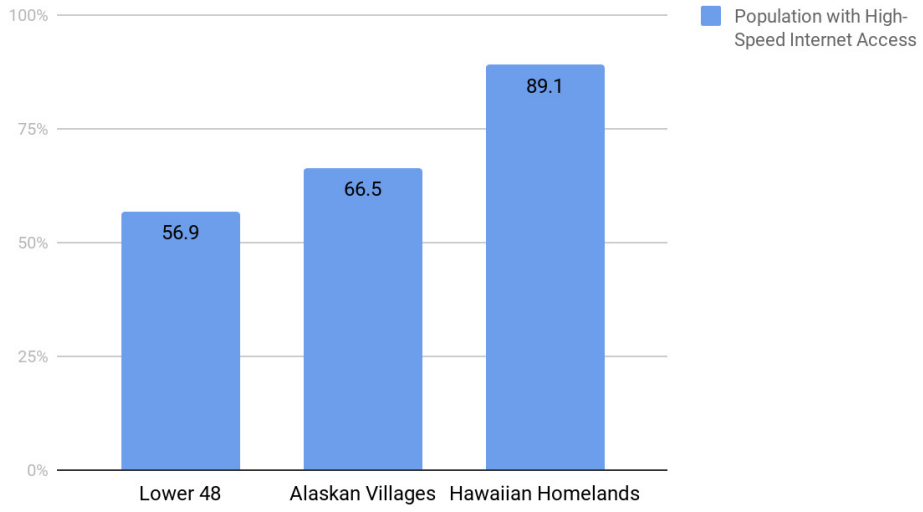


Figure 2: High-Speed Internet Access Deployment in Tribal Lands 2018 (2020 FCC Broadband Deployment Report)

Southern California Tribal Digital Village in California

Southern California Tribal Digital Village is a wireless network that is managed and operated by the Southern California Tribal Chairmen's Association.[22] The network provides service to 19 tribes near San Diego. At least 40 percent of the 9,000 people have access to the network. It uses almost every piece of available unlicensed or lightly licensed spectrum in the area to extend coverage. Matthew Rantanen stated that the tower at the head-end of the network literally cannot support any more gear. They have even had to get point to point licenses with the FCC to continue to push the network further. "There's a shortfall with the availability out there," stated Rantanen.

The Tribal Digital Village was built from the ground up to serve a particular need in the communities. COVID-19, however, has demanded more resources from the network than ever before. Managing the network is a complex task. Short-term, low-cost solutions can turn into larger expenses down the road, and Rantanen is focused on developing the network in a sustainable way. "Spectrum is a great tool to serve communities, but it is not as scalable as fiber," Rantanen explained in describing the different approaches to Internet infrastructure. Tribal Digital Village is still expanding and exploring cost-effective ways to serve the rural communities.

The FCC Office of Native Affairs & Policy is working to address these disparities. The FCC created the office in 2010 to develop policies and programs to improve Internet access on tribal lands. The office creates and leads outreach FCC efforts to Native Nations regarding any policy changes that might impact their connectivity. The office also oversees the Native Nations Communications Task Force.

Spectrum Sovereignty

One step to better Internet infrastructure is increasing the authority of Native Nations to manage the electromagnetic spectrum over their lands, called Spectrum Sovereignty.

This refers to the sovereign right of Native Nations to access and use spectrum. A growing movement recognizes the spectrum that covers Indian Country as a natural resource similar to mineral and water rights. The federal government has a history of trying to control such natural resources, rather than recognizing that they fall under the purview of treaties and the federal trust responsibility. The trust responsibility refers to how certain resources and lands are held in trust by the federal government for the benefit of Native Nations. Under current policy, Native Nations have not received funding from the auctioning and licensing of spectrum over their land that is managed by the FCC.

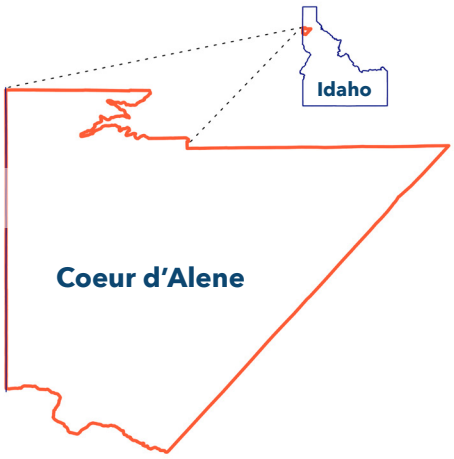
Spectrum is all around us. It includes radio frequencies, and it is divided into different frequency bands. But it is more than just FM radio and TV signals. It is an essential resource for wireless Internet service. Currently, the FCC auctions licenses for spectrum to entities based on distinct geographic units. Native Nations have little opportunity to participate in this system because the system tends to be optimized for large communication corporations and the geographic units do not often align with the boundaries of Native Nations. This approach makes it difficult for Native Nations to operate radio stations or develop wireless Internet service. There are some spectrum bands that are unlicensed or only lightly regulated, allowing anyone to use them with pre-approved off-the-shelf equipment. Some wireless networks, such as the Southern California Tribal Digital Village, use this spectrum to provide Internet access.

Recognizing that Native Nations should have access to spectrum, the FCC created a Rural Tribal Priority Window for the auctioning off of a specific band of spectrum in 2020. The 2.5 GHz band had been previously designated mainly for Educational Broadband Services[7] but it later became clear that this band could also be used for Internet access. Unfortunately, the FCC had paused licensing of the 2.5 GHz band in the early 1990s. Understanding the better use of this band, the FCC is now looking to distribute overlay licenses that do not interrupt the continued use of the 2.5 GHz band by current license holders. Instead, these overlay licenses enable people to use all of the currently unused portions of the band in their area. The FCC could have simply allocated this spectrum to the Native Nations, but decided to continue with an auction format after allowing Native Nations to claim rights to their territory if interested.

Native Nations had to act by August 3, 2020 to enter the auction process, though only rural tribal areas were eligible where the FCC designated that sections of the band were unused. The 2.5GHz band must still be used for the public good, and there are requirements on how long licensees can keep the spectrum if they do not begin using it. Some advocated for Native Nations taking advantage of this auction regardless of whether there were specific plans on how to use the 2.5GHz band because the auction did not require plans to be laid out in advance. Others recommended entering the auction with types of ready-made networks that can operate in the 2.5GHz band. Adopting an approach that recognizes Spectrum Sovereignty preempts the need for such arguments, since Native Nations can manage spectrum using similar systems to what they have developed for other natural resources.

Red Spectrum Communications

Coeur d'Alene Tribe in Idaho



About the Coeur d'Alene Tribe

The Coeur d'Alene Tribe are the Schitsu'umsh, meaning "those who were found here."[8] They have always lived in Idaho, Washington, and Montana as it is their ancestral homeland. There are more than 2,000 tribal members, and the reservation is about 345,000 acres in northern Idaho.[9] The Coeur d'Alene Tribe have built a casino and hotel that usually has $20 million in profits each year, and they also operate the Benewah Medical Center, which serves 10,000 patients (both Native and non-Native) in the area.[10] The tribal school is housed in a $5 million facility, and the Education Department also works in collaboration with Idaho's state college system on a language degree program.[11]

Learn more about Spectrum Sovereignty and Network Sovereignty:

Spectrum Sovereignty Workshop at Arizona State University's American Indian Policy, featuring MuralNet, a 501(c)(3) nonprofit that assists with network planning.[23]

***Network Sovereignty: Building the Internet Across Indian Country* is a book by Marisa Duarte, a professor at Arizona State University, that describes how radio and Internet service are key to sovereignty.[24]**

The Government Accountability Office released the report, "FCC Should Undertake Efforts to Better Promote Tribal Access to Spectrum," in November 2018.[25] It recommends ways to reform the allocation of spectrum for tribal broadband.

Brief History of Red Spectrum Communications

The network started out of an unfulfilled need in the community. In the early 2000s, the Coeur d'Alene reservation still relied on dial-up. In 2004, the maximum speed available via dial-up on the reservation still fell short of 56 Kbps. The dial-up depended on old copper lines that had been put into the ground almost one hundred years ago, and the signal degraded quickly on that infrastructure. Valerie Fast Horse, now the Director of Information Technology at Coeur d'Alene, saw an opportunity to improve Internet speeds and access. As a federally recognized tribe, the Coeur d'Alene Tribe can access several federal programs (many through the U.S. Department of Agriculture (USDA)) to fund Internet infrastructure.

In 2004, the Coeur d'Alene Tribe applied for a Community Connect Grant through USDA Rural Development. They received funds to build a small wireless network providing up to 1.5 Megabits per second (Mbps). By 2010, however, it became evident that the demand for connectivity was more than what the wireless network could handle. There was not enough unlicensed spectrum to meet their needs, and the challenge of signal interference was increasing. At the time, the federal government enacted the American Recovery & Reinvestment Act (ARRA), with billions of dollars in broadband subsidies available.

RED·SPECTRUM COMMUNICATIONS

In 2012, the Coeur d'Alene received ARRA funding to build a fiber network to support the wireless network. They received about $12.2 million, half loan and half grant, through the USDA Rural Utilities Service to build both middle-mile and Fiber-to-the-Home. The middle mile was necessary to move the local Internet traffic off of the reservation and to the wider web. Frontier

had wanted to charge the Coeur d'Alene Tribe $22,000 each month to access its middle mile network, but building their own would be much more economical over the long term.

The Technology Department continues to improve upon the wireless network to support all the users. With COVID-19, the network has experienced increased strain. Users report more lag if there are multiple devices trying to use the network simultaneously. Staff are doing what they can, but they are limited in the capacity of the spectrum available to them for wireless subscribers.

Network Details

Population Served

Approximately 1,600 households are currently connected with about 90 more waiting to be connected. The wireless and fiber service areas cover approximately 4,000 people total.

The wireless service area is much larger than the fiber service area, but Red Spectrum is seeking to expand the fiber service area. There are only a few Fiber-to-the-Home towns on the reservation. Red Spectrum Communications connects the tribal school with a 10Gb connection and the tribal government center with a 5Gb connection.

PRICES & SPEEDS

TABLE 1

Speed Tier	Price
Lifeline Broadband Service	$49.95
10 Mbps	$59.95
25 Mbps	$79.95
100 Mbps (Available on Fiber)	$124.95

Funding

Most of the funding for the wireless and fiber projects came from the USDA in the form of grants and loans with the Community Connect program and the ARRA. The total cost to build the network, including the middle mile, was a little over $12 million. The fiber network took up the bulk of the funding (about $10.2 million). The wireless networks had a lower initial capital cost (about $2.3 million) but the operating costs, such as changing equipment on towers, are much higher than on the fiber.

Expansion Plans

Red Spectrum Communications has submitted a grant and loan application for a project to expand and bring Fiber-to-the-Home to Plummer, Idaho, the largest city on the reservation. The town is home to about 1,000 people, and the community has few options for wired Internet access.

Managing spectrum and setting up networks

In developing the initial application for the Community Connect grant back in 2004, Information Technology Director Fast Horse had looked to the Tribal Digital Village network in California for an example of a successful wireless project. Red Spectrum Communications has grown from there, and it uses both the 2.4 GHz and the 5GHz bands of unlicensed spectrum to provide service in their wireless area. Fast Horse is keeping an eye on the new technology for the 6GHz band, which she expects will be available by the end of this year. The 6GHz band has a lot more capacity and can relieve network congestion.

Takeaways for Other Native Nations

To close our interview, we asked Fast Horse what she thinks other Native Nations should know about building Internet infrastructure. She pointed out that, at the time, no one else was building on the reservation because no one wanted to take on the work. She also highlighted that "you need to really make sure that tribal members are invested in it, especially tribal members with technical skills." Fast Horse stressed that it is best to hire locally and develop local talent.

Ultimately, she pointed out that technology is progressing rapidly, and it is not like water or sewer infrastructure where there is no possibility of competition. Wireless towers will still be useful as equipment changes, but providing good service is a continuing challenge as needs and utilization also change. She noted that although the fiber in the ground is future proof, you still have to make sure to change the electronics about every decade on the headend.

Hoh Nation & Starlink

While several Native Nations have taken on the challenge of building their own networks for Internet service, this is not the only option for better connectivity. The Hoh Tribe in western Washington decided to try a new approach to improve their Internet access – Starlink, a project from SpaceX.

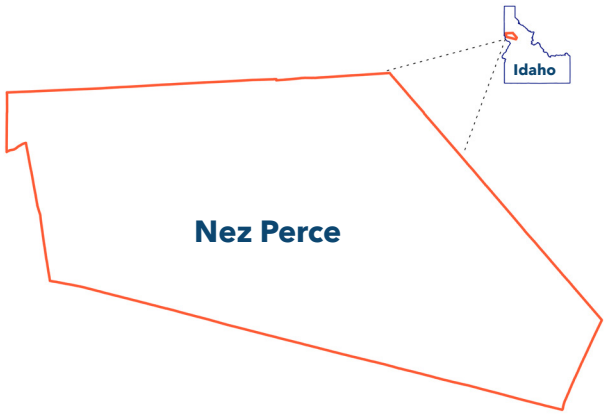
After meeting with Starlink representatives, the Hoh Tribe decided to be a beta tester for this new service. Starlink currently connects 18 homes in the community with speeds greater than 179 Mbps down. Speed tests from several beta testers in Washington clock the upload capacity between 10-40 Mbps. Community members now have access to distance learning and telehealth with this high-speed service. The Hoh Tribe itself pays for these connections for this first year, but next year the Hoh Tribe plans to shift billing to households directly.

Satellite Internet service is usually known for its poor quality, but Starlink is different. It uses low Earth orbit satellites to provide high-speed connections, and it can be a connectivity solution for remote areas where building a network is not feasible. Starlink can provide service to households directly or offer backhaul for wired or wireless networks distant from existing points of presence to interconnect to the Internet.

StarLink looks to be a high-quality solution for the present, but the Hoh Tribe are still pursuing the building of their own network in the long term.[26]

Nez Perce Tribe Department of Technology Services

Nez Perce Tribe in Idaho



About the Nez Perce Tribe

The Nez Perce Tribe are the Nimiipuu people whose land is in Idaho, Washington, and Oregon. They entered into a treaty with the U.S. in 1855, and this treaty set the boundaries of a 7.5 million acres of reservation. The U.S., however, discovered gold on the lands, and, after settlers continued to trespass and steal land, the U.S. forced the Nez Perce to sign another treaty in 1863. This treaty reduced the land base to only 750,000 acres. Later, the federal government again attempted to reduce the lands held by the Nimiipuu people through the Allotment Act, which created the checkerboard of land rights within the reservation today.[12] The Nez Perce Tribe operates two casinos: The Clearwater River Casino & Lodge and the It'se Ye-Ye Casino.[13]

Brief History of the Fiber and Wireless Projects

Like many fiber and wireless projects, the wireless network came out of a feasibility study for better connectivity between the government offices. In the 2000s the government was using bundled T1s and homes still relied on dial-up connections. Danae Wilson, Manager of the Nez Perce Tribe Department of Technology Services, explained how remote offices would start an email with attachments in the morning, and it would take all day for the email to actually send. The Nez Perce Department of Fisheries especially needed better connectivity at remote offices to collect and transmit a significant amount of data. At one point, they were physically moving laptops in Pelican cases to transfer data between offices because it was faster than using Internet service.

The Nez Perce started to deploy fiber in Lapwai where the tribal headquarters are located in 2000. They connected 18 locations and added additional fiber over subsequent years to connect more communities and remote facilities. As a model in building the network, the Nez Perce looked to some municipal models.

It all started to come together in 2009 when the Nez Perce tribal law enforcement were looking to connect their five towers, including some that were rather remote. They combined funding from the Idaho Gem Grant Program with a USDA Community Connect grant to deploy a few towers. Orofino to Lapwai, Idaho, was the first fixed wireless connection. Over the next three years, the network served its purpose but still proved to be insufficient. The goal of the fiber and wireless network was never to turn a profit, and the service is not run as a tribal enterprise. Instead, it is set up and run entirely as a tribal utility. Tribal enterprises are for commercial activities, whereas tribal utilities are supported by the Nation and focus on delivering needed services. In 2010, the Nez Perce Networks began selling service to home customers, local businesses and government/city entities. The Tribe has also leased tower space to cellular companies to improve cellular service on the reservation.

The tribe did a lot of research when the federal government made available funding programs for high-speed Internet service, including the Broadband Technology Opportunities Program (BTOP) through the American Recovery & Reinvestment Act of 2009 (ARRA). They applied for a BTOP in the first round but were not selected. They were successful in the second round, however, and the Nez Perce wireless project finally received funding. The tribe built a wireless ring around the reservation with 23 towers and co-located facilities on 12 additional towers. Public-private partnerships with local governments and cell phone companies were critical to access the towers they needed.

In 2020 the Nez Perce Tribe funded 21 miles of fiber from Spaulding, Idaho to Clarkston, Washington. The Department of Technology Services has allowed private entities to lease this fiber.

Network Details

Population Served

Nez Perce Networks serves between 1,500 and 2,000 customers. With a State of Idaho CARES Act grant, Department of Technology Services is planning to expand fiber to another 300 homes by the end of 2020. Those fiber connections will be in the Lapwai area, but planning for other communities within the reservation is on going.

PRICES & SPEEDS

TABLE 2. WIRELESS

Speed Tier	Price
Basic	$25
Plus	$45
Premium	$65

TABLE 3. FIBER

Speed Tier	Price
20 Mbps	$45
50 Mbps	$65
100 Mbps (Available on Fiber)	$85
120 Mbps	$105

Funding and Expansion

In total, the network cost an estimated $23 million. The Native Nation had to draw on a variety of programs to find the funding for all the projects: ARRA BTOP, USDA programs like Community Connect, RBOG, RBEG; the Idaho Gem Grant Program and the Idaho Broadband Grant. The Nez Perce Tribe has financially contributed to all of these projects, including fully funding the 21-mile fiber run. The Department of Technology Services continues to watch for funding opportunities to continue expanding the network.

Managing spectrum and setting up networks

The wireless network they have built uses both licensed and unlicensed spectrum. It depends upon the location and the types of services they need to provide. The hybrid mesh network uses spectrum in both the 2 and 3 GHz bands and is designed to use fiber backhaul as much as possible. The Tribe was recently awarded the licensed spectrum they applied for under the Tribal Priority Window for 2.5GHz spectrum. They will begin planning for build-out to meet the requirements of the license.

Takeaways for Other Native Nations

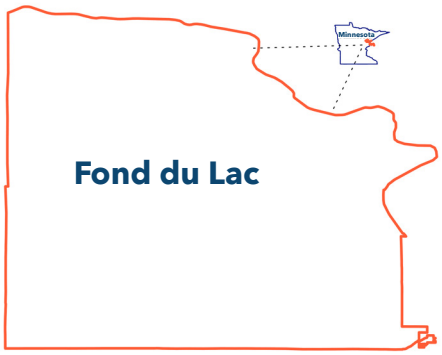
Department of Technology Services Manager Wilson stressed that there are many different models for providing Internet service and there is no one size fits all approach. It also does not have to be grandiose. Building little by little is still a good approach. Wilson said that it is important "to build from intent and purpose."

Wilson also highlighted that federal programs can have widely varying requirements that might not fit every community's needs. Some programs have specific requirements about profitability and return on investment, but Indian Country does not always fit these standard models. Backhaul and middle mile may not be as accessible. Applying for funding through the USDA can also be difficult because the USDA has a non-compete clause restricting the number of funded USDA areas.

There are other challenges Wilson identified: matching funds for some of the federal programs and negotiating partnerships. Access to Rights of Way and the services of the tribal employment rights offices are values that are not usually calculated into the match. Private Internet Service Providers, even when they receive federal funding, may still choose to overlook Indian Country because they do not want to navigate the Rights of Way and meet the standards for local training and employment through the Tribal Employment Rights Offices. It is hard to get commercial loans because tribes cannot collateralize federal lands. Wilson said that this means that the USDA is often the main loan source for broadband services in Indian Country.

Aaniin Fiber Services

Fond du Lac Band of Lake Superior Chippewa



About the Fond du Lac Band

The Fond du Lac Band is one of the six bands of Ojibwe, which together are federally recognized as Minnesota Chippewa. The Ojibwe have lived in the Great Lakes area for more than a thousand years. The La Pointe Treaty of 1854 established the Fond du Lac Band's reservation in Carlton and St. Louis County, Minnesota. The reservation is known as Nagaajiwanaang, "where the water stops." There are more than 4,000 people in the Fond du Lac Band.[14] They operate two casinos, Black Bear Casino Resort and Fond du Luth Casino. Fond du Lac also operates FDL Gas & Grocery, FDL Propane, and FDL Sand & Gravel as tribal enterprises.

Brief History of Aaniin Fiber Services

Aaniin was built through years of careful research and feasibility studies. Jason Hollinday, the Director of Planning at Fond du Lac Planning Division, explained how the Fond du Lac Band approached the problem of getting high-speed Internet service throughout their communities.

In 2006, they started to compare wireless and hardwired network types, such as cable and fiber. The original plan called for ten wireless towers throughout the reservation to deliver Internet service to people's homes. There were a number of issues with this plan, however, one of which was geography. Northern Minnesota has many hills and forests, and the wireless technology at the time was not going to be able to penetrate to many remote areas. It was, however, fairly inexpensive, and Fond du Lac moved forward with seeking grants for the project. They weren't funded and Hollinday says they were told that the project was "economically infeasible."

Undaunted, they changed tactics and considered alternatives, allowing them to be prepared when the market changed drastically in 2010. The price of fiber and equipment for a Fiber-to-the-Home network fell enough to make a network feasible on paper. They worked with the Blandin Foundation in Minnesota and pursued grants through the USDA.

Community members, however, needed Internet service faster than the fiber network was likely to be built. The Fond du Lac Band already had an institutional network between government buildings. They added 13 wireless hotspots to several of these buildings in 2013. The hotspots have a range of about ¼ mile, and still serve as a stop-gap measure for community members without reliable Internet service at home.

In 2015, they were finally awarded a USDA Community Connect Grant. Two Minnesota Border to Border Broadband Grants were later approved as well and one Housing & Urban Development (HUD) Indian Community Development Block Grant. In total, it was about $9 million in grants, and the Fond du Lac Band matched half that amount with $4.5 million in cash on hand. They had secured all the funding needed to build out a next-generation network.

Starting out, some of the grants required them to build to areas without Internet service of at least 10 Megabits per second (Mbps) download and 1 Mbps upload. Unserved areas were prioritized. Later grants supported building the network to areas without 25 Mbps download and 3 Mbps upload. This enabled the Fond du Lac band to reach the rest of the reservation. The Blandin Foundation had assisted with community outreach about the project. In a series of public meetings, community members talked about what they would like to do with the Internet service. Hollinday described a little bit of doubt from some members, such as "Well we'd never get that here, but if we did have it…," because the project sometimes seemed too good to be true. The network went live in Fall 2019.

The network, however, continues to expand across the reservation, connecting more people. People are still learning all the capabilities of the Internet service. Since 2014, Fond du Lac has offered a summer camp for teens to create smartphone and iPad apps. Each student creates an app and is given an iPad to take home. The program also supports cultural knowledge. For instance, some of the apps from 2014 went into detail about beading, plants, and the Ojibwe language.[15] The possibility of expanding outside of the reservation boundaries has been considered, but the focus right now is on making sure all community members have access to a reliable connection. Using gaming money and possibly further grants to build a fiber network in nearby areas could create a long-term diversified revenue stream for the community.

Network Details

Population Served

Hollinday shared that there are 510 accounts for customers, which he explained as being approximately 1500 - 2000 people. There are about a dozen businesses connected to the network, not including home businesses.

PRICES & SPEEDS

TABLE 4.

There are three service options currently available: Essential Home, Advanced Home, and Automation Home. Essential Home provides basic Internet Service, and the prices listed below include a $13 equipment rental fee.

Speed Tier (Download / Upload)	Monthly Price
50 Mbps / 50 Mbps	$67.95
100 Mbps / 100 Mbps	$87.95
250 Mbps / 250 Mbps	$100.95
500 Mbps / 500 Mbps	$120.95
1 Gbps / 1 Gbps	$140.95

The Advanced Home service costs an additional $8 monthly (starting at $75.95) and includes a mobile app to manage the network and parental controls.

The Automation Home option is designed for automating the home. It starts at $86.95 a month for 50 Megabits per second (Mbps) (an additional $19 more than the Essential Home service). It includes an Amazon Alexa and a home automation hub.

A lower cost option called Essential Flats, starting at $60.95, will be introduced at the end of 2020 for apartments.[16]

Funding

The network cost about $13.5 million in total. About $9 million came in the form of grants from a USDA Community Connect grant, two MN Border-to-Border Broadband grants, and a HUD Indian Community Development Block Grant. The Fond du Lac Band contributed $4.5 million in funding up front.

Expansion Plans

Hollinday said that they are still working to bring the network to the entire reservation, but they may later consider expanding into neighboring communities.

Managing and Setting Up the Network

COVID-19 has created increasing demand for Internet service, which so far has not strained the network. They are focusing on problem-solving issues common to any new network, such as improving customer service and adjusting to problems on the fly. For the first year of operation, they contracted out customer service, but if the problem is something physical, there are a couple of crews on call that will go out to fix it.

Takeaways for Other Native Nations

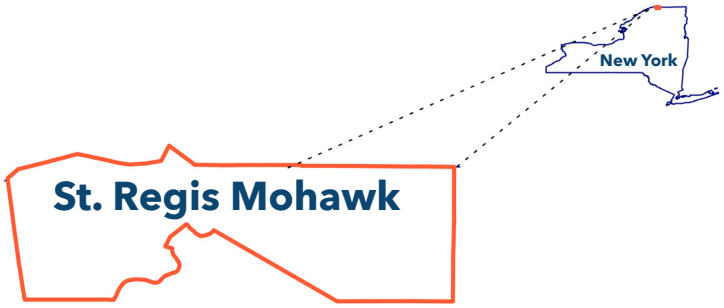
Hollinday found the key to Aaniin's success was a combination of background research and public outreach. Before embarking on this project, the Fond du Lac Band had spent years digging into what would make sense in their community. They had considered multiple avenues to bring Internet service to remote areas and had weighed the full cost of building a network. They also made sure to fully include the community in their project. Working with the Blandin Foundation, they held public meetings to learn what the community members wanted and designed the network to meet their expectations.

Doing background research and involving the community early in the process are all forms of pre-planning, steps taken before officials decided to pursue a specific course of action. All of these forms of pre-planning are useful for filling out grants. It creates a clear narrative that grant agencies can follow to see how an Internet service project will impact the community. Hollinday credits this pre-planning as "the difference between applying for early grants and now."

When the Fond du Lac Band had first applied for broadband grants in the mid-2000s, the Planning Division had not done as much pre-planning. They knew that their community needed Internet service and that the wireless project made the best economic sense at the time. But without pre-planning, they were not able to communicate that to grant agencies. When the market changed in 2010, the Planning Division realized Fiber-to-the-Home was actually feasible. They did more background research and involved the community. This showed grant agencies a clear narrative of why the community needed Fiber-to-the-Home.

Mohawk Networks

St. Regis Mohawk Tribe



About the St. Regis Mohawk Tribe

The St. Regis Mohawk Tribe is a single community, known as Akwesasne, meaning "land where the partridge drums."[17] It is crossed by the Canada-United States international border (New York - Quebec/Ontario), but tribal members are able to freely cross this settler-colonial border under the terms of the Jay Treaty of 1794. Both the United States federal government and the New York State government have separate government-to-government relationships with the St. Regis Mohawk Tribe. The community is home to about 1500 households. There are three tribal enterprises: the Akwesasne Mohawk Casino Resort. Akwesasne TV, and Mohawk Networks.

Brief History of Mohawk Networks

Mohawk Networks started out as an idea in the mid-2000s to provide everyone in the community reliable Internet access. It took close to a decade to determine the best project plan and to secure funding. This was one of the first fiber networks to be built by a Native Nation using funding from the American Recovery and Reinvestment Act (ARRA). Mohawk Networks uses both Fiber-to-the-Home and fixed wireless to connect everyone in the community.

Allyson Mitchell, General Manager at Mohawk Networks, described how it took a couple years to build out the fiber network, stringing about 70 miles of fiber along poles throughout the community. They made sure the anchor institutions, such as government buildings, were connected first, but the network was built methodically from one side of the community to the other. It cost approximately $15 million to build, but by 2015, the fiber network was completed and fully operational.

At the same time that the St. Regis Mohawk Tribe was planning for the fiber network, there was another project in the works to address the digital divide in the community. Connectivity is only one piece of the equation; devices are also important. In 2010, a Broadband Technology Opportunity Program grant brought 60 public computers to key places throughout Akwesasne, including the Boys & Girls Club, the Cultural Center, and the Office of the Aging's Senior Center.[18] With this project, everyone can access the Internet, even if they do not have a home connection through Mohawk Networks.

Now that Mohawk Networks' fiber network is complete, the network can be extended out to new homes as they are built. But there is also a fixed wireless option available. Mohawk Networks' fixed wireless network is a separate project that ensures connectivity for rural areas, and the flat terrain makes it easy to reach everyone with high-quality Internet access.

The fixed wireless can even reach off-territory, and Mohawk Networks offers service in parts of Franklin and Lewis Counties. Mohawk Networks is one of the few Native Nations' networks providing Internet access beyond the borders of its reservation. This is an opportunity for economic development that serves both the tribe and neighboring non-tribal towns with high-quality Internet access.

Network Details

Population Served

The network reaches 1500 households using Fiber-to-the-Home (southern portion of community) and fixed wireless (northern portion of community and off-territory).

PRICES & SPEEDS

TABLE 5. FIBER INTERNET ONLY

Speed Tier (Download/Upload)	Monthly Price
25 Mbps / 10 Mbps	$59.99
50 Mbps / 20 Mbps	$69.99
100 Mbps / 50 Mbps	$99.99

There are also bundled options with Video and Voice service available.

TABLE 6. WIRELESS

Speed Tier (Download/Upload)	Monthly Price
25 Mbps / 10 Mbps	$69.98

Funding

$10 Million for the fiber project came from the American Recovery and Reinvestment Act. The funding required matching funds of $5 million from the St. Regis Mohawk Tribe.

Expansion Plans

Mohawk Networks is expanding to homes incrementally as they are built in the community.

Managing Spectrum and Setting Up the Network

The wireless network was a separate project from the fiber network. It provides Internet access for rural farms, and Mohawk Networks maintains the ability to expand the reach of the fixed wireless network off-reservation.

Takeaways for Other Native Nations

Mitchell, the General Manager, drove home the importance of financial sustainability and choosing good partners. Since Mohawk Networks was one of the first fiber networks built by a Native Nation, they worked with external consultants, and it is necessary to choose "partners that understand how to work with tribes," explained Mitchell.

She also underscored the need to have good finance and accounting teams to manage grants. With reimbursable grants, money has to be available upfront to cover expenses, and the team needs to understand what counts as an eligible expense for the grant. Raising the capital for a project is not enough, operational expenses have to be taken into account. "The most important aspect is understanding the financial requirements and having a long term plan," said Mitchell.

Key Lessons

These case studies highlight key lessons Native Nations, lending institutions, and the federal government can use when considering a network project. The recommendations are generalized from the experiences relayed in these case studies. Every Native Nation is different and must consider what works best for their particular communities. The lessons laid out below, however, are important for lending institutions and the federal government. They should look to address how their processes can be barriers to Native Nations' network projects.

1. Improve Access to Capital

Native Nations do not have the same access to capital as municipalities or as private Internet service providers. Reservation land cannot be used as collateral for a loan because the land is held in trust by the federal government. This means that Native Nations have had to be creative when looking for funding. Many rely on loan opportunities from the USDA, but the USDA cannot fund both a Native Nation's network project and a cooperative's network project in the same area. Some Native Nations fully fund sections of projects and build out incrementally.

Lending institutions should address their processes for lending to Native Nations to determine how to better support network projects. The federal government should regularly evaluate funding opportunities for network projects by Native Nations. The Office of Native Affairs & Policy at the FCC should work with the USDA to ensure that Native Nations' sovereignty is being fully considered when overlapping network projects are proposed.

2. Avoid Single-Purpose Funding

The federal government has many different departments and programs. Many have funding opportunities for network projects, but there is a problem. This funding is often limited to a single purpose, such as connecting Indian Health Services facilities or schools & libraries. This means that there may be multiple network projects in the same community, but no way for residents to access Internet service at home. The Schools, Health, & Libraries Broadband Coalition encourages a concept called "To and Through Anchors" to get past these silos.[19]

New technology can make this problem obsolete, but federal government programs must adjust contract language. For example, fiber networks can have dedicated strands for specific facilities in keeping with the initial federal program, but the excess network capacity could be used for residential home Internet service.

3. Recognize the Preparation Needed to Take Advantage of Opportunities

Native Nations that have already started projects or have plans to start projects can easily jump on new funding opportunities. Having a small project shows dedication to providing Internet service and is a good way to build a network incrementally. This also means that there is a core team of network professionals ready and waiting for the next funding opportunity to be available. For example, Red Spectrum Communications was able to scale up because the team was ready for the funding opportunities in ARRA.

4. Tribal Employment Rights Offices Are a Value-Add

Training and hiring locally is a benefit to the community, and this means that contracted workers do not have to travel far to work on a project. The Tribal Employment Rights Offices provide a value often overlooked by lending institutions or the federal government. These offices make sure that the community is benefiting from the new job opportunities that a network project brings.

5. Respect Native Nations' Right to Spectrum

The FCC should not lease licenses to spectrum over any Native Nations to non-native entities. Spectrum should be treated as a natural resource, and the FCC should recognize Native Nations' autonomy in determining how to use spectrum for Internet access. The DIGITAL Reservations Act by Congresswoman Deb Haaland (NM-01) and U.S. Senator Elizabeth Warren (D-Mass.) would require this of the FCC and also create a Tribal Broadband Fund for Native Nations' wireless projects.

Conclusion

These case studies offer examples of just a slice of the important work being done in Indian Country by Native Nations to improve Internet access themselves. Much more is on the horizon, in part supercharged by the 2.5 GHz licenses now available to hundreds of tribes.
When considering how to improve Internet access in Indian Country, the Federal government must recognize the importance of tribal sovereignty. The Internet Society's 2020 Indigenous Connectivity Summit Policy Recommendations lays out clear proposals regarding tribal sovereignty and broadband funding for both the U.S. and Canadian governments[27]:

- "An Indigenous Broadband Fund and centralized data base that captures funding opportunities, eligibility, and information on how to apply should be created."
- "Indigenous representatives should be hired on a salaried basis to serve as liaisons to assist communities with their applications for funding and participation in policy processes."
- "Federal grants should be created and tailored to Indigenous communities for basic planning, digital inclusion, and network operation and maintenance."
- "If federal funds are allocated to private, non-Indigenous entities operating on Indigenous lands, that entity should be required to train community members to maintain the network on their own land or at minimum hire community members for local labor. They should also be required to service a higher penetration rate to ensure homes are serviced as well as businesses."

The Indigenous Connectivity Summit is held annually by the Internet Society. It includes tribal leaders, industry experts, academic researchers, and others to discuss Internet access in Indigenous communities. Policymakers should review the policy recommendations from these annual summits.

The U.S. Federal Government has recently passed the Consolidated Appropriations Act, a stimulus bill, which includes ~$1.3 billion in aid to Indian Country for broadband networks. This could greatly expand tribally owned networks. The previous COVID-19 relief bill, the CARES Act, provided Native Nations with funding, which enabled several of them to set up wireless networks. But the CARES Act included restrictions on how the money could be spent and when

the money had to be spent by. The Consolidated Appropriations Act extended these deadlines by a year to 2021 because unused funds must be returned to the federal government. Providing funding without reasonable deadlines and regulations is not useful.

Native Nations are already working to close the digital divide, and the Federal government and lending institutions can help. These case studies show how some have taken advantage of funding opportunities to build next-generation networks. They have envisioned how their communities will move forward with reliable Internet access, and they have found ways to combine funding from multiple sources to make that a reality. This is only a small segment of the tribally owned broadband projects in the U.S. The movement for data sovereignty, spectrum sovereignty, and network sovereignty is much larger.

Glossary

• **Allotted Lands –**These are lands that were part of reservations that the federal government assigned to nuclear family units under the Dawes Act in 1887 and the Curtis Act in 1898. This was a process to try to dissolve the strength of Native Nations and encourage Native families to adopt Western lifestyles.

• **American Recovery & Reinvestment Act (ARRA) –** This was economic recovery legislation passed by Congress in 2009 following the 2008 recession. The program had several grant and loan programs, including Broadband Technology Opportunities Program (BTOP) and Broadband Initiatives Program (BIP).

• **Bands (spectrum) –** The FCC manages the radio waves of the electromagnetic spectrum and has it split into specific frequencies, such as 2.5GHz.

• **Border to Border Broadband Development Grant Program –** This is a program specific to the state of Minnesota, which provides funding for up to 50 percent of the infrastructure cost. The maximum grant amount is $5 million.

• **Broadband –** This is a policy term used by the federal Communications Commission. The speed has increased over the years. From 2015-2020, it referred to a speed of at least 25 Megabits per second (Mbps) download and 3 Mbps upload on a fixed connection.

• **Broadband Initiatives Program (BIP) –** This $2.5 billion program was managed by the Rural Utilities Services (RUS) within the U.S. Department of Agriculture (USDA). It was designed to bring broadband to remote and rural areas. See American Recovery & Reinvestment Act (ARRA)

• **Broadband Technology Opportunities Program (BTOP) –** This $4.7 billion program was managed by the National Telecommunications and Information Administration (NTIA) of the Department of Commerce (DOC). It was designed to bring broadband to areas with little to no Internet access. See American Recovery & Reinvestment Act (ARRA)

• **Co-locate –** Wireless towers may be owned and used by one entity, but agreements can be made to share these towers. The wireless towers often have space for more equipment than one entity needs, so other companies or governments can put their equipment in the extra space.

• **Community Connect Program –** The USDA runs this program to expand Internet access. It provides grants to private companies, Native Nations, local governments, or cooperatives to bring Internet service to areas with speeds of less than 10 Mbps download and 1 Mbps upload. See U.S. Department of Agriculture (USDA)

• **Digital Divide –** This refers to the gap between areas that have Internet service and technology and areas that do not have the same options in Internet service or technology. It is often connected to underlying systemic inequities, such as racism and poverty.

• **E-Commerce –** Commercial transactions over the Internet. E-Commerce is a growing part of the U.S. economy.

• **Economic Development –** This is the process in which communities generate more wealth

and improve their social circumstances. Economic development also includes community development.

• **Electromagnetic Spectrum –** This all around us, and it includes: microwave, radio, visible light, infrared, ultraviolet, x-ray, and gamma ray. It is a range of frequencies based on wavelength, which is why it is called a spectrum.

• **Federal Trust Responsibility –** The federal government holds reservation land in trust. This means that the federal government has to use and manage the natural resources to the benefit of the Native Nations.

• **Fiber-to-the-Home –** A fiber-optic line is attached directly to the home or business, connecting to the Internet service. Fiber-optic lines are used throughout Internet infrastructure because they offer extremely high capacity and are very reliable. Fiber-to-the-Home is considered the gold standard for Internet access.

• **Fixed Connection –** This refers to a connection that is not mobile. It can be wireless, but generally excludes geostationary satellite. It is most often a direct cable or line into the building.

• **Gaming –** Gambling is highly regulated. A mid-1970s U.S. Supreme Court case established the legal basis for tribal gaming, and in 1987 the U.S. Supreme Court confirmed that tribal gaming is legal. A 1988 Act by U.S. Congress created regulations and established the National Indian Gaming Commission. The regulations are Class I (traditional, small prizes), Class II (bingo), and Class III (slot machines and other gambling). Native Nations and State governments negotiate State Compacts concerning the type and number of gaming operations in each state.

• **Gbps –** See Kbps/Mbps/Gbps

• **High-Speed Internet Access –** This is different from broadband because there is no legal and policy definition of what counts as high speed. Sometimes used to refer to connections order of magnitude faster than broadband. Sometimes used in marketing to confuse subscribers into thinking a slow connection is broadband.

• **Housing & Urban Development (HUD) Indian Community Development Block Grant –** Native Nations can use these grants to fund development projects, including broadband and housing, in areas that are predominately low to moderate income.

• **Indian Country –** Colloquially, this refers generally to Native Nations in the United States. Legally, it mainly refers to allotted lands and lands within reservation boundaries. This excludes many communities in Alaska whose lands are not held in trust by the federal government.

• **Internet Access –** This is the capability to receive Internet service at a location. This does not mean that there is currently Internet service at that particular location. As of 2020, federal statistics consider all locations within a census block served if an Internet access provider claims it can serve at least one address in a census block, the smallest geographic unit of measurement in the U.S. Census.

• **Internet Infrastructure –** The physical technology that provides Internet service. This includes wireless transmitters, satellites, fiber optic lines, cable, and DSL.

• **Kbps/Mbps/Gbps –** Kilobits per second/Megabits per second/Gigabits per second. These are units of measuring Internet service speed. 1000 Kbps is 1 Mbps. 1000 Mbps is 1 Gbps.

• **Licensed and Unlicensed (spectrum) –** In order to use most bands of spectrum in specific areas, one has to request permission from the FCC. Some bands of spectrum do not require the FCC's permission to use (unlicensed) as long as equipment operates according to prescribed rules. These are mainly the 900 MHz, 2.4 GHz and 5.8 GHz bands.

• **Matching Funds –** Grant and loan programs often require matching funds, which is money that the entity applying for the program has to have on hand. The entity often only has to match a percentage of the amount of the grant/loan. For instance, a $10 million grant might require 50% matching funds, which means that the entity has to have $5 million on hand to contribute to the $15 million project.

• **Mbps –** See Kbps/Mbps/Gbps

• **Mesh Network –** This refers to a non-hierarchical network. This means that data can re-route and travel the most optimal path with the least congestion from one node to another node through the network. There is no set path that data must travel through the network to reach its destination.

• **Microbusiness –** These are very small businesses that are often run by one person or a single family. They can be anything from roadside stands (in person) to Etsy or Ebay merchants (online).

• **Middle Mile –** A nebulous term for the network that connects from the neighborhood (but not the houses that are on the "last mile") to the network backbone that connects to the rest of the Internet. It is often fiber-optic.

• **Native Nations –** These are the Indigenous communities whose relationship with this land pre-dates the formation of the United States. They are self-governing.

• **Natural Resources –** These are the resources of the land, such as timber, oil, and fish. They are naturally occurring resources and depend on climate and locale.

• **Network Sovereignty –** Dr. Marisa Duarte uses this term to describe how infrastructure for Internet access supports Native Nations' sovereignty through self-determination.

• **Office of Native Affairs & Policy –** The Federal Communications Commission created an Office of Native Affairs & Policy in 2010. This Office is dedicated to ensuring government to government relations between the Federal Communications Commission and Native Nations.

• **Per Capita Payments or Per Cap –** A Native Nation may give a sum of money every month or year to each citizen of the Nation. Not every Native Nation has per cap.

• **Reservation –** These are lands that are reserved by treaties to Native Nations. federal laws and policies apply on reservations, but they are not governed by state law. Reservations are not lands given to Native Nations, but are lands held in trust by the federal government and resources on the lands are to be managed for the benefit of the Native Nation.

• **Right of Way –** This refers to small sections of land, often along roadways, that are owned and managed by the local government or Native Nation. This right of way is usually used for installing utilities or other infrastructure.

• **Settler Colonialism –** This is a term often used in American Indian Studies to describe the impact of how people from one area of the world settled in and colonized another area of the world. Examples of settler colonial societies include the U.S., Canada, Australia, and New Zealand. This has a continuing impact on Indigenous peoples.

• **Sovereignty –** Native Nations have governmental control over their peoples and their lands. This has been passed down since time immemorial.

• **Spectrum Sovereignty –** This refers to the sovereign right of Native Nations to access and use radio frequencies. There is a growing movement to recognize the spectrum that covers Indian Country as a federal trust responsibility (a natural resource that is managed by the federal government on behalf of Native Nations).

• **Tribal Lands –** This is a policy term that refers to all types of Native Nations' lands. The Federal Communications Commission uses this term to refer to reservations, allotted lands, and Hawaiian homelands.

• **U.S. Department of Agriculture (USDA) –** The U.S. Department of Agriculture is a federal agency that supports rural economies. It is primarily associated with farmers and produce, but it has holistic programs designed to support rural communities. The USDA has several grant and loan programs, including the Community Connect Program, to increase Internet infrastructure in rural areas.

Endnotes

1 https://www.nigc.gov/news/detail/2018-indian-gaming-revenues-of-33.7-billion-show-a-4.1-increase

2 https://www.nigc.gov/images/uploads/FINAL_2018_GGR_Charts_1.pdf

3 https://cdn.advocacy.sba.gov/wp-content/uploads/2019/04/23142719/2019-Small-Business-Profiles-US.pdf

4 https://www.ihs.gov/budgetformulation/includes/themes/newihstheme/documents/FY-2017CongressionalJustification.pdf

5 Ibid.

6 Data from 2020 FCC Broadband Deployment Report and Appendices https://www.fcc.gov/document/new-fcc-report-shows-digital-divide-continuing-close-0

7 https://www.federalregister.gov/documents/2019/10/25/2019-22511/transforming-the-25-GHz-band

8 https://www.cdatribe-nsn.gov/our-tribe/

9 https://www.cdatribe-nsn.gov/our-tribe/history/

10 Ibid.

11 Ibid.

12 Historical information from Nez Perce Tribe's History Web Page: https://nezperce.org/about/history/

13 https://nezperce.org/enterprises/

14 http://www.fdlrez.com/

15 https://blandinonbroadband.org/2014/09/09/app-camp-for-teens-on-fond-du-lac-reservation-see-the-results/

16 http://www.aaniin.net/res-internet.html

17 https://www.srmt-nsn.gov/history_of_tribal_government

18 http://tribalbusinessjournal.com/mohawk-networks-bringing-broadband-rural-communities/

19 https://www.shlb.org/uploads/Policy/Infrastructure/SHLB_ToAndThrough_Overview.pdf

20 https://www.youtube.com/playlist?list=PLBjQrzrj0Iyu6LSb-g17B0Nf31nJe5KDF

21 https://www.sba.gov/business-guide/grow-your-business/native-american-owned-businesses

22 https://sctca.net/southern-california-tribal-digital-village/

23 https://aipi.asu.edu/spectrum-sovereignty-workshop

24 https://www.indiebound.org/book/9780295741826

25 https://www.gao.gov/assets/700/695455.pdf

26 Read the full story by Matthew Marcus at https://muninetworks.org/content/starlink%E2%80%99s-beta-program-connects-remote-hoh-tribe-washington-state

27 https://www.internetsociety.org/resources/doc/2020/2020-ics-policy-recommendations/

April 13, 2021

The Honorable Nancy Pelosi
Speaker
U.S. House of Representatives
H-232 Capitol Building
Washington, D.C. 20515

The Honorable Kevin McCarthy
Minority Leader
U.S. House of Representatives
H-204 Capitol Building
Washington, D.C. 20515

The Honorable Charles Schumer
Majority Leader
U.S. Senate
S-221 U.S. Capitol Building
Washington, DC 20510

The Honorable Mitch McConnell
Minority Leader
U.S. Senate
S-230 U.S. Capitol Building
Washington, DC 20510

RE: Infrastructure Legislative Proposal

Dear Speaker Pelosi, Minority Leader McCarthy, Leader Schumer, and Minority Leader McConnell:

This letter is on behalf of the undersigned American Indian and Alaska Native (AI/AN) organizations, which collectively serve over 580 federally recognized Tribal governments. The requests outlined in this letter address the extraordinarily poor infrastructure conditions that require improvement to meet the health, safety, welfare, and development needs of AI/AN communities.

For decades, the federal government has recognized that Indian Country has sub-standard infrastructure in every sector.[1] The statistics are harrowing: 70 percent of Native homes are in need of repair, 48 percent of Native households lack access to clean water, over 20,000 miles of surface transportation consists of unimproved earthen or gravel roads, 40 percent of Tribal households

[1] A Quiet Crisis: Federal Funding and Unmet Needs in Indian Country, U.S. Commission on Civil Rights (2003) https://www.yumpu.com/en/document/read/32869468/a-quiet-crisis-federal-funding-and-unmet-needs-in-indian-country; and Broken Promises: Continued Federal Funding Shortfall for Native Americans, U.S. Commission on Civil Rights (2018) (hereinafter "Broken Promises"), https://www.usccr.gov/pubs/2018/12-20-Broken-Promises.pdf.

lack broadband, and there are hundreds of crumbling Tribal health and education facilities that impact life expectancy and educational attainment. Depravation and disparities are not the resources our ancestors bargained for when they entered a trust and treaty relationship with the United States as political sovereigns. Chronic underfunding increased AI/ANs vulnerability to the coronavirus-19 (COVID-19) pandemic and resulted in our communities having the highest per-capita COVID-19 infection, hospitalization, and death rates in the United States.[2]

As the U.S. shapes its infrastructure package, it must prioritize the honoring of its trust and treaty obligations to Tribal Nations. Tribal Nation economies have been devastated by federal policies of assimilation, termination, and neglect over the decades and centuries. Both the 2003 Quiet Crisis Report and 2018 Broken Promises Report conclude that the U.S. has failed to honor its trust and treaty obligations to Tribal Nations. As a result, Tribal Nations and AI/ANs suffering from some of the highest health and social well-being disparities found in the Unites States. Nevertheless, our Tribal Nation economies continue to rebuild after centuries of targeted U.S. destruction as part of its efforts to diminish our sovereign governmental rights, authorities, and powers. Similar to the intentions and rationale of the European Marshall Plan, Indian Country is long overdue its Marshall Plan. A new and modern approach, rooted in diplomacy like the Marshall Plan, must be included with the understanding that purposeful domestic investment into the economic recovery and success of Tribal Nations is in the best interests of the United States. Strong sovereign-to-sovereign relations, and strong Tribal Nation economies, often benefit local surrounding communities as well, through increased job opportunities and increased commerce. These types of benefits are a necessary component to any infrastructure effort. Additionally, in furtherance of these asks, we request the following unified principles apply to Tribal provisions in the forthcoming infrastructure package:

- funds must be provided directly to Tribal recipients and not as pass-through funding to states or another entity;
- indirect costs must be an eligible use of funds and Tribal recipients must be given the maximum flexibility possible in their use of federal funds;
- funds must not be limited to shovel-ready projects;
- all funds for Tribal recipients should be available until expended;
- funds should not be subject to competitive grants and match requirements; and
- explicitly require the Indian canons of construction be applied to provisions of this bill.

For convenience, we have created an abbreviated list to coincide with the specific funding and policy requests found in this letter.

The categories of funding and policy requests begin below.

[2] Centers for Disease Control and Prevention, Risk for COVID-19 Infection, Hospitalization, and Death by Rath/Ethnicity, https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html

In conclusion, we thank you for your consideration of the requests outlined in this letter. We look forward to working with you to ensure that Indian Country's infrastructure and tax concerns and other priorities are comprehensively addressed in forthcoming packages.

Sincerely,

National Congress of American Indians
National Indian Health Board
National Indian Gaming Association
National Indian Child Welfare Association
National Indian Education Association
National Council of Urban Indian Health
National Center for American Indian Enterprise Development

National Association of Food Distribution Programs on Indian Reservations
National American Indian Housing Council
National Association of Tribal Historic Preservation Officers
Native Farm Bill Coalition
Native American Finance Officers Association
National Tribal Emergency Management Council
Intertribal Agriculture Council
Intertribal Transportation Association
Native CDFI Network
American Indian Higher Education Consortium
Self-Governance Communication & Education Tribal Consortium
Association on American Indian Affairs
Great Plains Tribal Chairman's Association
United South and Eastern Tribes Sovereignty Protection Fund
Affiliated Tribes of Northwest Indians
Midwest Alliance of Sovereign Tribes
United Tribes of Michigan
All Pueblo Council of Governors
Inter Tribal Association of Arizona
Inter-Tribal Emergency Management Coalition
NW Tribal Emergency Management Council
Northwest Portland Area Indian Health Board
Alaska Tribal Transportation Work Group

Healthcare Infrastructure

Over the last several decades, Tribal Nations have seen incremental improvements in the federal government's efforts to support Tribal sovereignty and honor the trust responsibility regarding health; however, the Indian health system remains critically underfunded with medical services funded at only 48 percent of need. AI/ANs experience some of the poorest health outcomes when compared to all other groups. Strategic investment in health infrastructure is necessary to build a health system that will improve the health of all AI/ANs and prevent and prepare for public health emergencies. Outlined below are the current infrastructure needs in Indian Country related to the Indian, Tribal, and Urban Indian (I/T/U) Health Systems.

Health Care Facilities Construction

On average, Indian Health Service (IHS) hospitals are 40 years of age, which is almost four times more than other U.S. hospitals with an average age of 10.6 years. A 40-year-old facility is nearly 26 percent more expensive to maintain than a 10-year facility. Further, about 52 percent of current health care facilities are grossly undersized for patient populations, which has created crowded, even unsafe, conditions among staff, patients, and visitors.[3] At current rates of funding, if a new facility was built today, it would not be replaced for 400 years.[4] The absence of adequate facilities frequently results in either treatment not being sought, or sought later, prompted by worsening symptoms, and/or referral of patients to outside communities. To address these needs, we request the following:

- At least $21 billion for Healthcare Facilities Construction, including but not be limited to, support for new and current planned projects, the Small Ambulatory Health Center Program, UIOs, the Joint Venture Construction Program, and innovative approaches to addressing unmet construction needs for health facilities as described in 25 U.S.C. §1631(f).
- At least $10 billion in facilities construction funding that is available outside of the current Healthcare Facilities Construction Priority System (HFCPS) as a new, equitable source of funding that will provide access to construction funds and demonstration project funds for Tribes that do not qualify under HFCPS criteria.
- At least $2.9 billion for Sanitation Facilities Construction.
- At least $2 billion for behavioral health facilities.
- At least $1.8 billion for equipment.
- At least $750 million for maintenance and improvement of IHS and Tribal Facilities.
- At least $580 million devoted to incorporating sustainability features into construction projects (new and existing facilities).

Public Health Infrastructure

Public health infrastructure in Indian Country is one of the most severely underfunded and underdeveloped areas of the health service delivery system. The majority of the health disparities

[3] The 2016 Indian Health Service and Tribal Health Care Facilities' Needs Assessment Report to Congress. Indian Health Service, (2016). https://www.ihs.gov/sites/newsroom/themes/responsive2017/display_objects/documents/RepCong_2016/IHSRTC_on_FacilitiesNeedsAssessmentReport.pdf

[4] House Committee on Natural Resources, Oversight Hearing on Improving and Expanding Infrastructure in Tribal and Insular Communities, Remarks by Congressman Doug LaMalfa (R-CA), March 9, 2017. https://republicans-naturalresources.house.gov/newsroom/documentsingle.aspx?DocumentID=401671

Tribal communities currently face, such as obesity, diabetes, heart disease, and cancer are largely preventable chronic conditions. Treating these chronic health conditions imposes unnecessary challenges on Tribal health systems and IHS. Presently, full funding for the IHS is at least $48 billion to address unmet service needs, that are not inclusive of the infrastructure asks outlined below. A significant federal investment must be made to improve the Tribal public health system to begin to make meaningful reductions in chronic and infectious disease disparities experienced by AI/AN people. Accordingly, we request full funding for the IHS and the following:

- Full funding for the Indian Health Service at $48 billion.
- At least $3 billion for Electronic Health Records and Health IT Modernization.
- Allow I/T/U providers to be reimbursed for services provided outside of the four walls of their clinic, just as they would if they were provided in the clinic.
- At least $1 billion for an Inter-Tribal (interoperability between Tribes) public health infectious disease surveillance systems with mobile capabilities to accommodate rural/mobile public health professionals.
- At least $2.3 billion for Tribes and Tribal Epidemiology Centers (TECs) to build and strengthen Tribal public health infrastructure and capacity.
- Codify a permanent Tribal set-aside in the Strategic National Stockpile at a minimum of five percent.
- Reauthorize the Special Diabetes Program for Indians (SDPI) through FY26 and increase funding to $250 million annually, with annual increases for medical inflation and funding available through contracts/compacts for Title I and Title V Tribes.
- Establish a Native Behavioral Health Program for I/T/U and fund through FY26 at $200 million annually with annual increases for medical inflation, and funding available through contracts/compacts for Title I and Title V Tribes.
- Authorize advance appropriations to insulate Indian health care providers from government shutdowns and allow for long-term planning.

Tribal Health Workforce Development

IHS and Tribal health providers continue to struggle to find qualified medical professionals. Currently, IHS sites' estimated vacancy rates stand at: 34 percent for physicians; 16 percent for pharmacists; 24 percent for nurses; 26 percent for dentists; 32 percent for physician's assistants; and 35 percent for advanced practice nurses.[5] Current vacancy rates make it nearly impossible to operate a quality healthcare program. With competition for primary care physicians and other practitioners/administrators at an all-time high, the situation is unlikely to improve soon. IHS cannot meet workforce needs with the current strategy. To strengthen the healthcare workforce at I/T/Us, Indian Country needs investment from the federal government to educate, recruit, and expand its pool of qualified medical and healthcare administration professionals. To accomplish this goal, we request the following:

- Establish a non-competitive tribal program for Graduate Medical Education (GME) with $10 billion in funding, removing administrative barriers and allowing all reasonable costs for GME funding by Indian operated hospitals.

[5] U.S. Government Accountability Office, Indian Health Service, Agency Faces Ongoing Challenges Filling Provider Vacancies, GAO-18-580. (2018). https://www.gao.gov/assets/gao-18-580.pdf

- Establish a Tribal set-aside of $6 billion for Tribal medical residency programs under the HRSA Teaching Health Centers program.
- Make IHS and Tribal Loan Repayment Program tax-exempt.
- Establish a Tribal set-aside in Public Health Scholarships.
- At least $2 billion for improved housing options and long-term livable standards for IHS and Tribal health workforce.
- Fully fund the Community Health Aide Program for implementation in all states and for UIOs.

Unfunded Provisions of the Indian Health Care Improvement Act

Various portions of the Indian Health Care Improvement Act (IHCIA) have either been partially, or not at all, funded or implemented since the law was permanently reauthorized in 2010. All of the programs included in the law were meant to fulfill the trust and treaty responsibility owed to Tribal Nations by the federal government and provide high quality healthcare to AI/ANs. Until all of these programs are fully funded and implemented, Indian health will continue to lack the resources needed to fulfill these obligations. We request the following programs, authorized in IHCIA, be fully funded and implemented:

- Community Health Aide Program.
- Health Professional Chronic Shortage Demonstration Project.
- Indian Health Care Delivery Demonstration Projects (IHCIA Section 143).
- Indian Country Modular Component Facilities Demonstration Program.
- Mobile Health Stations Demonstration Program.
- Services for Community Based Long-Term Care.
- Inpatient and Community Health Facilities Design, Construction, and Staffing for at least one inpatient mental healthcare facility per IHS Area.

Infrastructure for UIOs

There are 41 UIOs operating in 77 health facilities across 22 states that provide high-quality, culturally competent care to urban Indian populations. Tribal leaders advocated to Congress for the creation of UIOs after the Relocation Era in recognition that the trust obligation for healthcare follows Indians off reservations. Unfortunately, there are significant parity issues experienced by UIOs as compared to other federally funded healthcare systems, which greatly impact their services and operations. For example, the IHCIA prohibits UIOs from making even minor renovations to their facilities using their annual appropriations. This provision was intended to help UIOs maintain or attain accreditation with grants, but instead has hamstrung UIOs from using their already limited funding for any infrastructure needs.

Further, unlike other parts of the Indian health system, UIOs do not receive any funding for facilities infrastructure, which has made repairs, renovations, and remediation extremely difficult. The pandemic has made it even harder for UIOs as they now must make updates for no-contact services, socially distanced waiting rooms, and increased security to adhere to COVID-19 safety guidelines. The time is long overdue for investment into UIO infrastructure for this vital prong of the Indian health system, and we request the following:

- Amend the IHCIA to remove restrictions on using UIO funds for making facility renovations.
- At least $100 million for Urban Indian Health IT (25 U.S.C. § 1660h).
- At least $749.3 million for Urban Indian Health.
- At least $3 million for Urban Indian Health Community Health Representatives (25 U.S.C. § 1660f).
- Extend Full (100 percent) Federal Medical Assistance Percentage (FMAP) to services provided at UIOs permanently.
- Establish an Urban Confer Policy for HHS.

Water Infrastructure

Water is a critical resource in Indian Country, with implications for the physical, cultural, and economic wellbeing of Tribal citizens. Yet 48 percent of Native households lack access to clean water, and 12.5 percent of AI/AN homes do not have basic sanitation facilities. Further, approximately two percent of these homes lack access to safe drinking water, as compared to 0.6 percent of non-Native homes in the U.S.[6] To place this discrepancy in perspective, the Environmental Protection Agency's Sixth National Drinking Water Infrastructure Needs Survey and Assessment – which focuses on Drinking Water State Revolving Fund eligible projects – reported that for this program there was a combined Indian Country need of $3.8 billion in capital investments over the next 20 years.[7] Access to clean water and water infrastructure is a top priority for Indian Country and necessary for our health and development of Tribal economies.[8] Accordingly, we request the following:

- At least $3.8 billion for Tribal governments within the Drinking Water State Revolving Fund and an increase to 5 percent, permanently, for the annual Tribal set-aside for the Drinking Water State Revolving Fund and the Clean Water Act State Revolving Fund.
- Permanently increase to 20 percent the Tribal allocation for Water Pollution Control Grants (Clean Water Act Section 106) to aid development of Tribal water quality for public health.
- At least $25 million to support Tribal environmental programs in assessing and managing nonpoint source pollution programs and threats.
- At least $30 million to support the protection and management, conservation, and utilization of trust water resources.
- Increase funding by $200 Million for water infrastructure and create a Tribal set-aside within the U.S. Department of Agriculture (USDA) Rural Development water programs, including for: Community Facilities Direct Loan & Grant Program; Water & Waste Disposal Grants to Alleviate Health Risks on Tribal Lands and Colonias; Grants for Rural and Native Alaskan Villages; Water & Waste Disposal Loan & Grant Program; and provide $10 million to support Tribal assessments on aging drinking water and wastewater infrastructure.

[6] Indian Health Services, Safe Water and Waste Disposal Facilities, Fact Sheet, https://www.ihs.gov/newsroom/factsheets/safewater/.
[7] Environmental Protection Agency, "Drinking Water Infrastructure Needs Assessment Survey: Sixth Report to Congress" (2018), pg. 42-46.
[8] Id., at Broken Promises, pg. 180-184.

- Permanently authorize and fund the Reclamation Water Settlement Fund (RWSF) to enable Tribal communities to address water shortages through water delivery infrastructure for the health, safety, and welfare of their communities.
- Increase funding for and permanently authorize the Indian Reservation Drinking Water Program.

Telecommunications and Broadband Infrastructure

Funding is needed throughout Indian Country for rapid deployment, adoption, affordability, and access to broadband internet. According to a 2019 Federal Communications Commission (FCC) report, individuals residing on Tribal lands are nearly 4.5 times as likely to lack any terrestrial broadband internet access as those on non-Tribal lands.[9] Even when examining fixed broadband deployment at speeds lower than 10 Mbps, only 6 percent of homes on non-Tribal lands lack coverage by any wired provider, while 25 percent of homes on Tribal lands have no wired option for 10/1 Mbps service.[10]

Barriers to broadband deployment in Indian Country range from a lack of financial investment, too difficult terrain that leads to excess deployment costs, and complex and burdensome regulatory environments.[11] Many Tribal Nations face many of these barriers, perpetuating digital exclusion. Modest estimates have indicated that the cost to begin closing the digital divide in Indian Country would be in excess of $8 billion. In 2009, The American Recovery and Reinvestment Act (ARRA) distributed $7.2 billion in broadband grants and loans, with less than two percent of those funds going towards Tribal broadband projects.[12] Broadband is critical infrastructure and Congress must ensure that Tribal communities are not left behind as education, healthcare, government services, and commerce undergo years of changes in a short time. Accordingly, we request the following:

- $10 billion in additional funding to the Tribal Broadband Connectivity Grant Program through NTIA.
- Establish a $1 billion Tribal Broadband Fund within the FCC to provide technical assistance, training, and direct funding to Tribal governments for broadband infrastructure deployment, maintenance, and upgrades.
- Establish a 20 percent Tribal set-aside for the USDA's Rural Utility Service broadband programs and 5 percent of the FCC's Universal Services Fund for the benefit of broadband deployment on Tribal lands.
- Ensure anchor institutions, including Tribal libraries, Tribal library consortiums, and community centers are eligible for the FCC's E-rate program.
- Require the FCC to open a new 2.5 GHz Rural Tribal Priority Window (TPW) that would last at least 180 days in order to create additional time for Tribal governments to apply

[9] Federal Communications Commission, *Report on Broadband Deployment in Indian Country, Pursuant to the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018*, 5, (2019), https://aipi.clas.asu.edu/sites/default/files/05011019fccreport_on_broadband_deployment_in_indian_country_pursuant_to_the_repack_airwaves_yielding_better_access_for_users_of_modern_services_act_of_2018.pdf
[10] Id., at pg. 5.
[11] Department of Interior, Indian Affairs, *National Tribal Broadband Strategy*, pg. 6, (2021), https://www.bia.gov/sites/bia.gov/files/assets/as-ia/doc/2020.%20December.%20National%20Tribal%20Broadband%20Strategy%20FINAL-cover%20change.pdf
[12] Congressional Research Service, *Background and Issues for Congressional Oversight of ARRA Broadband Awards*, R41775, (2015), pg. 2-3, https://crsreports.congress.gov/product/pdf/R/R41775

for unassigned spectrum licenses over their lands and remove the rurality requirement for the TPW.

- At least $1 billion for Tribal broadband grant programs through BIA and establish the Tribal Broadband Right-of-Way Pilot Program to allow the Secretary of the Interior to delegate the authority to approve rights-of-way for the construction, maintenance, and facilitation of broadband service to Indian Tribes.
- Establish the Tribal Broadband Interagency Working Group to serve as a forum to improve coordination across Federal broadband programs; reduce deployment barriers; promote awareness of Federal support for broadband deployment; and develop common Federal goals, performance measures, and plans to deploy affordable broadband on Tribal lands.
- Establish a Tribal Broadband Deployment Advisory Committee for Tribal leaders to meet and make recommendations to Congress on ways of improving the deployment of Tribal broadband services.

Energy Infrastructure

The energy resources of Tribal Nations are vast and critical to Tribal and national energy security, the reduction of greenhouse gases, and Tribal economic development. These resources include one-quarter of the nation's on-shore oil and gas reserves, one-third of the nation's western low-sulfur coal,[13] almost 3.5 percent of the nation's wind energy, and approximately five percent of the nation's total solar energy potential.[14] Despite this potential, Tribal Nations encounter significant financial and regulatory barriers to developing resources within their homelands, including access to existing infrastructure and financing energy development.[15] The consequences of these hurdles are dire for Tribal citizens in Indian County. For example, approximately 14 percent of homes on reservations do not have access to electricity.[16] Congress must act to address long-standing funding and structural inequities facing Tribal Nations as they seek to develop their energy resources. Accordingly, we request the following:

- At least $1 billion for Tribal energy grant programs within the Department of Energy's Office of Indian Energy Programs.
- At least $60 million to the U.S. Department of Agriculture High Energy Cost Grant Program for Tribal applicants.
- At least $50 million to establish a program to provide financial assistance to Tribal governments to carry out projects related to the modernization of the electric grid and energy storage.
- At least $35 million to Bureau of Indian Affairs Tribal Energy programs.
- Remove non-statutory program requirements that create barriers for applicants and provide 100 percent loan guarantees for the Tribal energy loan guarantee program.

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[13] *See e.g.,* Property and Environment Research Center, PERC Policy Perspective: Unlocking the Wealth of Indian Nations: Overcoming Obstacles to Tribal Energy Development, (2014), https://www.perc.org/wpcontent/uploads/old/pdfs/IndianPolicySeries%20HIGH.pdf.

[14] National Renewable Energy Laboratory, Techno-Economic Renewable Energy Potential on Tribal Lands, (2018), https://www.nrel.gov/docs/fy18osti/70807.pdf

[15] Id., at Broken Promises, pg. 182

[16] Department of Energy Department of Energy FY 2017 Congressional Budget Request – Volume 3. (Feb. 2016), pg. 755.https://energy.gov/sites/prod/files/2016/02/f30/FY2017BudgetVolume3.pdf.

- Confirm the regulatory authority of Tribal governments over their energy utilities, services, and infrastructure under the Federal Power Act, the Public Utilities Regulatory Policy Act, and the Rural Electrification Act.

Housing Infrastructure

Tribal Nations need an extensive investment in Tribal housing programs to meet the current backlog of maintenance, fund new construction, and alleviate overwhelming housing instability. Presently, Tribal communities face overcrowded homes at a rate of 16 percent, roughly eight times the national average.[17] Over 70 percent of existing housing stock in Tribal communities is in need of upgrades and repairs, many of them extensive.[18]

The flat-funding of federal housing programs for Tribal Nations, combined with inflation in construction costs over time—has resulted in a sharp decrease in the number of affordable housing units developed in Indian Country in recent years.[19] In 2016, the Acting Deputy Assistant Secretary at HUD stated that, "one of the greatest impediments to developing affordable housing in Indian Country is the flat funding of the Indian Housing Block Grant (IHBG) for most of the program's history."[20] Since NAHASDA was enacted, Tribal Nations have lost nearly $3.5 billion in funding from the lack of inflation indexing alone. In addition to historical funding shortfalls, the location of many Tribal communities increases the material and labor costs of home construction and imposes additional housing development costs.[21] Building materials must often be brought into Tribal communities from miles away over substandard roads or even by air, and the availability of "qualified and affordable contractors" is limited.[22]

In a 2017, HUD reported it would take approximately 33,000 new units to alleviate overcrowding and an additional 35,000 to replace existing housing units that are in grave condition.[23] Current annual IHBG appropriations only allow Tribes to build or purchase 1,000-1,200 units a year. To meet the total need of approximately 68,000 housing units (new and replacement), with the average development cost of a three-bedroom home, the total cost exceeds $33 billion.[24] While IHBG is the largest single source of federal funding for housing development and assistance, programs promoting housing development, maintenance, and rehabilitation in Tribal communities also are offered at the U.S. Department of Veterans Affairs, U.S. Department of Agriculture, and U.S.

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[17] U.S. Department of Housing and Urban Development, *Housing Needs of American Indians and Alaska Natives in Tribal Areas: A Report From the Assessment of American Indian, Alaska Native, and Native Hawaiian Housing Needs*, (2017), https://www.huduser.gov/portal/sites/default/files/pdf/HNAIHousingNeeds.pdf

[18] U.S. Department of Housing and Urban Development, *Fiscal Year 2017 Congressional Justifications*, pg. 11-12, (2016), https://www.hud.gov/sites/documents/FY_2017_CJS_COMBINED.PDF.

[19] Id, at Broken Promises, pg. 142

[20] Randall R. Akers, then Acting Deputy Assistant Secretary at HUD, *Testimony*, Briefing Transcript, pg. 166–67.

[21] Id, at Broken Promises.

[22] Ibid.

[23] U.S. Department of Housing and Urban Development, *Housing Needs of American Indians and Alaska Natives in Tribal Areas: A Report From the Assessment of American Indian, Alaska Native, and Native Hawaiian Housing Needs*, (2017), https://www.huduser.gov/portal/sites/default/files/pdf/HNAIHousingNeeds.pdf

[24] National Congress of American Indians, *Tribal Infrastructure: Investing in Indian Country for a Stronger America*, An initial report by NCAI to the Administration and Congress, 2017, p. 11, https://www.ncai.org/attachments/PolicyPaper_RslnCGsUDiatRYTpPXKwThNYoACnjDoBOrdDlBSRcheKxwJZDCx_NCAI-InfrastructureReport-FINAL.pdf

Department of the Interior. To address Indian Country's extensive housing needs, we request a total of $33 billion for Tribal housing programs.

Transportation Infrastructure

The economy and wellbeing of Indian Country are dependent upon transportation infrastructure. Without safe and well maintained roads, bridges, and adequate public transportation, Tribal Nations cannot adequately provide essential services to their citizens. Tribal Nations construct, improve, and maintain transportation facilities used by Tribal citizens and non-Tribal citizens alike and require funding to promote public safety, economic development, and community wellbeing.

Tribal and non-Indian residents in Tribal communities face significant transportation barriers every day getting to work, school, health facilities, retail centers, and government offices. U.S. Department of Transportation officials have characterized roads in Indian Country as the "most rudimentary of any transportation network in the United States," with nearly two-thirds of BIA-owned and Tribally-owned public road systems comprised of unimproved earth and gravel.[25] The CDC notes that AI/ANs suffer fatal motor vehicle crashes and pedestrian deaths at two and three times the national average.[26] The coronavirus pandemic has highlighted the infrastructure deficiencies that exist throughout Indian Country. Accordingly, we request the following one-time investment in roads, bridges, highways, and transit systems to help connect Indian Country to goods, services, cultural events, education, jobs and markets, improve the economies of the nation's Indian Tribes, and rebuild vibrant and safe Tribal communities:

- At least $11 billion for Tribal Transportation Program.
- Establish a 10 percent Tribal set-aside within the Airport Improvement Program and the Essential Air Service Program.
- $500 million in funding for the BIA Roads Maintenance Program to address the deferred maintenance backlog.

Law Enforcement, Public Safety, and Justice Infrastructure

Tribal governments serve as the primary instrument of law enforcement, homeland security, emergency management, and justice delivery for the more than 50 million acres of land that comprise Indian Country. As a result of historic underfunding and complex jurisdiction issues, AI/ANs experience disproportionally high rates of violent crime, more than 2.5 times the national rate; some reservations face more than 20 times the national rate of violence.[27] Despite these disproportionately high rates of violence, law enforcement, public safety, and justice infrastructure across Indian Country has largely remained underfunded.

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[25] U.S. Department of Transportation, *Hearing on Transportation Issues in Indian Country Before the Committee on Indian Affairs U.S. Senate*, July 12, 2007, https://www.transportation.gov/testimony/Tribal-transportation-indian-reservation-roads-irr-program-and-federal-highway

[26] Centers for Disease Control and Prevention, *Tribal Road Safety: Get the Facts*, 2020, https://www.cdc.gov/motorvehiclesafety/native/factsheet.html

[27] See Department of Justice (DOJ) and Department of Interior (DOI), Tribal Law and Order Act (TLOA) Long Term Plan to Build and Enhance Tribal Justice Systems, Joint Report in collaboration with the Work Group on Corrections, August 2011, pg. 2 (quoting Steven W. Perry, American Indians and Crime, A BJS Statistical Profile, 1992-2002, DOJ, Bureau of Justice Statistics, 2004) (https://www.justice.gov/sites/default/files/Tribal/legacy/2014/02/06/tloa-tsp-aug2011.pdf).

In addition to violent crimes, man-made disasters and natural disasters worsen safety in Indian Country. As the number of disasters across the U.S. has risen, Tribal governments continue to be left behind in assistance to meet the core homeland security and emergency management capabilities and capacities. For over 50 years, Congress has funded state and local governments, but not Tribal governments, to develop and sustain these core capabilities and capacities.

The COVID-19 pandemic exposed the tragic results of no federal investments in Tribal emergency management capabilities and capacity; 85 percent of Tribal governments were unable to access billions in life saving funds during the height of the pandemic.[28] Many of the Department of Homeland Security (DHS) funding streams lack a Tribal set-aside and include burdensome administrative requirements to access the billions of dollars in federal funds. The Tribal capacity and funding gaps will continue to grow unless all Tribal governments receive streamlined support to build their homeland security and emergency management capacity. Congress must ensure the safety of all Americans by providing the following funding streams for Tribal law enforcement, public safety, and justice in Indian Country:

- $1 billion for law enforcement infrastructure in Indian Country.
- $200 million for the BIA Public Safety and Justice Construction.
- $500 million for the construction of Tribal multi-justice centers and detention facilities through the Department of Justice, Bureau of Justice Assistance.
- $500 million for Tribal courts, including courts in P.L. 280 jurisdictions through the BIA Indian Tribal Justice Act programs.
- $527.4 million for criminal investigations, police services, and detention/corrections through the BIA.
- Establish the Tribal Resiliency Continuity Program within DHS to build Tribal emergency management capacity and provide $244 million.
- $40 million for the Tribal Homeland Security Grant Program and establish a DHS National Tribal Advisory Council.
- Establish a 10 percent set-aside for Tribal governments in cybersecurity funding available for state and local governments, as well as to require DHS to submit an annual report to Congress outlining the cybersecurity needs of Indian Country.

Lands and Natural Resource Infrastructure

Despite losing more than 1.5 billion acres to U.S. expansion between 1776 and 1934, AI/ANs have nurtured, lived, and thrived off their traditional homelands since time immemorial as the first stewards of those places. As land managers, Tribal Nations and their citizens maintain deep and ongoing physical, cultural, spiritual, and economic relationships. When these lands and natural resources are mismanaged, Tribal Nations suffer. Further, many Tribal Nations ceded their territories in exchange for reserving the right to continue to fish, hunt, and gather. Without abundant natural resources to sustain Tribal lifeways, Tribes' treaty rights, cultures, and economies are inevitably threatened. These risks heighten when off-reservation development and management of federal lands do not invite or adequately include Tribal input and ignore impacts to Tribal cultural heritage and natural resources. Congress must better support incorporation of

[28] *See* Federal Emergency Management Agency, By the Numbers Coronavirus Pandemic Whole-of-America Response (Feb. 8, 2021); Federal Emergency Management Agency, By the Numbers Coronavirus Pandemic Whole-of-America Response (March 8, 2021).

Tribal knowledge and co-management strategies into natural resources infrastructure. Accordingly, we request the following:

- Enact a Clean *Carcieri*-Fix to ensure all Tribal Nations have the ability to restore their homelands.
- At least $700 million for Tribal wildland fire prevention and preparedness activities.
- At least $550 million for the National Park Service Tribal Historic Preservation Officer (THPO) Program.
- Reauthorize and provide at least $500 million in funding to the Indian Environmental General Assistance Program (IGAP).
- At least $97.5 million for natural infrastructure for Tribal wildlife conservation and restoration.
- At least $70 million for Tribal fish hatchery infrastructure, including deferred maintenance, facility upgrades, and new facilities.
- Establish a Tribal wildlife corridors program and provide at least a $10 million set-aside for Tribal governments.

Climate Infrastructure

The cultures and lifeways of Tribal Nations and their citizens are place-based and closely tied to subsistence practices. These resources are disappearing faster than they can be restored because of dramatic shifts in weather and climate.[29] As a consequence, Tribal Nations are at the front lines of the climate crisis and disproportionally affected by having to respond to dramatic and incremental events like sea level rise, coastal erosion, ocean acidification, increased frequency and intensity of wildfires, extended drought, and altered seasonal duration.[30] These weather events have impacts on traditional cultural and subsistence practices and sacred places, Tribal fisheries, timber harvesting, and agricultural operations, eco-tourism, and infrastructure.[31] As a result of these challenges, Tribal Nations are involved in all stages of climate response, including but not limited to, emissions reduction, mitigation, and adaptation. Tribal Nations are key partners in the national and global response to climate change. Accordingly, we request the following:

- At least $2 billion for Tribal climate resilience and adaptation.
- Authorize HUD's Sustainable Communities Initiative to support Tribal planning efforts to help communities integrate housing, transportation, infrastructure, and environmental goals.
- Incentivize Tribal participation in state and regional carbon trading markets and treat Tribal carbon credits as a trust resource.
- Authorize a Climate Migration Program to facilitate and fund Tribal governments' climate-related migration planning and implementation needs.
- Authorize FEMA to work with Federal agencies to streamline and standardize the application process for grants and other financial assistance to increase collaboration between the federal government and Native communities and develop unified, comprehensive plans that incorporate hazard mitigation plans, risk assessments, climate

[29] Broken Promises, pg. 193.
[30] Id. at, pg.193-194.
[31] Fourth National Climate Assessment, Vol. II: Impacts, Risks, and Adaptation in the United States, Chapter 15 (2018).

vulnerability assessments, and flood maps that can be used to streamline federal climate adaptation resources.

Education Infrastructure

K-12 Education

Many Native-serving schools remain shuttered, creating major complications for students who have only experienced education through distance and virtual programs in the past year. As our schools look at reopening, many lack the basic infrastructure for safe return to the classroom. The Department of Interior reports a $725 million backlog in addressing deferred maintenance issues at Bureau-funded schools.[32] This is nearly double the $430 million backlog in 2016 when the Department of Interior Office of Inspector General found it would take $1.6 billion to replace the 68 Bureau-funded schools in the worst condition.[33] Most recently, at the end of FY 2019, BIE reported 71 schools in poor condition.[34] Additionally, public schools that serve students on and near Tribal lands face similar issues, as shown by a 2017 report from the National Association of Federally Impacted Schools (NAFIS), which found over $4.2 billion in infrastructure projects with the "most pressing need" at schools receiving Impact Aid funding.[35]

The number of schools that need replacement has grown since these reports, particularly taking into account public health hazards such as ventilation. Deferred maintenance has nearly doubled, exacerbating the rate of deterioration in our school facilities and increasing the need for a strong investment in school replacement and facility construction. Even the newest facilities must undergo major renovations to heating and air, plumbing, and other systems to ensure the safety of students, staff, and faculty in the building. In addition, transportation expenses are expected to rise due to limitations on space, and requirements for technology support and broadband have become even more essential in the new virtual world. Accordingly, we request the following:

- $725 million to address deferred maintenance and failing infrastructure in Bureau-funded schools, as defined in 25 U.S.C. § 2021(3).
- At least $2.6 billion for Replacement School/Facility/Employee Housing Construction at Bureau-funded schools, as defined in 25 U.S.C. § 2021(3).
- $120 million for education information technology.
- $73 million to the BIE Student Transportation Program for funding and improving transportation.
- $4.2 billion to address pressing school facility needs at Impact Aid schools.

TCU Infrastructure

[32] Statement of Jason Freihage, Deputy Assistant Secretary For Management Office Of The Assistant Secretary For Indian Affairs Department of The Interior Before The Subcommittee on Interior, Environment, and Related Agencies, House Committee on Appropriations on Education Facilities And Construction, July 24, 2019, https://www.congress.gov/116/meeting/house/109835/witnesses/HHRG-116-AP06-Wstate-FreihageJ-20190724.pdf.
[33] U.S. Congressional Research Service, Indian Elementary- Secondary Education: Programs, Background, and Issues, RL- 34205; July 28, 2020. https://files.eric.ed.gov/fulltext/ED607186.pdf
[34] U.S. Department of the Interior Site Assessment Analysis for FY 2020, Data as of end of FY 2019 Q4. https://www.ncai.org/12_-_Improving_School_Facilities_-_Site_Assessment_Analysis_for_FY_2020.pdf
[35] NAFIC, Foundations for Learning: The Facilities Needs of Federally Impacted Schools, Jocelyn Bissonnette, 2017. https://www.nafisdc.org/wp-content/uploads/2017/07/2017-school-construction-report.pdf

The nation's 37 Tribal Colleges and Universities (TCUs) serve more than 160,000 AI/ANs, and other rural community members each year through academic and community-based programs at more than 75 sites in 16 states. TCU students represent well over half of the over 580 federally recognized Tribes, hailing from more than 30 states, and 79 percent receive federal financial aid.

A recent survey of TCUs, conducted by the American Indian Higher Education Consortium (AIHEC), revealed a list of outstanding, chronic facilities-related needs.[36] These needs include campus renovations; technology-enabled facilities; and student and faculty housing, classrooms, libraries, and laboratories. A recent TCU Cyberinfrastructure study conducted by AIHEC and EDUCAUSE, revealed that TCUs have more expensive and, on average, much slower Internet connectivity than other U.S. institutions of higher education.[37] Additionally, the average TCU IT equipment replacement rate is 8.29 years, lagging behind the industry standard rate of three to five years. To address these urgent needs, funds should be dedicated within the Department of the Interior to address TCUs' new construction needs, deferred maintenance and rehabilitation issues, and facilities operations and maintenance needs. A dedicated fund also should be established within USDA's Rural Utility Service to provide and develop critically needed telecommunication and broadband services to better serve TCUs, as rural, community-based, and under-resourced institutions. Accordingly, we request the following:

- $800 million for TCU construction, deferred maintenance, rehabilitation, and construction.
- Establish a permanent TCU IT Service Fund at $24 million under the USDA-Rural Utilities Service Program.
- An additional $200 million for TCU/1994 land-grant research, equity, and extension programs to establish a level of equity for the thirty-five 1994 land-grant institutions compared to programs for the fifty 1862 institutions and eighteen 1890 institutions.
- Land-grant research infrastructure funding: no less than 33 percent should be designated for the 1994 land-grant institutions (based on the share of institutions in the nation's land-grant system).
- To help build a highly skilled and educated Native workforce, no less than 10 percent of *any* funding within the Department of Education (ED) designated for minority-serving institutions should be specifically designated for TCUs.
- An adequately funded ED-Capital Financing Fund should be established for TCUs, consistent with the *existing* Capital Financing Fund for HBCUs.
- Designate for TCUs at least 10 percent of Department of Labor workforce development funding provided to community colleges and other institutions of higher education.
- $20 million for the Department of Health and Human Service TCU-Head Start Partnership Program to help address the dearth of trained and credentialed workers.
- At least $20 million to TCU programs directed at science and engineering education.

[36] AIHEC, TCUs: Information Technology & Cyberinfrastructure Needs, February 2021. http://www.aihec.org/what-we-do/docs/FY22/PHASE%205%20COVID%20Relief%20Bill_TCU%20Priorities_2.24.21.pdf

[37] AIHEC, TCUs: Information Technology & Cyberinfrastructure Needs, February 2021. http://www.aihec.org/what-we-do/docs/FY22/TCU%20IT%20Fund%20$24M.pdf

- Establish a TCU Native American Language Vitalization and Training program at $15 million annually to preserve and revitalize the use of endangered Native American languages.

Indian Child Welfare Infrastructure

AI/AN child welfare programs and social service agencies need to have the resources necessary to support families in times of crisis and uncertainty. The COVID-19 pandemic further revealed and exacerbated many of the disparities that Tribal governments face in trying to address child safety concerns in their communities. The lack of investment in infrastructure has negatively impacted the ability of Tribal Nations to develop comprehensive data collection, telemedicine options for youth, and child welfare human service program areas. For example, Tribal Nations only receive about one-half of one percent of all federal child welfare funds, despite Native children representing approximately two percent of the United States population under the age of 18 and four percent of the child welfare population.[38] Accordingly, we request the following:

- $25 million to support Tribal child welfare data systems development (authorize under Title IV-B, Subpart 1 of the Social Security Act – the Stephanie Tubb Jones Child Welfare Services Program).
- $20 million to support the development of Tribal child welfare telemedicine options (authorize under Title IV-B, Subpart 1 of the Social Security Act – the Stephanie Tubb Jones Child Welfare Services Program).
- Create a 5 percent Tribal set-aside under the Title XX Social Services Block Grant to fund workforce development training and the ability to have flexible funds to address other cross-cutting human service infrastructure needs across a range of human service populations.

Agriculture Infrastructure and Rural Development

Agriculture serves as a major economic force in Indian Country, especially as a job creator for rural Tribal communities. Tribal governments and farmers rely on partnerships with the federal government to support the agriculture industry and the more than 35 percent of AI/ANs who live in rural communities. USDA's 2017 Census of Agriculture counted nearly 80,000 Native farmers and ranch operators utilizing more than 59 million acres of land.[39] These farms and ranches sold $3.5 billion of agricultural products, including more than $1.4 billion of crops and $2.1 billion of livestock and poultry.[40] However, AI/AN agriculture producers often struggle to access loans, insurance, and credit lines.[41] To address this lack of investment, we request the following:

[38] National Indian Child Welfare Association, American Indian/Alaska Native Children Exposed to Violence in the Home Testimony of Dr. Sarah L. Kastelic, Deputy Director National Indian Child Welfare Association provided to the Attorney General's Task Force on American Indian and Alaska Native Children Exposed to Violence, Pg. 5-7, 2013, https://www.nicwa.org/wp-content/uploads/2016/11/NICWATestimonyTaskForceonAIANChildren-ExposedtoViolence_Dec2013.pdf

[39] USDA National Agricultural Statistics Service, 2017, *Census of Agriculture*, Table 63, https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/usv1.pdf.

[40] Ibid.

[41] Id., at Broken Promises, pg. 213.

- $725 million to fund the Conservation Stewardship Program within the Natural Resources Conservation Service (NRCS), allow for updated cost and payment schedules, and support specific additional and regenerative conservation practices.
- $30 million to the National Institute of Food and Agriculture, Federally Recognized Tribal Extension Program.
- $320 million for Food Distribution Program on Indian Reservations (FDPIR) new construction, new sites and expansion of existing sites and service, new and existing infrastructure, and technological upgrades.

Rural development programs across the federal government offer opportunities to address barriers Tribal communities face by providing funding for essential infrastructure. For any infrastructure investment plan to be truly national, it must assess and account for the unique needs of Indian Country. Therefore, in any upcoming infrastructure package, we request the following:

- $3.5 billion infrastructure investment to build integrated Tribal food hubs throughout Indian Country, which includes funding for processing, meat processing, storage, logistics, distribution, technical assistance, financial support, and Native youth opportunities.
- Expand USDA's Rural Development (RD) programs' Substantially Underserved Trust Area (SUTA) designation to all programs at RD to support Tribal priority.
- At least $29 billion in loan authority for the Rural Housing and Community Facilities Programs.
- At least $3.4 billion to USDA Rural Development, Rural Utilities Programs, and Rural Housing and Community Facilities Program.

Tax Parity and Equity

Congress has a trust and treaty responsibility to ensure that federal tax policy grants Tribal governments the same opportunities as other governments to provide for their citizens. Currently, the tax code does not provide Tribal governments many of the benefits and protections available to state and local governments. These disparities place Tribal governments at a distinct disadvantage when it comes to providing for the health, safety, and welfare of their communities. These inequities are further exacerbated by dual taxation. While Tribal Nations have the inherent authority to tax within their jurisdiction, economic activities on Tribal lands are often subject to attempts by state and local governments to tax the same activity. Dual taxation creates unpredictability and disincentives for investments on Tribal lands.

Tribal governments often forego taxation in order to retain private investment on their lands. As a consequence, they lose essential government revenue to support their communities' infrastructure needs. These impacts necessitate federal action to address dual taxation and also highlight the urgent need for legislative efforts to increase access and deployment of targeted tax credits in Indian Country to address significant socio-economic disparities. Indian Country has long asked Congress to pass legislation in the areas contained in NCAI Resolution PDX-20-025[42], and we

[42] PDX-20-025, Calling Upon Congress to Enact Legislation to Provide Equitable Tax Treatment for Tribal Governments,https://www.ncai.org/attachments/Resolution_wPZfxMuBQFONFfImBcWUhzqEfEPuosDgIMnpHmjJAhdhIlAWMsQ_PDX-20-025%20SIGNED.pdf

request their inclusion in any tax and infrastructure package. These include, but are not limited to, the following:

- Provide Tribal tax exempt bond parity, establish a National Tribal Government Bond Volume, and remove the Essential Government Functions Test.
- Increase deployment of Low-Income Housing Tax Credits in Indian Country and ensure Tribal inclusion in program allocation.
- Increase deployment of New Markets Tax Credits in Indian Country and provide a proportional Tribal allocation.
- Simplify, expand, and make permanent the Indian Employment Tax Credit.

Economic and Workforce Development

Chronic underinvestment and growing backlogs of critical infrastructure projects hamper Tribal Nations' ability to realize and leverage their economic potential and their citizens' ability to participate fully in the American economy. In addition to increased direct funding, Congress must support Tribal governments' ability to leverage and attract private capital for continuing infrastructure needs. As identified in the Broken Promises report, the lack of financial institutions near Tribal lands, the inadmissibility of trust land as collateral, and outright discrimination against AI/ANs have been barriers to accessing capital. These issues necessitate investments in Tribal programs that incentivize private investments in Indian Country to finance infrastructure. "Access to Capital" programs enable Tribal governments and Native businesses to secure loans and surety bonding through expanded loan guarantees which will better enable participation in rebuilding our infrastructure and economy.

Additionally, "Access to Contracting" tools are essential, especially those unique to Indian Country, to increase opportunities for Tribal enterprises and other Native businesses to pursue award of federal contracts and subcontracts for infrastructure-related development, including transportation, water, power, cyber defense, telecommunications and broadband deployment, and housing, school and health facilities construction, and other economic development projects. Lastly, to realize the long-term economic benefits of infrastructure development, workforce investments must be made to ensure Tribal citizens have training and access to skilled labor positions. Accordingly, we request the following:[43]

- Provide $1 billion for Interior's Indian Loan and Surety Bond Guarantee Programs.
- Expand the Buy Indian Act's application government-wide.
- Implement the Indian Incentive Program government-wide, as originally intended.
- At least $60.5 million for the Department of Labor, Employment and Training Administration, Indian and Native American Program Workforce Innovation and Opportunity Act Section 166 program.

Tribal Governance and Funding Stability

In exchange for the land and resources that made the United States the most powerful country in the world, Tribal Nations paid in full to retain their inherent right of sovereignty and receive

[43] The first three requests are detailed in an April 9, 2021 inter-organization letter which we endorse and is accessible here: https://www.ncaied.org/buy-indian-expansion-proposals/

programs, services, functions, or activities (PSFAs) provided by the federal government. These PSFAs represent an exchange of promises made and acknowledgement of sovereign rights already held by Tribal governments. Federal funding for these PSFAs should be provided through mandatory spending mechanisms and should not be administered through competitive grants.

The ability of any governing body to promote, develop, and maintain physical and institutional infrastructure is derived from the stability and certainty of revenue sources to operate government. Disruptions in resources for Tribal Nations have an outsized impact that substantially harms infrastructure advancement. Ambiguities in the intent of Congress with respect to Section 105(l) lease agreements under the Indian Self-Determination and Education Assistance Act (ISDEAA) also impact health delivery and substantially hinder the development of healthcare infrastructure throughout Indian Country.[44] The following policy solutions will ensure Tribal Nations have the basic certainty and security in continuity of resources to address systemic infrastructure needs throughout Indian Country and maximize federal investment:

- Make spending for programs that fulfill the trust and treaty obligations of the United States mandatory.
- Provide formula-based, annually reoccurring funding for Tribal programs that fulfill core trust and treaty obligations to Tribal governments rather than competitive grant mechanisms.
- Provide such sums as may be necessary for ISDEAA Section 105(l) lease agreements through mandatory spending for DOI and IHS and confirm that space used to provide services within the scope of an ISDEAA agreement—to any patient—is compensable under Section 105(l) of the ISDEAA.
- Provide such sums as may be necessary for Contract Support Costs through mandatory spending for DOI and IHS.

[44] NCAI Resolution #ECWS-2021-002, Support for Legislative Fix to Amend Lease Compensation Provisions of the Indian Self-Determination and Education Assistance Act. https://www.ncai.org/attachments/Resolution_eontvOcwAgAYphrWlBPWpscJEzItoIqJInPaYgjHtOhHqZpSyCL_NCAI%20Resolution%20ECWS-21-002.pdf