

NATIVE NATIONS COMMUNICATIONS TASK FORCE

Handbook on Infrastructure Deployment on Tribal Lands

Report to the Federal Communications Commission

From the Tribal Members of the Task Force

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Handbook on Infrastructure Deployment on Tribal Lands

I. INTRODUCTION

The Tribal members of the Native Nations Communications Task Force have prepared this Infrastructure Deployment on Tribal Lands Handbook as a resource for the Federal Communications Commission (FCC), Tribes and third-party providers of wire and radio communications services on Tribal lands.¹ The Handbook is intended to bring awareness of the various steps involved in broadband deployment, whether wireless or wireline, including developing networks, forming partnerships, establishing sound regulatory policies and practices, and creating sustainable business models. It also provides guidance related to assessing both current and future needs and designing systems to meet those needs, whether a Tribe seeks to provide communications services itself or through a third party.

For Tribes that elect to provide communications services themselves, the Handbook provides guidance on deploying the infrastructure required to make communications systems operational and establishing and overseeing a Tribally owned service provider. For third-party providers, the Handbook provides insights into Tribal perspectives and information concerning deployment on Tribal lands, including Tribal land use, and associated regulatory codes.

The information contained in this Handbook is not intended to be comprehensive and fit all situations, nor does it endeavor to address all aspects of Tribal sovereignty, including Tribal regulatory authority, as it relates to the deployment of broadband infrastructure and services on Tribal lands. Indian Country is diverse, and each Tribe has issues that are pertinent to its local and state jurisdictions and, more importantly, to its respective Tribal governance. Tribes with authority to enter into business leases for Tribal lands pursuant to the HEARTH Act² will find most, if not all, sections of this Handbook pertinent to them. Tribes that lack such authority may only find certain sections pertain to them given limitations on their regulatory authority over their lands.

Whether Tribes build and operate their own networks or obtain service from private providers, there are a variety of options for constructing, owning, and leasing key assets, such as communications towers, fiber-optic cable, and wireless spectrum. Some of these options create revenue-generating opportunities for Tribes. This Handbook provides guidance on how to identify and evaluate the available options, as well as the pros and cons of alternative approaches.

For Tribes seeking service from outside providers, the Handbook provides guidance related to negotiating and regulating the deployment of private infrastructure on Tribal lands, with special emphasis on the benefits of establishing formal regulatory codes to govern the many different considerations involved in the deployment and operation of communications networks. The Handbook also identifies the multiple ways in which Tribal land-use and other codes can foster and accelerate the deployment of modern communications infrastructure on currently unserved or underserved Tribal lands. These benefits will accrue whether a Tribe decides to provide communications services itself, or to secure such services from private providers. Section III includes examples of existing Tribal codes regulating deployment of broadband facilities that other Tribes can adopt or adapt in establishing codes for their own use.

II. BROADBAND PROVISIONING ON TRIBAL LANDS

A. Tribal Self-Provisioning of Broadband Services

Tribes interested in self-provisioning broadband services for government purposes or as a commercial service to businesses and/or residential households must make a number of threshold determinations.³

1. Methods of Operation Can Include Tribal Ownership or Partnership

As a first step, a Tribal Nation that wants to provide communications services on its lands must decide whether to do so alone or form a partnership with one or more other entities, including other Tribes or other commercial providers. There are benefits and costs to each approach. A Tribe that works alone retains the greatest degree of control and flexibility, including the flexibility to provide the service in a manner that maximizes the benefits to its community rather than the monetary return on investment.

On the other hand, partnerships among two or more Tribes, including by forming a consortium, allow the participants to pool resources and achieve important economies of scale. Consortia can include multiple Tribal organizations, state and/or private entities developing plans to deploy broadband to meet a larger geographic demand by collaborating resources. One example of a successful consortia dedicated to providing middle mile broadband infrastructure and services is REDINet, a high-speed open access community broadband network owned and operated by a consortium of local and Tribal governments in New Mexico, including Santa Fe County, Los Alamos County, Rio Arriba County, the North Central Economic Development District, City of Espanola and four Pueblos – Pueblo of Pojoaque, Ohkay Owingeh, Santa Clara Pueblo and Pueblo of Tesuque.⁴

Partnerships with private entities offer opportunities to access critical expertise and capital, as well as to speed deployment and spread risks. For a private provider, partnering with a Tribe can obviously provide access to new consumers, but there can be other benefits as well. For instance, bringing service to rural Tribal areas often depends on support from federal and/or state funding sources. Some competitive funding programs award additional weight to bids or applications from entities that include Tribes. Potential private partners include traditional communications providers, but non-traditional partners are also increasingly available, such as rural electric companies and other utilities seeking to capitalize on existing network infrastructure. Rural electric companies are good potential partners for bringing broadband to Tribal communities because of their existing infrastructure and relationship with their customers. As these companies lack expertise in the provision of broadband communications services, many are seeking partners to assist them. The Chickasaw Nation is considering partnering with a local rural electric company (FTTH) to provide last mile broadband service via fiber to the home. Partnering with a local rural electric company can have many benefits.⁵ Deployment costs can be minimized by using the utility's current utility pole infrastructure. The pre-existing customer relationship the utility has can increase the chance of signing the customer up for a high-quality broadband connection in addition to their existing electric service.

Several Chippewa Tribes in Wisconsin have applied for and received state public service grants which predate the COVID-19 pandemic to expand broadband services in conjunction with a private Internet service provider (ISP) as a partner. The Tribal entity retains control of the infrastructure and ownership of the broadband network while the private ISP partner is allowed to operate on the network and provide service in the Tribal areas. This model has allowed the expansion of both middle and last mile connections to Tribal areas as well as directly to Tribal member customers. These grants are competitively awarded and often opposed by incumbent carriers that are not properly serving Native lands.

In response to the COVID-19 pandemic, the federal government and some state governments have provided substantial funding for broadband deployment and adoption across the country, particularly in unserved and underserved rural areas.⁶ This has resulted in a significant increase in the broadband funding available to Tribal governments and entities. While these programs have significantly increased the funds made available to the Tribes, the funding amounts are still not sufficient to fully address and close the digital divide on all Tribal lands. For example, applications for initial funding from NTIA's Tribal Broadband Connectivity Program far exceed the available funding in the program. As already noted, Tribes that receive federal funding can use it to provide broadband services themselves, or partner with private companies or other Tribes. But the various federal programs at issue also provide significant funds to state and local governments, creating new opportunities to establish intergovernmental partnerships. Federal broadband funding opportunities for Tribes could vary from state to state.

At the same time, the pandemic has changed the landscape of the workforce. The place of employment has shifted from the office to home and many companies are allowing employees to work remotely. Furthermore, the latest trend is that companies no longer require their workforce to live close to their office, allowing employees to move from their places of employment in cities to other locales, including rural areas, increasing demand for rural broadband services. The combination of substantial new funding and increased broadband demand creates new opportunities for Tribes to partner with other entities to build and operate broadband networks.

Tribes that elect to establish partnerships with other Tribes, with private providers, or state or local agencies should ensure both the business plan and governance structure for the partnership are flexible enough to adapt to changing conditions and technologies.

2. Business Model Considerations for Tribes Self-Provisioning

Once a Tribal government has decided to self-provision, it should consider conducting a broadband feasibility study to determine the viability of the Tribal broadband business. Business model considerations may include the type of network to use; whether to seek Universal Service Funds (USF), for which in some cases it will need designation as an Eligible Telecommunications Carrier (ETC); whether to obtain such designation from the state or federal government; and which part of Tribal government will exercise oversight responsibility over the Tribal provider.

a. Feasibility Study

A feasibility study is highly recommended to ensure that a network buildout can be supported and, above all, is sustainable, which takes into consideration the cost not only to build but also to maintain and operate the network once it is built. Conducting a feasibility study helps Tribal governments assess the options for broadband deployment on their lands.

Components of a feasibility study will include, among other things, a survey of stakeholders and their expectations of service, which will determine the technology used and will guide the design and planning for network infrastructure. Stakeholders include Tribal government offices and agencies, as well as healthcare providers such as hospitals or clinics, and schools or libraries and any other places of learning. Additional stakeholders can include businesses, any other places of employment, and future Tribal economic development projects.

The feasibility study should also identify and assess any existing infrastructure. If any facilities (copper, fiber, wireless) exist and provide service to a Tribal community, do they meet the required bandwidth necessary to serve the stakeholders? In addition, the feasibility study should identify existing and needed rights-of-way for infrastructure deployments.

Tribes should take great care in choosing private partners for a feasibility study. Potential partners should have a familiarity with Tribal concerns and a cultural sensitivity. Tribes should be ready to provide additional economic and demographic data to the company performing the feasibility study to ensure that the study fully captures the realities of the Tribe's situation.

b. Broadband Technologies

Broadband service can be provided using a number of different technologies. For example, Digital Subscriber Line (DSL) service today to many homes and businesses is offered by regulated incumbent local exchange carriers and provided over last-mile copper networks. Last-mile copper is an older technology that generally should be avoided in modern buildouts. Fiber-optic last mile networks deliver greater bandwidth today than other network technologies. Fiber has a longer life than copper and fiber deployments can facilitate multiple applications in the future. In addition to directly connecting homes and businesses, fiber is also found in middle-mile and Internet backbone networks. Terrestrial broadband service can also be provided wirelessly, using the radio spectrum. Regardless of which technology is chosen for the provision of last-mile service to end users, both wireline and wireless service will require a robust fiber backbone for, and interconnection with, other networks and backhaul service to Internet points of presence.

Many of the new federal broadband funding programs available to Tribes contain relatively high minimum broadband speed requirements, making fiber the only practical technology to deploy to meet the service requirements.⁷ Fiber enables future growth and expansion possibilities not available through any other current technologies.

c. Types of Distribution Network Providers

Distribution networks that connect end-users to the public switched telephone network and/or the Internet can be either wired or wireless, or a combination of the two. Tribes can choose which technology to employ and where, based on considerations such as topography, cost, and access to spectrum. Regardless of their choice in last-mile network technology, Tribes will need to build or obtain middle-mile connections to other networks, peering points with Internet transport providers, and Internet points of presence (POPs) to provide retail services. While it is not strictly necessary to enter the market as a regulated telecommunications provider, as explained below, doing so has both costs and benefits that should be considered when choosing a business model.

i. Local Exchange Carriers

Background. In most cases in Tribal areas, the existing wired voice and broadband connection to a premise such as a home, business, educational institution and/or medical facility is provided by a telecommunications carrier operating as local exchange carrier (LEC). Such carriers generally provide service using either copper or fiber for last-mile distribution. Providers of voice telecommunications services have specific regulatory requirements, such as provision of E911 and voice switching services. LECs provide not only retail service to end users, but also wholesale services to other providers that could include Tribal providers for backhaul or connectivity between their last mile facilities and the Internet.

There are two types of LECs providing voice telephone services on a common carrier basis, incumbent LECs – also referred to as “ILECs” – and competitive LECs – also referred to as “CLECs.” A telephone “exchange” is a telephone system for a small geographic area that provides the switching (interconnection) of subscriber lines for calls made between them.

Incumbent LECs originated either as part of the unified Bell System, or with independent telephone companies established in the late 19th and early 20th centuries to provide voice telephony services to business and residential customers on a generally exclusive basis in separate local areas. Competitive LECs were established after the Telecommunications Act of 1996 to provide local exchange services in competition with incumbent LECs. Long distance voice service between exchanges (interexchange service) was generally provided by long-distance carriers (interexchange carriers or “IXCs”), whose calls were connected to end users on both ends by interstate or intrastate access services provided by the LECs.⁸

Ten Tribes have established their own LECs and taken on the responsibilities of that status. Nine established or took over local exchange operations from incumbent providers, operating in their areas as the incumbent LECs; one has established a competitive LEC.⁹ Most operate as traditional “rate of return” carriers, whose tariffed rates for interstate access service are regulated by the FCC and are set by the carriers to recover their regulated costs and allow them to earn a set “rate of return” on investment.¹⁰ The oldest established Tribal LEC, Cheyenne River Sioux Tribe Telephone Authority, is over 60 years old,¹¹ with the newest LEC, Siyeh Communications, less than 2 years old.¹² The Tribal Telcos have established a trade association, the National Tribal Telecommunications Association (NTTA), to provide advocacy and guidance and assistance to members who are working to provide modern telecommunications services to Tribal lands.¹³

Advantages and Disadvantages. There are advantages and disadvantages to becoming a LEC. Incumbent LEC operations and capital expenditures are regulated, which provides an established framework and operations model for Tribes new to the telecom industry. Service areas for the provision of local exchange services – known as “Study Areas” for Universal Service Fund (USF) support purposes¹⁴ – were established years ago by states and the FCC.¹⁵ Network accounting, various types of USF funding, and reporting obligations are categorized according to whether the company’s rates are regulated under price caps or on a rate-of-return basis. Incumbent LECs are regulated on a “common carrier” basis, with many services provided under tariffs.¹⁶

Voice calls are regulated differently based upon what jurisdiction the call crosses. Intrastate end-user rates for both business and residential customers, and intrastate local access service charges – the charges incumbent LECs assess interexchange carriers for the “last mile” connection to the end user for long distance services within a state – are regulated by state public utility or service commissions.¹⁷

Interstate and intrastate access charges – charges LECs impose on interexchange carriers for originating and terminating their traffic – were comprehensively reformed by the FCC beginning in 2011.¹⁸ Those reforms will ultimately phase out access charges, a process the FCC began by moving certain terminating access charges to zero. Interstate access rates are listed in tariffs incumbent LECs, and some competitive LECs, file with the FCC.¹⁹ Tariffs, pursuant to 47 CFR, Part 61, contain the rates, terms, and conditions governing the carriers’ provision of telecommunications service to their customers. The FCC has detariffed many interstate and international services, but incumbent LECs must still file annual access charge tariffs with the FCC every year effective July 1st. Carriers that seek to change their tariffed interstate access rates or change the tariff terms and conditions must file tariff revisions with the FCC subject to FCC review. Tariffs are typically filed under a streamlined process that gives the FCC and the public 15 days’ notice to challenge proposed price increases and changes in terms and conditions, and seven days’ notice to challenge proposed price reductions.

The FCC has established an entity, the National Exchange Carrier Association (NECA) to help small and rural incumbent LECs comply with access charge regulation.²⁰ NECA’s

forecasting, fund pooling process with other incumbent LECs, and reporting processes allow its members to recover their costs and meet revenue requirements. Depending on the size of a company, costs and expenses are reported on a monthly schedule. Carriers may file their own tariffs separately or participate in the NECA tariffs.

The benefits of forming a LEC are independence from telephony services provided by third parties (usually larger incumbent LECs), which in some circumstances may not provide adequate voice and broadband services on Tribal lands, and more control over delivery of services to Tribal communities, government facilities, and anchor institutions.²¹ Most rural independent LECs are small to mid-sized and have been established for years. They serve rural communities, including some Tribal lands, and are owned and operated locally.

The disadvantages of becoming a LEC are that it takes an enormous amount of planning, and telecommunications carriers and their businesses may be heavily regulated, with complex compliance requirements.²² Recovery of the costs of doing business as a rural incumbent LEC is regulated. Costs are recovered through the access charge rates established in the carrier's tariff or NECA's tariffs. Entry into the LEC market is controlled, and the FCC has been generally reluctant to approve the establishment of new exchanges and new rate-of-return carriers.

Although competitive LECs are not subject to the same level of federal regulation as incumbent LECs, they are still regulated as common carriers, subjecting them to a number of FCC and state requirements. However, most competitive LEC rates to business and residential customers are considered competitive and are therefore largely unregulated. Nonetheless, many competitive LECs choose to tariff interstate access charges, which they are permitted to do under certain conditions.²³

An alternative to seeking to provide telecommunications services as an incumbent LEC is to become a competitive LEC by applying for a "Certificate of Convenience and Necessity" (CCN) (also called a "Certificate of Public Convenience and Necessity" (CPCN) in some jurisdictions) or similar authorization usually issued by a state agency granting a company authority to operate a public service especially as a utility. Oklahoma, for example, prohibits any person, firm, association, corporation or cooperative from furnishing telecommunications service to any end-user or customer in the State of Oklahoma without first having secured a CCN from the Oklahoma Corporation Commission. The state also requires any recipient of funding from the Oklahoma Universal Service Fund to obtain a CCN prior to receiving funding.²⁴

ii. Wireless Internet Service Providers

Wireless Internet service providers (WISPs) rely on fixed wireless access for their last-mile distribution networks and provide broadband Internet access service but generally do not provide voice services. Fixed wireless uses radio spectrum and a single transmission point, such as a tower, that covers a wide area to provide service to many locations. Where fixed wireless broadband is available, users simply plug a small device into an outlet and within minutes they can connect to the Internet wirelessly.

These fixed wireless systems are sometimes faster to deploy and often cost less than fiber to install but have some technical limitations, including distance, line of sight, propagation, terrain or topography, some of which will vary depending on whether the spectrum used is licensed or unlicensed. Fixed wireless bandwidth is limited by the frequencies deployed and the capacity of the equipment. The amount of bandwidth available to fixed wireless is inherently less than the bandwidth available to physical fiber installations because the time that it takes a radio wave to travel from point to point is considerably slower than the speed of light employed in fiber installations. Fixed wireless is also susceptible to interference from foliage, other

wireless equipment in the area, and other natural causes. All interference degrades the capacity of the fixed wireless connection. Finally, the lifecycle of fixed wireless equipment is much faster than terrestrial installations. Wireless equipment is more exposed to weather and the upgrade/replacement cycle has greater equipment turnover. Lifecycle issues for fixed wireless equipment can greatly increase costs.

Adding fiber connections to the towers for backhaul service to connect local networks to Internet points of presence will dramatically improve wireless broadband functionality by increasing network throughput and reliability. Fiber also provides longer term growth options. Having fiber to a tower increases the revenue potential for tower colocations and future communications technologies. Laying fiber, however, can be very expensive, particularly in rural and remote locations.

WISPs typically employ two types of fixed wireless connections. The term “point-to-point” generally refers to the connections that enable large throughput between towers. “Point-to-multipoint” generally refers to the connections between towers and end users, such as individual homes, businesses, and offices. This is typically a “line-of-sight” technology. Signals are broadcast from a tower to a customer’s house or business, and there must be a clear line of sight between the two. These point-to-multipoint connections can also be used to create Wi-Fi hotspots for use by anyone in the community.

WISP networks require access to the commercial radio spectrum, which is regulated exclusively by the FCC. This access can be obtained in many ways. Licenses in spectrum bands allocated for commercial use are most commonly awarded through competitive auctions, where Tribes and others place bids to purchase the spectrum licenses, and licenses are awarded to the highest bidder. However, hundreds of federally recognized Tribes recently have obtained licenses through an FCC initiative that specifically provided advantages for Tribal Nations, the first-of-its-kind 2.5 GHz Rural Tribal Priority Window. Although it is possible to secure licenses in other spectrum bands through competitive auctions, prices in such auctions are often too high for the average Tribe. Nevertheless, Tribes can purchase or lease spectrum from other licensees on the secondary market, and there are opportunities to make unlicensed use of spectrum in certain bands, including the 2.4 GHz and 5.8 GHz bands, as well as TV white spaces. Other spectrum sharing opportunities, such as in the 3.5 GHz band, also exist.²⁵ Unlicensed uses typically come without protection from interference, but the rural and remote nature of many Tribal areas also decreases the likelihood of competing uses. Tribes considering accessing spectrum on an unlicensed basis should first conduct a comprehensive study of possible interference to determine whether this is the best option for service delivery under local conditions.

Obtaining information from FCC databases about the availability of spectrum over Tribal lands and identifying spectrum potentially available for leasing from the current licensee can be difficult. Staff in the FCC’s Office of Native Affairs and Policy²⁶ and Wireless Telecommunications Bureau are available to assist Tribal Nations seeking this information.

d. Seeking Universal Service Fund Support and ETC Status

A significant issue for Tribes to consider is whether to seek USF support from the FCC. Established in 1997, the USF collects money in the form of assessments on telecommunications providers’ interstate end-user revenues. These assessments are used to fund four distinct USF programs, all with the goal of achieving universal, affordable, reliable communications services nationwide.²⁷ The four programs are Lifeline, E-Rate (more formally known as the Schools and Libraries Program), Rural Health Care, and High-Cost (also known as the Connect America Fund or “CAF”). Participation in all four of the USF programs is limited

to telecommunications providers deemed Eligible Telecommunications Carriers by either the FCC or a state public utility or public service commission (PUC or PSC).

The Lifeline program provides a subsidy to an ETC to defray a portion of the cost of voice and broadband services for low-income subscribers. The basic monthly Lifeline subsidy for voice-only service is being phased out and is currently capped at \$5.25. The basic monthly subsidy for broadband service, or a voice-broadband bundle is \$9.25. However eligible households on qualifying Tribal lands may receive an enhanced benefit of up to \$34.25 a month.²⁸

Link Up, another element of the Lifeline Program available to eligible households on Tribal lands, is a one-time benefit, per address, that reduces the initial installation or activation fees of certain Lifeline providers. Qualified subscribers living on Tribal lands receive a one-time discount of up to \$100 on the cost of initiating service at their primary residence. For service initiation charges of up to \$200, Link Up also provides a deferred, no-interest payment plan to the subscriber for up to one year. Subscribers can request Link Up once for each change of their primary residential (home) address. Tribal Link Up support is only offered to carriers who are building out infrastructure on Tribal lands.²⁹

The E-Rate Program helps schools and libraries obtain affordable broadband. Eligible schools, school districts and libraries may apply individually or as part of a consortium. Applicants may request funding under two categories of service: category one services to a school or library (telecommunications, telecommunications services, and Internet access), and category two services that deliver Internet access *within* schools and libraries (internal connections, basic maintenance of internal connections, and managed internal broadband services). Discounts for support depend on the level of poverty and whether the school or library is located in an urban or rural area. The discounts range from 20 percent to 90 percent of the costs of eligible services.

The Rural Health Care Program, which provides funding to eligible health care providers for telecommunications and broadband services, currently consists of two programs: the Healthcare Connect Fund Program and the Telecommunications Program. The Healthcare Connect Fund Program provides support for high-capacity broadband connectivity to eligible health care providers and encourages the formation of state and regional broadband health care provider networks. Under the program, eligible rural health care providers, and those eligible non-rural health care providers that are members of a consortium that has more than 50 percent rural health care provider sites, receive a 65 percent flat discount on an array of communications services. These services include Internet access, dark fiber, business data, traditional digital subscriber line (DSL), and private carriage services. The Telecommunications Program subsidizes the difference between urban and rural rates for telecommunications services. Under this program, eligible rural health care providers can obtain rates on telecommunications services in rural areas that are reasonably comparable to rates charged for similar services in corresponding urban areas.

The High-Cost program can provide support for both deployment and on-going network operations. Historically, the Commission provided high-cost support on an ongoing basis to carriers regulated either on a rate-of-return or price-cap basis who meet program requirements. More recently, the Commission has awarded high-cost support through reverse auctions – i.e., to carriers that bid to provide service to a discrete geographic area at the lowest costs – and through a cost model. In 2018, the Connect America Fund Phase II auction awarded 103 bidders \$1.49 billion over 10 years to provide fixed broadband and voice services to over 700,000 locations in 45 states.³⁰ In 2020, Phase 1 of the Rural Digital Opportunity Fund awarded over \$9 billion for broadband deployment. USF can be an extremely important source

of funding for Tribal telecommunications carriers, defraying costs for networks supplying both voice and broadband services.³¹

The two principal forms of federal USF support commonly sought by Tribal providers seeking to build broadband networks to self-provision services are High-Cost and Lifeline. Tribes can seek ETC status for the limited purpose of becoming eligible to receive Lifeline support, or ETC status for the purpose of receiving high-cost support, or both. However, the decision whether to seek ETC status is a hard one for Tribes. Meeting the requirements for being designated an ETC can be quite burdensome, and it is generally not an option for Tribes planning on providing only fixed wireless Internet access service as WISPs because ETCs are required to provide voice service.

Becoming an ETC has benefits but it also subjects the provider to specific requirements, whether a provider seeks ETC designation from the FCC or a state. These include: (i) offering services throughout its designated service areas either using its own facilities or a combination of its own facilities and resale of another carrier's services; (ii) certifying it will comply with the service requirements applicable to the supported areas; (iii) demonstrating its ability to remain functional in emergency situations; and (iv) advertising the availability of such service charges using media of general distribution.³² Also, ETCs must satisfy additional requirements applicable to all high-cost ETCs, such as Lifeline obligations. These requirements are described in more detail below.

ETCs serving or planning to serve Tribal lands and receiving USF high-cost funds are required to engage with the Tribes in their service area at least once a year.³³ They are also required to report on this engagement in their annual Form 481 filings. Tribes have access to these filings through a USAC portal,³⁴ which allows them to review, among other things, the carrier's unredacted deployment plans. This can provide an additional source of information about the location of current and planned fiber.

e. Obtaining ETC Status

Tribes that wish to become ETCs must decide whether to file their ETC petitions with the state public utility or public service commission (PUC), or with the FCC. The Communications Act of 1934, as amended, gives state PUCs primary authority for ETC designations.³⁵ As sovereign Nations in their own right, some Tribes do not want to be subject to state jurisdiction and prefer to file their petitions for ETC designation with the FCC. However, the Commission has authority only when "a common carrier [is] providing telephone exchange service and exchange access that is not subject to the jurisdiction of a state commission."³⁶

In addition to the requirements listed above, carriers seeking an ETC designation from the FCC must:

- Submit a five-year plan describing the proposed improvements and upgrades to their network within the proposed service area.
- Demonstrate its ability to remain functional in emergency situations.
- Demonstrate that they will satisfy applicable consumer protection and service quality standards.³⁷

f. Additional Requirements for Carriers Seeking Lifeline-only ETC designation

Carriers seeking Lifeline-only ETC designation face additional requirements.³⁸ Any carrier seeking an ETC designation from the Commission must send a copy of its petition to each Tribe that has lands within the proposed service area.³⁹ Similarly, the Commission must send any public notice seeking comment on any ETC petition that includes Tribal lands to the

affected Tribal government and Tribal regulatory authority.⁴⁰ Before designating a carrier as an ETC, the Commission must determine that doing so is in the “public interest,” taking into consideration, among other things, any public comments it receives on the petition.⁴¹

State ETC processes vary by jurisdiction but can be substantially similar to the Commission’s rules. Washington State, for example, requires an ETC petition to include:

- A description of the area or areas for which designation is sought.
- A statement that the carrier will offer the services supported by federal universal service support mechanisms throughout the area for which it seeks designation, either using its own facilities or a combination of its own facilities and resale of another carrier's services (including the services offered by another ETC).
- A description of how it will provide each supported service.
- A substantive plan of the investments to be made with initial federal support during the first two years in which support is received and a substantive description of how those expenditures will benefit customers.
- A statement that the carrier will advertise the availability of services supported by federal universal service mechanisms.
- For wireless petitioners, a map of proposed service areas (exchanges) with existing and planned locations of cell sites.
- Information that demonstrates its ability to remain functional in emergency situations.
- Information that demonstrates it will comply with the applicable consumer protection and service quality standards.⁴²

The state commission will approve an ETC petition if it meets the foregoing requirements, “the designation will advance some or all of the purposes of universal service found in 47 U.S.C. § 254, and the designation is in the public interest.”⁴³

g. Tribal Provider Oversight

Internal government organization and structures are not uniform across Tribes. Some Tribes are “treaty Tribes” and have Tribal constitutions governing internal operations. Their governing instruments may consist of Tribal history, ordinances, resolutions, or other actions. Other Tribes that are governed by a Tribal constitution have organized their government structures pursuant to the Indian Reorganization Act of 1934, which was enacted to promote Tribal self-governance.⁴⁴ Sections 16 and 17 of the IRA, respectively, provide for the formation of Tribal political and business structures.⁴⁵

Section 16 allows Tribes to organize a political structure, adopt Tribal constitutions and create political entities such as Tribal councils, and executive and judicial branches.⁴⁶ Tribal constitutions in turn can provide the authority for Tribes to develop business entities within their governmental structure. Ordinances, resolutions, and other legislation enacted under the authority of the Tribal Council allow for the creation of entities to conduct businesses. The Tribal Council can give Tribally owned corporations, limited liability corporations (LLCs) and other business entities the authority to operate independently but subordinate to Tribal government.

Two other very important decisions for Tribes are how to structure their provider and who within the Tribal government should exercise oversight of its operations. While Tribal Councils or governments will have the ultimate authority over any entity they create to provide communications services, they may consider delegating that authority to an existing or new

Tribal governmental entity or regulatory body. Examples of such Tribal entities include business boards, information technology departments, or utilities regulatory commissions or authorities.

For Tribal business enterprises and LLCs, Tribes will typically have an enterprise or business board that is separate from, but often regulated by, its elected officials to oversee operations.⁴⁷ This can create a clear separation of powers and allows those responsible for operating and overseeing the business to function outside of political interests. If the entity is operating as a Tribal government utility, there is usually a utility board exercising oversight. If the Tribe already has a utility board, it must evaluate whether the existing board has the experience and expertise to oversee a communications provider, or whether additions or other changes to the board will be required. Tribal Councils and governing bodies often have final control over enterprise or business boards, even if this fact is not stated outright in the board's organizing documents. A complete understanding of the individual Tribe's governing structure should be considered when choosing how to organize a Tribal communications entity.

Any Tribe, whether organized under section 16 or not, may also establish a Tribal corporation pursuant to section 17 of the IRA.⁴⁸ Section 17 was intended to create efficiencies in conducting business, allowing Tribes to operate separate business structures under the oversight of Tribal councils. Section 17 gives Tribes the power to organize a federally chartered Tribal corporation to engage in business transactions separate from Tribal government. To form a section 17 corporation, a Tribe must draft a charter, submit it for approval to the Bureau of Indian Affairs, and receive an Approval Article or Certificate signed by the Secretary of the Interior. The corporation must be structured as a legal entity wholly owned by the Tribe, but separate and distinct from the Tribal government.

A section 17 corporation shares the same privileges and immunities as the Tribal government but holds assets or property separately from the Tribal governing body. Although the property or assets of the corporation are at risk to the extent necessary, for example, to satisfy creditors, property owned by the separate and distinct Tribal governmental body is still protected by sovereign immunity and is safe from the execution of a judgment against the Tribal corporation. Tribal corporations formed under section 17 of the IRA are not recognized as separate entities for federal tax purposes. The section 17 corporation has the same tax status as the Tribe and is not subject to federal income tax.⁴⁹ It is essential that third-party providers wishing to do business with a Tribe or Tribal entity understand the governmental organization of the Tribe. The method of a Tribe's organization affects how powers are distributed, who can act for the Tribe, and what, if any, approvals may be necessary to carry out a transaction.

h. Separation of Government and Business Authority

It is also advisable to ensure that government politics and business operations do not overlap. It is reasonable to consider that government policies and businesses will have similar objectives and priorities. However, it is advisable that Tribal LLCs, utility boards and authorities established to operate broadband networks be allowed the latitude necessary to oversee projects and operations on a business level. For this reason, Tribes should consider separating their government and business operations. If public-private partnerships are formed, it should be recognized that Tribal governments and public-private entities operate differently. Tribal governments are deliberative bodies and operate with set timelines for decision making – for example, convening only monthly or bi-monthly. In contrast, Tribal business entities' decision-making timelines need to be more flexible to better accommodate the types of business exigencies arising with telecommunications projects.

Regardless of how operations and governance are structured, regular communication is important for all entities. Regular reporting should be established between all parties, including

reports to Tribal councils to ensure that they are informed on the progress of all aspects of the business.

Establishing a Tribal business operation for network and service provisioning that is separate from the Tribal government creates a foundation for success. The Tribal business entity should be given full authority to conduct the business and enter into contracts with third parties for components of the telecommunications business without having to seek Tribal government approval for each transaction.

It is not uncommon for a Tribal provider to hire outside consultants to assist with the technical details or provide other telecommunications-specific expertise. The telecommunications field is vast and constantly changing. Consultants can offer targeted services to assist with specific aspects of network operations and service delivery and are routinely used within the telecommunications industry.

For Tribes with limited telecommunications or technical expertise, it is also advantageous to include within contracts with third parties a provision for training or mentoring Tribal members, which will provide employment opportunities for Tribal members. In addition, equipment vendors offer training with the sale and purchase of their products, and training can be incorporated with the purchase of equipment and services.

B. Tribal Infrastructure Asset Ownership

Whether a Tribe elects to build and operate its own communications network or obtain service from a third party, it will need to make decisions regarding the construction, acquisition, and use of key assets, such as wireless spectrum, communications towers, and fiber. Tribal ownership of assets necessary for infrastructure deployment present opportunities for network deployment and operation cost savings, as well as revenue opportunities from other providers. The information provided within this section is a high-level view of potential business opportunities Tribes may explore and is not meant to constitute a business plan.

1. Tribal Trust Lands

The ability to control access to its lands can be among a Tribe's most significant assets. For example, Tribal land can be leased to tower owners, producing a steady revenue stream for the Tribe.⁵⁰ In addition, or in the alternative, a Tribe can exchange permission to build a tower on its land for reduced rates for Tribal customers, or for the right to collocate the Tribe's own equipment on the tower. The same holds true for fiber-optic cable that crosses Tribal lands. Tribes can exchange permission to lay fiber on their land for access to the fiber or require the installation of additional fiber and/or conduit dedicated to the Tribe.

2. Wireless Communication Towers

Tribes may wish to consider leveraging their sovereign immunity in establishing wireless communication tower sites on their lands.⁵¹ Tribal councils have the authority to establish ordinances, resolutions, and codes to approve use of Tribal land and other resources for wireless communication facilities. Legislation can protect the sovereignty of the Tribe to conduct leasing, construction, and ensure environmental and cultural compliance. Tribal legislation can identify governmental services from commercial network services and provide for revenue generation from these same networks. Governmental network services are typically reserved for the use of Tribal government operations and their designated purposes, such as serving anchor institutions, public safety, and emergency response entities. Commercial network services are used for revenue generation and can be made available to the public, collocation with third party providers, and potential infrastructure leasing arrangements. It is possible to have both governmental and commercial services on a single tower.

The establishment of an oversight board or operating company (board, LLC or other business entity) through Tribal council legislation can provide the tower entity the authority to exercise oversight and administration on a business level.

Depending on its needs, resources and business plans, a Tribe can construct and own its own communications tower(s), whether for its own use or to lease to third-party providers. Alternatively, a Tribe can enter into an agreement with an outside party to build and maintain one or more communications towers on Tribal lands. In the latter case, it is important to be very clear about what is required and expected of both parties. Tribes negotiating with third-party tower owners should be aware that:

- Some vendors will want an extended lease period, for example 25 years, to ensure they can recoup their investment.
- Some vendors may be building the tower for their own use, while others may be building it to lease to other users, or a combination of the two.
- As noted above, the agreement could include reserved space on the tower for the Tribe's use. Even if the Tribe has no plans to create its own retail service, wireless communications equipment is important to many critical Tribal government functions, such as public safety and emergency response.
- Any sub-leases with an entity outside the original agreement, interests, or changes to the equipment in the original agreement should be negotiated and approved separately.
- As an alternative to leasing space, Tribes may license space to third-party providers on communications towers owned by the Tribe in accordance with BIA licensing guidelines. Using the BIA licensing process, a Tribe can license space on the Tribe's cell tower to a third-party to install and operate communications equipment.⁵² The license differs from a lease in that the Tribe is not ceding any land rights to the licensee nor granting any rights-of-way. Licenses can be used to establish service by licensing tower space in shorter term increments that do not encumber the land or property of the Tribe. These license contracts must be reviewed by the BIA to ensure that they do not constitute a lease. BIA will review the contract (license) provided by the Tribe and either approve it, deny it, or permit it to be tacitly approved by allowing the statutory time limit for approvals to run out. The Red Cliff Band of Lake Superior Chippewa Indians pioneered this method and successfully licensed tower space to AT&T/FirstNet to install and operate equipment on a Red Cliff-owned cellular tower.

There are many opportunities and challenges with a wireless communication business, and success requires both an understanding of the needs of both the business and the consumer. Tribes should evaluate the opportunities based on the business case and an understanding of the competitive nature of the wireless industry.

3. Tribal Tower Ownership Considerations

If a Tribe decides to own communications towers, it must understand that it will be responsible for obtaining all approvals needed for construction, operations, maintenance, safety-structure analysis, and compliance with federal height regulations. Joint ownership is an option that provides shared responsibility for tower maintenance, market-coverage studies, and other expenses, as well as shared control of revenues.

In either case, the compliance responsibilities of tower ownership may be outsourced to companies with appropriate management experience. Contracts with network infrastructure companies that include supporting services are standard. The expense of owning

communication sites may be passed on to the tenants through collocation, subleasing and other fees.

The assessment for revenue generation for communication sites should be conducted by a tower company whose business is to evaluate the market. The assessment will identify rates for tower space or collocation and land rent for equipment huts based on market factors.

Market factors for collocation and rent include, but are not limited to, the geographical location of communication site. The benefits of location next to major traffic corridors such as an interstate or state highways, as well as elevation with unobstructed line-of-sight transmission to nearby residential or business sectors is a valid business consideration in setting fee levels.

Negotiation for monthly rent should be based on pre-established rental rates. Rent rates are increased annually on a set percentage or can be based on financial indices such as the Consumer Price Index, (CPI) or other unique market conditions. Other market factors and unique circumstances may impact rents.

Automatic renewals should be factored into collocation agreements with ample notice for cancellation of rent. Long-term rent agreements result in long-term revenues. Terms of renewal are typically 10-15 years, with additional renewable periods of 5 years.

Examples of other fees for communications tower collocation and land rent are:

- A one-time application or processing fee.
- An annual fee paid in a lump sum upfront. The fee could include costs for site maintenance.
- If the communications tower is owned by a non-Tribal entity, the Tribe should reserve the right to approve collocations and obtain rent and collocation fees directly from the tower owner.
- Fees for subleases should require the approval of the Tribal LLC or business entity.

The terms of collocation agreements vary and are determined by Tribes and their business entities who have oversight, but industry standards should be adhered to.

In some cases, wireless towers are not owned by the wireless carriers but rather by tower operators. Wireless tower operators own the tower and assume responsibility for managing communication sites. They will oversee tower siting and the acquisition of land. In this scenario, wireless carriers do not carry the operating expense of real estate acquisition, tower maintenance, and all other associated costs. Wireless carriers can therefore provide network service to their subscribers with less operating expense and in turn, tower operators benefit by leasing space to carriers upon their towers.⁵³

In addition to doing business with carriers, Tribes can also utilize tower space for governmental services such as in network enhancements for public safety, education, telehealth, local public access such as Wi-Fi,⁵⁴ local area networks (LANs), distributed antenna systems (DAS), and other necessary uses for the benefit of the Tribe. The FCC maintains a centralized system for registering non-federal communications towers, called the Antenna Structure Registration (ASR) system.⁵⁵ Tribes can use this system to identify the owners of existing towers and can also contact FCC staff in the Wireline Telecommunications Bureau's Competition and Infrastructure Policy Division (CIPD) for help navigating the ASR database. Commercial and governmental purposes should be considered, as these interests will vary by the operating entity but can be beneficial to the Tribal community.

4. Wireline Infrastructure

Like wireless communications towers, existing wireline infrastructure on Tribal lands can be owned by several different parties and will have restrictions on access. Wireline infrastructure can be owned by private corporations, telecommunications carriers, states, counties, municipalities and educational institutions. Nevertheless, it may still be possible to lease existing fiber capacity to meet the Tribe's own needs. It can be challenging to learn what fiber is currently in the ground under Tribal lands and who owns it, but Tribes can access broadband maps maintained by the FCC, USAC, NTIA or State Broadband offices, and can contact these agencies to see if they have additional information.⁵⁶

Alternatively, a Tribe could install its own fiber, whether for its own use, to lease to third parties, or both. If the Tribe is installing its own fiber, there is also the opportunity to add extra conduit, so additional fiber can be added in the future, whether for leasing or to meet the Tribe's own future needs. Such a "dig once"⁵⁷ approach can reduce both ground disturbance and overall costs. Tribes that receive federal or state funds to install fiber for limited uses – for example, E-Rate funds to connect schools and libraries – should consider adding surplus conduit at their own expense to meet future demands. Doing so can significantly reduce overall costs.

Even wireless communications networks need high-throughput capacity for backhaul. Although microwave links can meet this need, fiber is generally preferable because it has greater carrying capacity. When considering whether to install new fiber, Tribes should consider the potential to lease capacity to other tower owners, which will produce recurring revenue for the Tribe that can partially offset deployment costs.

5. Attaching Tribally Owned Infrastructure to Utility Poles

Tribes deploying their own broadband infrastructure, whether wired or wireless, may find the need to make attachments to existing utility poles owned by various third parties. Pole owners may include investor-owned electric utilities, telephone companies, cable operators, municipalities, and rural electric cooperatives. Section 224 of the Communications Act of 1934, as amended, provides rules for attaching to poles owned by electric utilities and telecommunications carriers.⁵⁸ Electric and telephone utilities often enter into what are known as "joint use" agreements where ownership over the pole is exercised by one or the other. State PUCs may opt to regulate pole attachments themselves by a process known as "reverse preemption." Twenty-three states and the District of Columbia have done so.⁵⁹ Poles owned by municipalities and rural electric cooperatives are not regulated at either the federal or state level, and consequently, their pole attachment rates may be significantly higher than those owned by regulated entities. When considering deploying aerial network infrastructure on utility poles, providers must keep in mind make-ready costs, leases, and insurance requirements, as well as ongoing maintenance and replacement costs.

Tribes wishing to attach to existing poles will have to negotiate the rates, terms, and conditions of access with the pole owner and execute a master agreement to cover the poles that will support their attachments. The FCC has developed formulas for rates for pole attachments by cable and telecommunications carriers and regulations governing third-party attachments, covering topics such as "make ready costs" and pole replacements to accommodate new attachers.⁶⁰ Many states have taken jurisdiction over pole attachment regulation and base their allowable rates on FCC rate formulas.⁶¹

A joint use or master agreement for pole attachments will contain a statement of work, route license acknowledgement or site license acknowledgement. These agreements cover pole, duct or wireless attachment specifications, guidelines, conditions, and fees. These can

include fees for engineering specifications to ensure the poles can support the load (wind, ice, and weight); environmental fees, pole make-ready for installing the connection support hardware; annual lease rates per-section or per-pole; and insurance and replacement for end-of-life poles. These fees vary based on the regulatory authority (federal/state) and the regulatory status of the Tribal entity--for example, telecommunications carrier, ISP operated as a private corporation, enterprise business or government utility.

Tribes may also elect to install their own utility poles for the purpose of stringing wire or placing wireless antennas, etc. Tribes owning their own utility poles may permit other attachers to rent space for their attachments, providing a source of potential revenue for the Tribe.

C. Regulatory Considerations

Many aspects of infrastructure ownership and deployment on Tribal lands are regulated by the federal government.

1. Environmental and Historic Preservation Reviews

The National Environmental Policy Act (NEPA) requires an environmental review of all “major federal actions,” except those federal actions that are categorically excluded from such review.⁶² Similarly, section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to conduct historic-preservation reviews of all federal “undertakings.”⁶³ Multiple federal agencies may have independent NEPA and NHPA obligations for broadband deployments on federal lands, including BIA permitting responsibilities for Tribal Trust lands, federal land managing agencies permitting projects crossing federal lands, federal funding agencies such as NTIA or RUS, and the FCC. Identifying all federal agencies associated with a project and coordinating the associated environmental requirements early may ultimately reduce environmental compliance time and costs.

Because the FCC licenses the spectrum that wireless providers use, construction of communications towers for wireless installations and other wireless facilities, as well as collocations on existing towers and other wireless facilities, are considered “federal” actions and undertakings. While some new communications towers and other wireless facilities are categorically excluded from NEPA review,⁶⁴ others are not.⁶⁵ On the other hand, almost all new construction of wireless facilities, including communications towers, must undergo section 106 historic preservation review, while many collocations on existing facilities are excluded from both NEPA and section 106 review.⁶⁶ All towers that present potential flight obstruction hazards (47 CFR Part 17) also require Antenna Structure Registration (ASR). An ASR application requires local and national “environmental notification” with a thirty-day public notice period.

The Advisory Council on Historic Preservation (ACHP) has promulgated regulations governing the historic-preservation-review process that allow the ACHP and other federal agencies to enter into programmatic alternatives. The FCC and the ACHP, together with the National Conference of State Historic Preservation Officers (NCSHPO), have entered into two National Programmatic Agreements (NPAs) establishing alternative procedures for reviewing the potential impacts of wireless facilities on historic properties. One governs the construction of new wireless facilities,⁶⁷ while the other governs collocations of wireless antennas and associated equipment on existing wireless facilities.⁶⁸ It is important to note, however, that neither NPA applies on Tribal lands unless the relevant Tribe explicitly agrees to follow it. The ACHP issued and subsequently amended a program comment that removes duplicative section 106 responsibilities of funding and permitting agencies for actions (such as tower construction) subject to review under the FCC NPAs where a Tribe elects to follow them.⁶⁹ Ultimately,

however, wireless facilities constructed on Tribal lands and/or constructed by a Tribe, must comply with whatever federal NEPA and NHPA regulations do apply.

The HEARTH Act permits Tribes to lease Tribal lands for authorized purposes without approval of the Secretary of the Interior, as long as the lease is executed under approved Tribal regulations and doesn't exceed a certain term.⁷⁰ Tribal leasing regulations submitted to the Secretary of the Interior for approval must include a process for identifying and evaluating potentially significant environmental effects of the lease and associated activities, seeking public comment on those effects, and responding to any comments and projected effects. If requested by a Tribe, the Secretary will provide a Tribe with technical assistance in developing an environmental regulatory review process. For federally-funded projects, a Tribe may rely on a federal environmental analysis.

Tribes that adopt regulations approved by the Secretary of the Interior pursuant to the HEARTH Act will no longer need BIA approval for non-mineral site leases.⁷¹ Tribal leasing regulations may provide for the lease of lands for business or agriculture for up to 25 years, with an option to renew for up to two additional 25-year terms. Tribal leasing regulations may provide for the lease of lands for public, religious, educational, recreational, or residential purposes for up to 75 years. The Secretary is required to approve or disapprove Tribal leasing regulations within 120 days. The Secretary "shall": approve Tribal regulations that are consistent with regulations issued by the Secretary under section 415(a); require the identification and evaluation of any significant effects of the proposed action on the environment; require that the public be informed of, and have a reasonable opportunity to comment on, any significant environmental impacts of the proposed lease; and require the Tribe to respond to relevant and substantive public comments on any such impacts before the lease is approved.

2. FCC Tower Construction Notification System

The FCC maintains an online Tower Construction Notification System (TCNS) that allows wireless-project proponents to upload project details and automatically notifies all federally recognized Tribes that have indicated an interest in the project's geographic area of the proposed project and the opportunity to participate in the associated section 106 review. Each Tribe then has the opportunity to determine whether there are properties of cultural or religious significance in the Area of Potential Effects (APE). If there are, that Tribe is invited to become a consulting party in the historic-preservation-review process. Typically, that process happens between the project proponent and the interested Tribe(s), but the Commission does become actively involved in some circumstances, including at the request of the Tribe.

3. Federal Infrastructure Permitting

Tribes may wish to extend broadband networks both on and beyond their reservation boundaries for a variety of reasons, including to better serve Tribal communities and residents in areas bordering reservation boundaries. The federal government has taken several steps to facilitate the deployment of broadband infrastructure on federal, Tribal, and individual Indian trust lands. Executive Order 13604 (Improving Performance of Federal Permitting and Review of Infrastructure Projects) (March 22, 2012),⁷² and Executive Order 13616 (Accelerating Broadband Infrastructure Deployment) (June 14, 2012)⁷³ recognize the need to facilitate broadband deployment on Tribal and individual Indian trust lands (tribal lands) and federal lands. These EO's require federal agencies to develop and implement a strategy to facilitate

timely and efficient broadband deployment on Tribal lands through a consistent approach that facilitates processes and decisions and coordination with Tribal governments. Executive Order 13821 (Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America) (January 8, 2018)⁷⁴ affirms the policy of the executive branch to use all viable tools to accelerate the deployment and adoption of affordable, reliable, modern, high-speed broadband connectivity in rural America, including Tribal communities, by reducing barriers to wireless facility siting on buildings and other property owned by the federal government, and locating broadband facilities on federal real property.⁷⁵

The Fixing America's Surface Transportation (FAST) Act⁷⁶ created a structure, procedures, and funding authorities designed to improve the timeliness, predictability, and transparency of the Federal environmental review and authorization process for covered infrastructure projects, including broadband deployment. FAST-41 is a voluntary program for eligible large-scale infrastructure projects of \$200 million or more and provides project sponsors with enhanced coordination among thirteen federal agencies to ensure more timely and efficient environmental reviews and authorizations.⁷⁷

In 2021 DOI Indian Affairs released a "National Tribal Broadband Strategy" (Strategy) as part of the American Broadband Initiative cataloging barriers to Tribal broadband deployment and proposing "a roadmap for action and investment by the federal government in broadband access and adoption for American Indian and Alaska Native (AI/AN) communities with the aim of eliminating the AI/AN connectivity gap." One of its strategic goals is reducing the complexity and delays associated with federal permitting.⁷⁸ The Department of Transportation Federal Highway Administration (FHWA) has published a new Broadband Infrastructure Deployment final rule that will allow for the installation of broadband during road construction projects, alongside other utilities, to avoid the need for further excavation in the future (often referred to as "dig once") that can minimize cost and disruption to the traveling public.⁷⁹

Federal agencies establish procedures for assessing processing fees to recover the agency's costs incurred in evaluating special use applications and issuing special use authorizations, including communications use applications and authorizations.⁸⁰ Tribal governmental entities are not exempt from paying federal agency processing and monitoring fees.

4. Rights-of-Way on Tribal Lands

Providers wishing to develop broadband infrastructure by digging trenches, deploying fiber, constructing towers, or deploying new equipment on existing towers and utility poles on Tribal lands will need to secure rights-of-way to lay their lines.⁸¹ The Bureau of Indian Affairs, acting on delegated authority from the Secretary of the Interior, has jurisdiction to approve requests for rights-of-way (ROW) over or across any lands held in trust by the United States for individual Indians or Indian tribes, communities, bands, or nations (trust lands) or any lands owned by individual Indians or Indian Tribes, communities, bands, or nations that are subject to restrictions against alienation (restricted lands).⁸² BIA may also prescribe conditions with any grant of ROW.⁸³ BIA's ROW rules, codified at 25 CFR § 169, were updated in 2015 to streamline and otherwise modernize requirements for obtaining a right-of-way over or across Indian and BIA lands for certain business purposes while giving landowners and Tribes as much flexibility and control as possible.⁸⁴ The Department of the Interior's (DOI) Division of Real Estate Services (DRES) works with BIA to grant ROW for various types of infrastructure projects.⁸⁵

Tribally owned land is treated differently than land owned by individual Indians because, although the United States has a trust responsibility to all beneficial owners, it has a government-to-government relationship with Tribes and seeks to promote Tribal self-governance. BIA's rule provides Tribes with as much deference as possible, within the bounds of the DOI's trust responsibilities, to determine which ROWs to grant, for how much compensation, and with identified enforcement provisions.⁸⁶ The rule requires that owners of a majority of the interests in a tract must consent to the right-of-way, in accordance with the statutory requirement in 25 U.S.C. § 324, and specifies that Tribes and individual Indian landowners may negotiate the terms of their consent, which ultimately become the terms of the grant. The rule clarifies that landowners may negotiate the terms to ensure the right-of-way is best suited to their needs and provides that the BIA will defer to individual Indian landowners in their determinations, to the extent it is possible to coordinate with multiple individual Indian landowners.⁸⁷ Consistent with 25 U.S.C. § 325, the general trust relationship between the United States and the Indian Tribes and individual Indians, and deference to Tribal sovereignty, BIA's rule requires that the compensation granted to Indian landowners be just.⁸⁸

ROWs approved under 25 C.F.R. §169 are subject to all applicable federal and Tribal laws.⁸⁹ The ROW does not diminish the Indian Tribe's jurisdiction over the land and any person or activity within the ROW.⁹⁰ Tribes retain the power to tax the land, any improvements on the land, or any person or activity within the ROW. Tribal consent is required for grants of ROW across Tribal land.⁹¹ In the case of individually owned lands, developers must notify all individual Indian landowners and must obtain written consent from the owners of the majority interest in each tract affected by the grant of ROW.⁹² BIA may issue the grant of ROW without the consent of any of the individual Indian owners in certain circumstances.⁹³ BIA will grant a ROW request when it determines that the ROW is in the best interest of the Indian landowners, complies with all applicable federal environmental, land-use, historic-preservation, and cultural-resource laws and ordinances, and may require measures to satisfy any requirements, including any other federal or Tribal land-use requirements.⁹⁴

DOI has developed a template grant form with placeholders for conditions and restrictions agreed to by landowners. Landowners are given as much notice as possible regarding rights-of-way on their land, giving Tribes and individual Indian landowners actual notice (as opposed to constructive notice) of every ROW affecting their land, including any land in which the Tribe owns a fractional interest.⁹⁵

5. Railroad Rights-of-Way

Railroads may cross Tribal lands one or more times, and access to rights-of-way controlled by railroads is governed in part by the General Railroad Right of Way Act, which granted railroads a right of way across federal lands.⁹⁶ Railroad lines may be either active or abandoned. Regardless, Tribes will need to negotiate with line owners for access to construct their networks in rights-of-way controlled by the railroad. There are a number of fees typically involved with railroad right-of-way agreements, including application, insurance and yearly lease fees for deployments that cross railway lines. If the costs become too high, the Tribe may have to redesign its network to avoid railroad rights-of-way. These agreements will vary from state to state, and fees will vary by railroad owner. Gaining access to railroad rights-of-way is not standardized but is an important consideration if contemplating deploying broadband where railroad lines exist.

6. Municipal Rights-of-Way

Tribal providers that wish to deploy broadband infrastructure within municipal boundaries will also need to obtain rights-of-way permits and, in some cases, franchises, from the municipal government before constructing their networks in municipal rights-of-way. In general, municipal rights-of-way and franchise ordinances cover the use of public rights-of-way for facilities deployment by various utilities, including telecommunications carriers, but in some cases may be worded to extend to providers of broadband Internet.⁹⁷

III. TRIBAL LAND USE REGULATORY CODES

Tribes with regulatory codes governing the construction, operation, and regulation of communications infrastructure on Tribal lands can see faster infrastructure deployments than Tribes lacking such codes. Different Tribes may take different approaches to formalizing the applicable rules, whether in a codified rule, a Tribal ordinance, or a law-and-order code. A Tribal review process could include rules governing all digging, road work, or new developments to ensure there is coordination for new infrastructure deployment.

A. Tribal Regulatory Code Benefits.

For Tribes with regulatory authority over leasing and infrastructure deployment on their Tribal lands, establishing formal land-use, rights-of-way, environmental-review, and other regulatory codes both encourages and speeds the deployment of communications infrastructure and services. Private providers are more likely to invest in areas where the rules and procedures governing deployment and operation of communications services are well-established and transparent. This type of information allows providers to better estimate the cost of and return on potential investments, while also making the Tribal application and approval processes more predictable and efficient. Tribes that do not have established rules, as well as standardized forms and contracts, must largely start from scratch each time they deal with a potential provider. This requires both the Tribe and providers to invest more time and money in the application and approval processes, while making outcomes less predictable.

B. Suggested Types of Tribal Codes.

Tribes that want to attract private investment should have clearly established rules and procedures addressing a wide range of issues. There should be formal, transparent rules governing what fees providers will have to pay, whether application, land-use or concession fees. Similarly, there should be rules governing whether, when and how private providers will be taxed by the Tribal government. It should be clear which Tribal government entity is authorized to review and approve all relevant applications and proposals, to impose and collect taxes, and to regulate communications providers once they begin operating. Tribal employment rights should also be clearly established.

In addition, whether built by a private provider or the Tribe itself, many infrastructure projects on Tribal lands will be required to comply with federal environmental and historic-preservation laws. Where following federal regulations is optional, Tribes should make clear whether they will require private providers to follow those regulations and/or whether different or additional Tribal requirements will apply. Tribes should also determine and make clear in advance the need to obtain approvals from outside entities, such as Bureau of Indian Affairs approval of rights-of-way on trust lands, if required.

C. Discussion of Key Provisions of Sample Tribal Land Use Codes

There are a variety of types of Tribal codes related to land use and infrastructure deployment on Tribal lands. This Handbook highlights such codes from two Tribes – Red Cliff

Band of Lake Superior Chippewa and the Morongo Band as potential models on which other Tribes can base their codes. A brief discussion follows of each sample code and the authorities over ROW access it provides the Tribe.

Red Cliff Code of Laws Chapter 25, "Rights of Way, Service Lines and Trespass." Red Cliff's ROW code provisions address how a telecommunications company must process rights-of-way on the Red Cliff reservation.⁹⁸ This code may be of particular interest to other Tribes in how it describes the specific job duties of Tribal employees as well as its tightening of BIA definitions and requirements for access to rights-of-way on Red Cliff lands. Also in this code, Red Cliff defines "service lines" for telecommunications companies and regulates what is and is not a service line. Furthermore, in section 25.5, Red Cliff identifies unauthorized facilities installations. This can be used by Tribes to specifically identify and address facilities that have been placed without proper authorization or are otherwise not allowable on Tribal lands.

Specifically, in section 25.8 of its Code, Red Cliff requires compensation for installation of telecommunications facilities on Tribal lands. These fees can then be used for integrating and upgrading Tribal telecommunications facilities.

The Morongo Band of Mission Indians Ordinance #26, Tribal Utility Authority, provides the Tribe's authority to establish, operate, maintain, and manage a Tribal Utility System located on the reservation.⁹⁹ The Utility Authority may provide or arrange for the provision of essential utility services including, but not limited to, water, wastewater, natural gas, electricity, and telecommunications, within the exterior boundaries of the reservation. Ordinance 26 gives the Tribe the authority to contract with federal and state agencies and political subdivisions, municipal corporations and districts, as well as transmitters and/or providers of telecommunications services, to assure adequate, safe, economical, and environmentally responsible utility services are available and used by Tribal enterprises and the broader community.

Separately, the Tribe's Ordinance #31, Utility Transmission, establishes the regulations and procedures for the submission, review, grant or denial of applications for the issuance, renewal or modification of licenses, easements, rights of way or other rights in, across, under or upon the lands of the Morongo Indian Reservation for utilities, such as telecommunications.¹⁰⁰ Ordinance 31 also establishes a clear process for utility companies, such as the Notice of Intent to file an application for a new utility, renew or expire a utility, review process, application content requirements, processing schedules, permit to construct, adequate and appropriate compensation for utility licenses, easements, right-of-way or other rights across Tribal lands.

Endnotes

¹ The Tribal members of the Task Force are Danae Wilson, Nez Perce Tribe, Tribal Co-Chair; Theron Rutyna, Ponca Indian Tribe of Nebraska, Tribal Vice-Chair; Honorable Cheryl Andrews-Maltais, Wampanoag Tribe of Gay Head (Aquinnah); Honorable Joe Garcia, Ohkay Owingeh Pueblo; Honorable Joey Whitman, Gila River Indian Community; Cliff Agee, Chickasaw Nation; Bill Bryant, Salt River Pima-Maricopa Indian Community; Sam Cohen, Santa Ynez Band of Chumash Indians; Damon Day, Confederated Tribes of the Colville Reservations; Daniel Gargan, Rosebud Sioux Tribe; Kristan Johnson, Tohono O'odham Nation; James Kinter, Yocha Dehe Wintun Nation; Donald Long Knife, Fort Belknap Indian Community; Marissa Mercurieff, Aleut Community of St. Paul (ASCPI), AK; Will Micklin, Ewiiapaayp Band of Kumeyaay Indians; Allyson Mitchell, St. Regis Mohawk Tribe; Travis Noland, Cherokee Nation; Dr. Stacey Oberly, Southern Ute Indian Tribe; Robert Pollard, Blue Lake Rancheria; Kevin Shendo, Pueblo of Jemez; Teresa Taylor, Lummi Nation; Jimmy Williams, Choctaw Nation; Jon Walton, Iowa Tribe of Kansas and Nebraska; Karen Woodard, Morongo Band of Mission Indians.

² Helping Expedite and Advance Responsible Tribal Homeownership Act of 2012, Pub. L. No. 112-151, 126 Stat. 1150 (codified at 25 U.S.C. § 415) (HEARTH Act), *available at* <https://www.congress.gov/112/plaws/publ151/PLAW-112publ151.pdf>. This Act makes a voluntary, alternative, long-term land leasing process available to Tribes by amending the Indian Long-Term Leasing Act. Indian Long-Term Leasing Act of 1955, Pub. L. No. 255-615, 69 Stat. 539 (codified at 25 U.S.C. § 415) (ILTLA). Previously, under the ILTLA and its subsequent amendments, leases of Tribal trust lands generally required review by the Bureau of Indian Affairs (BIA) and approval by the Secretary of the Interior. *See generally* U.S. Department of the Interior, Bureau of Indian Affairs, *HEARTH Act Leasing*, <https://www.bia.gov/service/hearth-leasing> (last visited May 17, 2022); U.S. Department of the Interior, Bureau of Indian Affairs, *The HEARTH Act Information Series – Part 2 Tribal Business Leasing Regulations*, <https://www.bia.gov/sites/default/files/dup/assets/bia/ots/bia/pdf/idc1-029624.pdf> (last visited May 17, 2022).

³ These determinations are similar to the determinations a Tribe must make when considering the provision of other analogous utility services, such as electric service. The Bureau of Indian Affairs published a Handbook on establishing a Tribal Utility Authority in 2012 that Tribes might find instructive when considering self-provisioning broadband communications services. U.S. Department of the Interior, Bureau of Indian Affairs, *Establishing a Tribal Utility Authority Handbook* (2012), https://www.bia.gov/sites/default/files/dup/assets/as-ia/ieed/ieed/pdf/tribalutility_handbook.pdf. There are several publicly available glossaries of telecommunications terms and definitions that Tribes may find useful in familiarizing themselves with key technologies and concepts. *See, e.g.*, FCC, *Glossary of Telecommunications Terms*, <https://www.fcc.gov/general/glossary-telecommunications-terms> (last visited May 16, 2022); NECA, *Telecom Terminology*, <https://www.neca.org/education/telecom-terminology> (last visited May 17, 2022).

⁴ *See generally* REDINet, *Northern New Mexico's Community Broadband Network*, <https://www.redinetnm.org> (last visited May 17, 2022).

⁵ *See* Anna Read and Lily Gong, *Partnerships With Electric Utilities Can Help Expand Broadband Access*, https://www.pewtrusts.org/en/research-and-analysis/articles/2022/03/29/partnerships-with-electric-utilities-can-help-expand-broadband-access?mc_cid=ff3305304e&mc_eid=479cca0b93 (Mar. 29, 2022) (Discussing how investor-owned utilities can provide infrastructure to bring high-speed Internet to rural America).

⁶ *See, e.g.*, *Establishing the Emergency Connectivity Fund to Close the Homework Gap*; WC Docket No. 21-93, Report and Order, 36 FCC Rcd 8696 (2021); The American Rescue Pan Act of 2021, Pub. L. No. 117-2, 135 Stat. 4 (providing funds to address the continual impact of COVID-19 on the economy, public health, state and local governments, individuals and businesses).

⁷ For example, the final rule adopted by the Department of the Treasury for State and Local Fiscal Recovery Funds (SLFRF) reflects a clear preference for fiber. *See generally* Department of the Treasury, *Coronavirus State and Local Fiscal Recovery Funds, Final Rule*, 31 CFR Part 35, Jan. 27, 2022, *available*

at <https://www.govinfo.gov/content/pkg/FR-2022-01-27/pdf/2022-00292.pdf>. The rules permit the award of funds for projects designed to, upon completion, reliably meet or exceed symmetrical 100 Mbps download and upload speeds. If the project is not designed to reliably meet or exceed symmetrical 100 Mbps download and upload speeds, the applicant must explain why not. The applicant must also confirm that the project is designed to, upon completion, meet or exceed symmetrical 100 Mbps download speed and between at least 20 Mbps and 100 Mbps upload speed, and be scalable to a minimum of 100 Mbps download speed and 100 Mbps upload speed. Additional information is available at the Treasury Department's website. U.S. Department of the Treasury, *Coronavirus State and Local Fiscal Recovery Funds*, <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/state-and-local-fiscal-recovery-fund> (last visited May 16, 2022).

⁸ For most of the 20th century, the Bell System (later known as AT&T) was comprised of both LECs and an IXC. After a 1982 court decision, AT&T agreed to be broken up in 1984 into separate Regional Bell Operating Companies (RBOCs), which kept the various Bell Telephone local exchange companies, and a long-distance company (AT&T), which provided long distance and related services. After enactment of the Telecommunications Act of 1996, LECs eventually were able to add both long distance and broadband Internet services to their own offerings, the local exchanges were opened to competition, and competitive LECs were established to compete with incumbent LECs.

⁹ The following Tribes operate their telcos as incumbent LECs: Cheyenne River Sioux Tribe (Cheyenne River Sioux Tribe Telephone Authority); Fort Mojave Indian Tribe (Fort Mojave Telecommunications, Inc.); Gila River Indian Community (Gila River Telecommunications, Inc.); Hopi Tribe (Hopi Telecommunications, Inc.); Mescalero Apache Tribe (Mescalero Apache Telecommunications, Inc.); Salt River Pima Maricopa Indian Tribe (Saddleback Communications); San Carlos Apache Tribe (San Carlos Apache Telecommunications and Utilities, Inc.); Tohono O'odham Nation (Tohono O'odham Utility Authority); and Blackfeet Tribe (Siyeh Communications). The Confederated Tribes of the Warm Springs Indian Reservation (Warm Springs Telecommunications) operate their Telco as a competitive LEC.

¹⁰ The Communications Act of 1934 required that the rates of common carriers be regulated and be included in tariffs filed with the FCC. See generally 47 U.S.C. §§ 201-203. The FCC developed rate-of-return regulation for tariffed services like interstate access to help ensure that rates were just, reasonable, and not unreasonably discriminatory. It has been moving away from the rate-of-return form of rate regulation since the early 1990s, encouraging LECs to agree to be rate regulated on a "price cap" basis and most recently has awarded support on a competitive basis with speed and deployment obligations. The price cap plan the Commission adopted in 1991 was designed to mirror the incentives for efficiency found in competitive markets, thus acting as a transitional regulatory scheme until the advent of actual competition makes price cap regulation unnecessary. In general, only the larger incumbent LECs chose to be regulated under this plan. Most of the smaller rural and independent LECs chose to remain under the rate-of-return form of regulation. Given reforms in the FCC's access pricing and USF rules in recent years, for most purposes, rate-of-return access rates and USF support are capped or frozen and are no longer based on carriers' actual costs. Additionally, the price cap/rate-of-return distinction is also reflected in the FCC's implementation of its Universal Service Fund Connect America Fund (CAF) programs. See, e.g., FCC, *Price Cap Resources*, <https://www.fcc.gov/general/price-cap-resources> (last visited May 16, 2022).

¹¹ See C.R.S.T. Telephone Authority, *Our Story*, <https://crstta.com/home/about-us/our-story/> (last visited May 16, 2022).

¹² See Siyeh Communications, Homepage, <https://siycom.com> (last visited May 16, 2022).

¹³ See NTTA, *Who We Are*, <https://nationaltribaltelecom.org> (last visited May 17, 2022). The Tribal Telco members of the Association are primarily rate-of-return carriers.

¹⁴ The Universal Service Fund and its various support programs for voice telephony and broadband are discussed in detail below. See *infra* at 7.

¹⁵ FCC rules define a “study area” as “[a] common carrier’s entire service area within a state.” 47 CFR § 69.703(e). The Commission froze all study area boundaries effective November 15, 1984. See MTS and WATS Market Structure; and Establishment of a Joint Board; Amendment, 50 Fed. Reg. 939, 944 (Jan. 8, 1985) (“Study area boundaries shall be frozen as they are on November 15, 1984.”). See also 47 CFR Part 36 Appx-Glossary. A carrier must apply to the Commission for a waiver of the study area boundary freeze to sell or purchase additional exchanges. *Request for Clarification Filed by the NECA, et. al.*, AAD Docket No. 95-173 *et al.*, Memorandum Order and Opinion, 11 FCC Rcd 8156, 8156, paras. 3, 5 (CCB 1996).

¹⁶ See 47 U.S.C. §§ 201-203.

¹⁷ See, e.g., Arizona Corporation Commission, *Utilities Division-Telephone*, <http://webuat.azcc.gov/utilities/telephone> (last visited May 16, 2022); Arizona Corporation Commission, *Utilities Division-Telecommunications Company Tariffs*, <http://webuat.azcc.gov/utilities/telephone/telephone-tariffs> (last visited May 16, 2022).

¹⁸ In 2011, the FCC comprehensively reformed its USF and ICC rules. See *generally Connect America Fund et al.*, WC Docket No. 10-90 *et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663 (2011), *aff’d sub nom, In re: FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014) (*USF/ICC Transformation Order*). In 2016, the Commission adopted significant reforms to the rules governing carriers subject to rate-of-return regulation, including the adoption of a new Connect America Fund Broadband Loop Support (CAF BLS) mechanism, budget controls for support provided to rate-of-return carriers, an operating expense limitation, a capital investment allowance, and a voluntary path to model-based support for rate-of-return carriers. See *generally Connect America Fund et al.*, WC Docket No. 10-90 *et al.*, Report and Order, Order and Order on Reconsideration and Further Notice of Proposed Rulemaking, 31 FCC Rcd 3087 (2016).

¹⁹ See *generally* FCC, *Tariffs*, <https://www.fcc.gov/general/tariffs-0> (last visited May 16, 2022). Intercarrier compensation (ICC) is the system of regulated payments in which carriers compensate each other for the origination, transport and termination of telecommunications traffic. See *generally* FCC, *Intercarrier Compensation*, <https://www.fcc.gov/general/intercarrier-compensation-0> (last visited May 16, 2022).

²⁰ NECA manages a significant part of the rural telecommunications industry’s revenue streams in accordance with the FCC’s regulation of access charges. NECA provides a variety of services to these companies, including filing interstate access charge tariffs with the FCC; collecting and validating cost and revenue data; ensuring compliance with FCC rules; distributing revenues from access charges among pool members, based on each company’s costs of providing interstate access; processing FCC Regulatory Fees; and offering training and education on a wide variety of telecom topics. See *generally* NECA, Homepage, <https://www.neca.org> (last visited May 16, 2022).

²¹ These benefits adhere whether the entity is organized as an incumbent or competitive LEC.

²² There is, however, expertise available to rural LECs through telecom industry trade associations, attorneys who specialize in this area, cost consultants, and engineering firms.

²³ Competitive LECs are permitted, but not required, to tariff their interstate access rates. Those tariffs are subject to the Commission’s “benchmark” rule, allowing competitive LECs to tariff rates for access that are no more than the rates charged by the competing incumbent LEC. 47 CFR § 61.26(c).

²⁴ See *generally* OKLA. ADMIN. CODE § 165:55-3-1, available at <https://rules.ok.gov/code>.

²⁵ For more information about the 3.5 GHz band, see <https://www.fcc.gov/35-ghz-band-overview>.

²⁶ The Office of Native Affairs and Policy (ONAP) was established by FCC Order in 2010 to further the Commission's efforts to bring the benefits of modern communications to all Native communities. See generally *Establishment of the Office of Native Affairs and Policy in the Consumer and Governmental Affairs Bureau*, 25 FCC Rcd 11104 (2010). You can find more information at ONAP's website. FCC, *Office of Native Affairs and Policy*, <https://www.fcc.gov/office-native-affairs-and-policy> (last visited May 16, 2022).

²⁷ FCC, *Universal Service*, <https://www.fcc.gov/general/universal-service> (last visited May 16, 2022).

²⁸ *Bridging the Digital Divide for Low-Income Consumers; Lifeline and Link Up Reform and Modernizations; Telecommunications Carriers Eligible for Universal Service Support*, Report and Order and Further Notice of Proposed Rulemaking, 34 FCC Rcd 10886 (2019) (*Lifeline Order*), WC Docket No. 17-287.

²⁹ *Lifeline Order*, 34 FCC Rcd at 10886, para 3.

³⁰ FCC, *Connect America Fund Phase II: Auction 903 Results*, <https://www.fcc.gov/reports-research/maps/caf2-auction903-results/> (last visited May 16, 2022).

³¹ Rural Digital Opportunity Fund, Connect America Fund, Report and Order, 35 FCC Rcd 686 (2020), WC Docket Nos. 10-90, 19-126; see also FCC, Rural Digital Opportunity Fund Phase I Results, <https://www.fcc.gov/reports-research/maps/rdof-phase-i-dec-2020/> (last visited May 16, 2022).

³² See generally *WCB Reminds Connect America Fund Phase II Auction Applicants of the Process for Obtaining a Federal Designation as an Eligible Telecommunications Carrier*, WC Docket Nos. 09-197, 10-90, Public Notice, 33 FCC Rcd 6696 (WCB 2018), available at <https://www.fcc.gov/document/wcb-reminds-carriers-federal-etc-designation-process>.

³³ *USF/ICC Transformation Order*, 26 FCC Rcd at 17868, para. 637; 47 CFR § 54.313(a)(5).

³⁴ See Universal Service Administrative Co., *File FCC Form 481*, <https://www.usac.org/high-cost/annual-requirements/file-fcc-form-481/> (last visited May 16, 2022).

³⁵ 47 U.S.C. § 214(e)(2).

³⁶ *Id.* § 214(e)(6).

³⁷ *Id.* § 54.202(a)(1)-(3).

³⁸ *Id.* § 54.202(a)(4)-(6).

³⁹ *Id.* § 54.202(c).

⁴⁰ *Id.*

⁴¹ See *id.* § 54.202(b)-(c); 47 U.S.C. § 214(e)(6) ("Before designating an additional eligible telecommunications carrier for an area served by a rural telephone company, the Commission shall find that the designation is in the public interest.")

⁴² WASH. ADMIN. CODE § 480-123-030 (2021).

⁴³ *Id.* § 480-123-040.

⁴⁴ Indian Reorganization Act of 1934, Pub. L. No. 100-581, 48 Stat. 987 (codified at 25 U.S.C. §§ 5101-5144) (IRA). The IRA was originally codified at 25 U.S.C. §§ 461-494a.

⁴⁵ 25 U.S.C. §§ 5123-5124.

⁴⁶ 25 U.S.C. § 5123.

⁴⁷ Tribal Councils and governing bodies often have final control over Tribal enterprise or business boards, even if this fact is not expressly stated in the enterprise or board's organizing documents. A complete understanding of the individual Tribe's governing structure should be considered when choosing how to organize a Tribal Internet Service Provider.

⁴⁸ 25 U.S.C. § 5124.

⁴⁹ Additional information about the tax implications of Tribal corporations may be found at the IRS website. See, e.g., IRS, *ITG FAQ #1 Answer-What are the different ways that tribal entities can be structured, and what are the tax implications of each?*, <https://www.irs.gov/government-entities/indian-tribal-governments/itg-faq-1-answer-what-are-the-different-ways-that-tribal-entities-can-be-structured-and-what-are-the-tax-implications-of-each> (last visited May 16, 2022).

⁵⁰ As discussed in the Introduction, the HEARTH Act gives Tribes the ability to enter into leasing agreements if their Tribal leasing regulations have been approved by the BIA. See HEARTH Act, § 2(h), 126 Stat. 1151.

⁵¹ Due diligence is required for any undertaking. Wireless communication networks should be a component of a comprehensive feasibility study incorporating all aspects of wireline and wireless networks as well as all types of technologies, current and emerging. A business plan is in part supported by a feasibility study.

⁵² See generally U.S. Department of the Interior, Bureau of Indian Affairs, Encumbrances of Tribal Land-Contract Approval, 66 Fed. Reg. 38918 (Sept. 24, 2001), available at <https://www.federalregister.gov/documents/2001/07/26/01-18475/encumbrances-of-tribal-land-contract-approvals>; U.S. Department of the Interior, Bureau of Indian Affairs, 66 Fed. Reg. 38918 (July 26, 2001); 25 CFR § 84.001 *et. seq.* (dealing with encumbrances of Tribal land and contract approvals).

⁵³ Tribal attorneys should consider working with an attorney with industry experience to develop a business model. This includes agreements with tower operators and carriers. Limited waivers of sovereign immunity are a tool that enhances Tribes' access to partnerships or joint use agreements and are an area in which Tribal attorneys can assist industry attorneys.

⁵⁴ Wi-Fi is a family of wireless network protocols, based on the IEEE 802.11 family of standards, which are commonly used for local area networking of devices and Internet access, allowing nearby digital devices to exchange data by radio waves. A local area network (LAN) is a computer network that interconnects computers within a limited area such as a residence, school, laboratory, university campus or office building. A distributed antenna system, or DAS, is a network of spatially separated antenna nodes connected to a common source via a transport medium that provides wireless service within a geographic area or structure. See generally Wikipedia, *Wi-Fi*, <https://en.wikipedia.org/wiki/Wi-Fi> (last visited May 17, 2022).

⁵⁵ FCC, *Antenna Structure Registration Search*, <https://wireless2.fcc.gov/UlsApp/AsrSearch/asrRegistrationSearch.jsp> (last visited May 17, 2022). In general, structures must be registered in ASR if they are taller than 200 feet above ground level or are located in the flight path of a nearby airport. 47 CFR §§ 17.4, 17.7. Other towers may be registered voluntarily in ASR.

⁵⁶ FCC, *Fixed Broadband Deployment Map*, <https://broadbandmap.fcc.gov/#/> (last visited May 17, 2022); NTIA, *National Broadband Availability Map*, <https://www.ntia.doc.gov/category/national-broadband->

[availability-map](#) (last visited May 17, 2022); Colorado Broadband Office, *Colorado Broadband Map*, <https://broadband.colorado.gov/data-hub/colorado-broadband-map> (last visited May 17, 2022).

⁵⁷ See Tyler Cooper, *Dig Once: The Digital Divide Solution Congress Squandered And Policy That Could Save \$126 Billion On Broadband Deployment* (Nov. 30, 2021), <https://broadbandnow.com/report/dig-once-digital-divide/>.

⁵⁸ See generally 47 U.S.C. § 224.

⁵⁹ *States That Have Certified That They Regulate Pole Attachments*, Public Notice, 35 FCC Rcd 2784 (WCB 2020), available at <https://www.fcc.gov/document/states-have-certified-they-regulate-pole-attachments-2>.

⁶⁰ 47 CFR § 1.1412.

⁶¹ See, e.g., Pennsylvania Public Utility Commission, *Pole Attachments*, <https://www.puc.pa.gov/electricity/pole-attachments/> (last visited May 17, 2022).

⁶² 40 CFR §§ 1501.3, 1501.4.

⁶³ See generally Advisory Council on Historic Preservation, *An Introduction to Section 106*, <https://www.achp.gov/protecting-historic-properties/section-106-process/introduction-section-106> (last visited May 17, 2022).

⁶⁴ 47 CFR § 1.1306 (“Actions which are categorically excluded from environmental processing”). See, generally, FCC Tower and Antenna Siting webpage at <https://www.fcc.gov/wireless/bureau-divisions/competition-infrastructure-policy-division/tower-and-antenna-siting> for guidance on NEPA, NHPA, and ASR for FCC-licensed facilities.

⁶⁵ 47 CFR § 1.1307 (“Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.”).

⁶⁶ While the NPAs are not presumed to apply on Tribal lands, if a Tribe elects to follow the Wireless Facilities NPA, section III establishes some section 106 exclusions for new towers.

⁶⁷ 47 CFR Part 1, Appx. C.

⁶⁸ *Id.*, Appx. B.

⁶⁹ Program Comment for Streamlining Section 106 Review for Wireless Communications Facilities Construction and Modification Subject to Review Under the FCC Nationwide Programmatic Agreement and/or the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (as amended on September 24, 2015 and July 31, 2020). 85 FR 53830.

⁷⁰ See HEARTH Act, § 2(h)(1), 126 Stat. 1151.

⁷¹ See U.S. Department of the Interior, Indian Affairs, HEARTH Act Leasing, <https://www.bia.gov/service/hearth-leasing> (last visited May 17, 2022).

⁷² Executive Office of the President, *Improving Performance of Federal Permitting and Review of Infrastructure Projects*, 77 Fed. Reg. 18887 (March 28, 2012).

⁷³ Executive Office of the President, *Accelerating Broadband Infrastructure Deployment*, 77 Fed. Reg. 36903 (June 20, 2012).

⁷⁴ Executive Office of the President, Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America, 83 Fed. Reg. 1507 (Jan. 8, 2018).

⁷⁵ FCC, Broadband Deployment Advisory Committee: Streamlining Federal Siting Working Group – Final Report (2018), <https://www.fcc.gov/sites/default/files/bdac-federal-siting-01232018.pdf> (reviewing challenges and proposed solutions to federal siting challenges).

⁷⁶ Fixing America’s Surface Transportation Act, PL 114–94 [confirm this is the correct format; a different format is used elsewhere], 129 Stat. 1312 (codified at 23 U.S.C. § 101 *et seq.*).

⁷⁷ Additional information can be found at the Federal Infrastructure Projects website. *See generally* Permitting Dashboard, Federal Infrastructure Projects, *Become a FAST-41 Covered Project*, <https://www.permits.performance.gov> (last visited May 17, 2022).

⁷⁸ *See generally* U.S. Department of the Interior, Bureau of Indian Affairs, National Tribal Broadband Strategy (2021), <https://www.bia.gov/sites/default/files/dup/assets/as-ia/doc/2020.%20December.%20National%20Tribal%20Broadband%20Strategy%20FINAL-cover%20change.pdf>.

⁷⁹ U.S. Department of Transportation, Federal Highway Administration, Broadband Infrastructure Deployment, 86 Fed. Reg. 68553 (Dec. 3, 2021); *see also* Department of Transportation, Federal Highway Administration, Office of Transportation Studies Policy Brief, Minimizing Excavation Through Coordination (2013), https://www.fhwa.dot.gov/policy/otps/policy_brief_dig_once.pdf.

⁸⁰ 23 CFR § 645.

⁸¹ “A right-of-way is a non-possessory interest in land, and title does not pass to the grantee.” 25 CFR § 169.10.

⁸² *See* 25 U.S.C. § 323 (the Secretary of the Interior “is empowered to grant rights-of-way for all purposes, subject to such conditions as he may prescribe, over and across any lands now or hereafter held in trust by the United States for individual Indians or Indian tribes, communities, bands, or nations, or any lands now or hereafter owned, subject to restrictions on alienation, by individual Indians or Indian tribes, communities, bands or nations, including lands belonging to the Pueblo Indians in New Mexico, and any other lands heretofore or hereafter acquired or set aside for the use and benefit of Indians.”) Additional statutory authority covering ROW on Tribal lands may be found in sections 2218 and 3504. 25 U.S.C. § 2218 (Approval of leases, rights-of-way, and sales of natural resources); 25 U.S.C. § 3504 (Leases, business agreements, and rights-of-way involving energy development or transmission). *See also* 25 CFR 169.2 (defining various terms in rights-of-way regulations); U.S. Department of the Interior, Bureau of Indian Affairs, *Rights-of-Way on Individually Owned Indian and Tribal Lands*, <https://www.bia.gov/service/rights-of-way-individually-owned-indian-and-tribal-lands> (last visited May 17, 2022).

⁸³ 25 U.S.C. § 323.

⁸⁴ The uniform procedures developed rely on statutory authority under Chapter 25 of the United States Code. *See* 25 CFR § 169.6 (“BIA will act on requests for rights-of-way using the authority in 25 U.S.C. 323–328, and relying on supplementary authority such as 25 U.S.C. 2218, where appropriate.”). BIA issued a handbook that contains guidance on this subject. U.S. Department of the Interior, Bureau of Indian Affairs, Procedural Handbook: Grants of Easement for Right-of-Way on Indian Lands at 8 (2006), https://openei.org/w/images/f/fb/BIA_Procedural_Handbook-Grant_of_Easement_for_Right_of_Way_on_Indian_Lands.pdf (general description of the laws and authorities governing the granting of easements for rights-of-way over and across Indian lands) (BIA ROW Handbook).

⁸⁵ The official recordation of the legal description, owners, and existing encumbrances of Indian lands is recorded and maintained by the BIA Land Titles and Records Office (LTRO).

⁸⁶ See 25 CFR § 169.107 (requiring Tribal consent for a right-of-way across Tribal land).

⁸⁷ *Id.*

⁸⁸ 25 CFR §169.112 (requiring “not less than fair market value” unless certain conditions apply).

⁸⁹ 25 CFR §169.9. BIA technically issues grants of easements for rights-of-way across lands in trust or restricted status. An easement is a right one has in the land of another created by a grant, reservation, agreement, prescription or necessary implication. A “grant of easement” for ROW defines the type, extent, use, purpose, width, length, and duration of the ROW. While title to the property remains with the landowner, a granted ROW encumbers the title. BIA ROW Handbook at 2.

⁹⁰ 25 CFR § 169.10.

⁹¹ 25 U.S.C. § 324; 25 CFR § 169.107 (Tribal or individual Indian landowner consent required); 25 CFR § 169.108 (Indian Tribes, adult Indian landowners, and emancipated minors may consent to a right-of-way over or across their land, including undivided interests in fractional tracts).

⁹² 25 CFR §169.107(b). The rules also allow a Tribe to be compensated for a ROW by any amount negotiated by the Tribe. 25 CFR §169.110.

⁹³ These circumstances are if (i) there are 50 or more landowners so that it would be impracticable to obtain consent and (ii) BIA determines the grant will cause no substantial injury to the land or any landowner. BIA will then provide notice of intent to issue the grant of ROW to all of the owners at least 60 days prior to the date of the grant. 25 CFR §169.107(b)(1)-(2).

⁹⁴ 25 CFR §169.123(a).

⁹⁵ Additional general guidance in preparing requests for ROW on land in trust or restricted status under the jurisdiction of the BIA may be found in BIA ROW Handbook, which also provides general guidance in preparing requests for ROW on land in trust or restricted status under the jurisdiction of the BIA. See BIA Handbook at 1 (“This handbook is designed to provide procedural requirements in preparing a Grant of Easement for Right-of-Way (ROW) across lands in trust or restricted status under the jurisdiction of the Bureau of Indian Affairs (BIA)”); see also U.S. Department of the Interior, Bureau of Indian Affairs, National Tribal Broadband Summit Presentation, Rights-of-Way the Right Way: An Insider’s Guide to Cutting through Red Tape (2019), <https://www.doi.gov/sites/doi.gov/files/uploads/2.-rights-of-way-the-right-way-an-insiders-guide-to-cutting-through-red-tape.pdf> (providing an overview of rights-of-ways, service line agreements, and leases).

⁹⁶ 43 U.S.C. § 934; see generally Congressional Research Service Report, Federal Railway Rights of Way (2006), <https://www.everycrsreport.com/reports/RL32140.html#:~:text=The%201875%20General%20Railroad%20Right%20of%20Way%20Act,of%20state%20or%20federal%20powers%20of%20eminent%20domain.>

⁹⁷ The National Telecommunications and Information Administration (NTIA) publishes a 50-State Survey of rights-of-way statutes governing the use of public ROW by utilities and telecommunications carriers, compiled with the assistance of several local franchising organizations. NTIA, 50-State Survey of Rights-of-Way Statutes, <https://www.ntia.doc.gov/legacy/ntiahome/staterow/rowtable.pdf> (last visited May 17, 2022). Local government regulation of cable operator use of ROWs, however, is governed by the Communications Act, which establishes rules for issuance of cable franchises. See 47 U.S.C. § 541(a)(2) (establishing parameters for authorizing the construction of a cable system over public rights-of-way). The issue of extending cable franchising requirements to the provision of Internet access service is controversial; specifically, municipal attempts to do so have been the subject of litigation by cable

operators claiming that local efforts to collect additional fees assessed on revenues from their Internet services are preempted by federal law. See, e.g., Mike Rogoway, *Comcast sues Beaverton, opening new front in cable giant's fight over local taxes* (Nov. 18, 2020), <https://www.oregonlive.com/silicon-forest/2020/11/comcast-sues-beaverton-opening-new-front-in-cable-giants-fight-over-local-taxes.html#:~:text=Six%20years%20after%20losing%20a%20major%20tax%20case,a%20court%20declaration%20that%20Beaverton's%20fees%20are%20illegal.>

⁹⁸ See generally Red Cliff Band of Lake Superior Chippewa Indians, Code of Laws & Constitution, https://www.redcliff-nsn.gov/government/tribal_government/code_of_laws.php (last visited May 17, 2022)

⁹⁹ See generally Morongo Band of Mission Indians, Ordinance 26, Tribal Utility Authority Ordinance (2005), <https://morongo.sfo2.digitaloceanspaces.com/morongo.com/Ordinance-26.pdf>.

¹⁰⁰ See generally Morongo Band of Mission Indians, Ordinance 31, Ordinance Regulating Utility Transmission System Rights-of-Way (2006), <https://morongo.sfo2.digitaloceanspaces.com/morongo.com/Ordinance-31.pdf>.