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## **Private Wireless Networks for Native Nations**

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In today's digital world, Internet connectivity has become a necessity. However, Tribal lands lack access to broadband, which affects their ability to participate in the digital age. This guidebook is designed to provide information and best practices for deploying a private wireless network in Native nations.

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**30%+**  
OF INDIVIDUALS  
ON TRIBAL LANDS  
LACK ACCESS TO  
HIGH-SPEED INTERNET

## Lack of Broadband Access in the United States

The digital divide in Tribal regions is considerable, as geographically dispersed communities acutely feel the need for digital services. In 2022, a White House fact sheet stated that **over 30 percent of the population on Tribal lands do not have access to broadband infrastructure** that provides minimally adequate speeds. The issue was exacerbated by the pandemic with the shift to remote learning and the use of online services. Activities such as doctor visits, buying a car, and connecting customers to a home-based business have opened the door to individuals in Native nations, as long as they have broadband access.

To address these challenges, many communities are turning to private wireless networks. A private network is owned by the Tribe and provides safe, reliable, high-speed Internet to individual homes and businesses in the community. With the reopening of the 2.5 GHz spectrum and the availability of federal funding, Tribal leaders are collaborating with wireless solution providers to deploy technologies customized for their communities.

## What is a Private Wireless Network?

**A private wireless network is a communication network privately owned and operated**, as opposed to a public network that is typically owned and operated by a telecommunications service provider. Private networks are designed for specific organizations or groups, providing secure and reliable network access for users over a defined area. These networks are often used by businesses, educational institutions, and Native nations to meet their specific needs and requirements. They can be deployed as a standalone network or integrated into existing infrastructure.

## Benefits of Implementing a Private Network

- Cellular coverage extended to areas outside of public networks
- Improved reliability and performance through high quality connections, resulting in faster speeds and reduced downtime
- Increased control since the network owner determines who can access the network and what data is transmitted
- Carrier-grade security standards such as SIM authorization, encryption, CIPA-compliant filtering, and APN (Access Point Name) configuration
- Seamless mobility between the private network and public networks
- Ability to reduce or eliminate monthly carrier bills and the risk of future rate hikes



## Is Your Community a Viable Candidate?

To help determine if your community is a good candidate for a private wireless network, ask these questions:

1. Are there areas with limited or no access to public network coverage?
2. Are your users experiencing slow network speeds or frequent outages on your current public network?
3. Would your users need seamless mobility between the private and public networks?
4. Do you want control over who can access your network, including the ability to authenticate users and monitor network usage?
5. Do you require carrier-grade security standards such as SIM authorization, encryption, CIPA-compliant filtering, and APN configuration to integrate into your existing functionality?



## Potential Pitfalls

**Designing and deploying a private wireless network can be a complex and challenging process.** Here are some things to consider before building one in-house.

1. Designing and deploying a network requires an elevated level of technical ability, including knowledge of networking protocols, security best practices, and radio frequency (RF) design.
2. Building a private network requires a significant investment of time and resources, including the development of network architecture, installation of components, and configuration of devices.
3. It is important to design a scalable network that not only meets current requirements, but can also accommodate future growth.
4. Incorporate appropriate security protocols to address vulnerabilities such as unauthorized access, and data breaches that can impact the integrity of sensitive information.

Working with an experienced vendor can ensure your network meets performance expectations, can support future growth, and save money by eliminating rework.



## How to Choose a Vendor

**Choosing the right private wireless vendor can impact the performance, reliability, security and cost of your network.** When choosing a vendor, it is important to consider the following factors:

- **Prior Experience with Tribal Projects:** Tribal projects have unique cultural, environmental, and logistical considerations that require specialized expertise and sensitivity.
- **Technical Expertise and Innovation:** Deep technical expertise in broadband infrastructure deployment allows the vendor to design and build a future-proof solution customized for your community's needs.
- **Project Ownership:** A reliable partner will take complete ownership of the project from initial environmental studies to post deployment testing, ensuring all aspects are managed efficiently.
- **Flexibility:** A capable vendor will possess the agility and innovation to meet your requirements and overcome obstacles.
- **Strong Communication and Collaboration:** Ensure the vendor listens to your unique needs, engages in open dialogue, and provides transparent progress updates throughout the project lifecycle.



## Kajeet for Private Wireless Networks

**As a leading provider of wireless solutions for 20 years,** Kajeet has extensive experience in designing, building, and managing private wireless networks for Native nations. Kajeet has a team of experts who can work with you to assess your specific needs and develop a customized solution to meet your goals. Additionally, its network of equipment partners can help scale any size project, ensuring you have access to the best technology and resources to support your network.

**To learn more, visit: [Kajeet Private Networks](#)**

## About Kajeet

Kajeet provides optimized IoT connectivity, software and hardware products that deliver safe, reliable, and controlled internet connectivity to nearly 3,000 businesses, schools and districts, state and local governments, and IoT solution providers. Kajeet's Private Network solutions simplify private wireless to allow customers to design, install and manage their own private wireless networks. Kajeet is the only managed IoT connectivity services provider in the industry to offer Sentinel®, a scalable IoT management platform that includes visibility into real-time data usage, policy control management, custom content filters for added security and multi-network flexibility. Kajeet is available for hybrid and multi-network access across all major North American wireless networks, globally with coverage in 173 countries, and on multiple licensed and unlicensed networks. Kajeet holds 43 U.S. patents in mobile technologies. To learn more, visit [kajeet.com](http://kajeet.com) and follow us on Twitter at @Kajeet.

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