Bringing Hi-Speed Wireless Internet to Hoopa Valley Tribe

When the pandemic started, Tribal citizens of the Hoopa Valley Tribe (HVT) in Northern California struggled to access fast reliable internet. Students were sent home with worksheet packets or gathered in parking lots of local businesses that provided limited Wi-Fi. A spotlight on the digital divide was evident on their reservation, like with many other Tribal communities. Satellite internet providers do offer service in the area, but because of the dense vegetation and changing weather patterns, the service is often unreliable. Other major internet providers had skipped over the Hoopa Reservation and showed no interest in building out the area to provide critical internet needed for the area to be part of the 21st century.

But Hoopa Valley Public Utilities District (HVPUD), a Tribally run entity of the HVT, with 40 years of experience, decided to step in and solve the problem. In 2019, with funding from Coronavirus Aid, Relief and Economic Security Act funding (CARES), the Tribe started Acorn Wireless. The Wireless Internet Service Provider (WISP) serves most of the reservation utilizing wireless spectrum to bring customers internet service.

"Acorn Wireless was created out a dire necessity to improve connectivity within the Hoopa Valley Indian Reservation. The pandemic escalated the timeline of receiving funding for the Tribe to invest in communications infrastructure for our Tribal people," explains Linnea Jackson, General Manager HVPUD. "There is a longstanding lack of connectivity in rural and Tribal regions and finally there are opportunities for Tribes to seek funding and improve conditions on our own, train our own people to manage and operate critical infrastructure." On any given day, employees of the Utility and Acorn Wireless can be found crimping cables, installing equipment in Hoopa Valley Tribal members homes, or climbing towers to repair infrastructure.

"The Hoopa Valley Public Utilities District has taken on the Broadband initiatives due to the lack of investment from our local telco. We have had to rapidly deploy wireless while simultaneously developing plans to take advantage of funding availability for fiber infrastructure," stated Matthew 'Speygee' Douglas. "It has been an incredibly stressful and rewarding journey and we have learned many lessons along the way. We are focused on continually improving our approach and clarity of deliverables to be the foundation of change for our community."

The area is prone to wildfires during the summer months, which makes having reliable connectivity throughout the reservation particularly critical.

In 2020, the federal government announced a new grant program with \$2 billion available for Tribes to improve digital equity on reservations. With the Infrastructure Investment and Jobs Act, another \$1 billion was added to provide Tribes with a small slice of the billions of dollars available to improve internet access in the United States.

Director of AMERIND Critical Infrastructure, Felix McGowan, views the Tribal Broadband Connectivity Program as a once-in-a-lifetime opportunity for Tribes. "The program not only helps to build critical broadband infrastructure but also to secure a place within the internet service provider ecosystem. It will be essential to shore up additional funding to run these types of operations in order to make high speed broadband available to all Tribal citizens."

While starting a WISP was a good start for the Tribe, it soon became evident that a more robust infrastructure was needed to bring higher speed internet access to the entire community. HVPUD, with the support of the HVPUD Board of Directors, began working with AMERIND Critical Infrastructure to apply for a grant from the National Telecommunications and Information Administration (NTIA). After a year of revisions, waiting and anticipation, NTIA informed the Tribe they were awarded over \$65 million to build out their network and bring fiber to the citizens of the Hoopa Valley Tribe.

"The Hoopa Valley Tribe has needed improved connectivity for governmental services, telehealth, education, cultural preservation, and economic development activities. We are proud of our Tribal entity for providing internet service to our Tribal community," stated Hoopa Valley Tribal Chairman, Joe Davis. "With the successful grant award provided by the National Telecommunication and Information Administration and partnership with the California Department of Technology, we will achieve our Tribal connectivity goals over the next several years. These infrastructure investments will provide major improvements to the Hoopa Valley Tribe's sovereignty goals."

Today HVPUD is busier than ever, preparing to take on a tremendous project.

"The most rewarding part of this journey is to build a grow a Tribal network that is managed and operated by Tribal people," Jackson said. "We are collectively learning and improving each day. We have learned from our mistakes, improved processes and as a result will make more informed decisions because of those lessons learned. She concluded, "I feel blessed to be a part of the Hoopa Tribal Telcom journey. Great things will be achieved in the next few years."



ABOUT AMERIND CRITICAL INFRASTRUCTURE

AMERIND Critical Infrastructure (ACI) helps Tribal Nations develop and deploy the most important 21st Century critical infrastructure, high-speed "broadband" internet, and supports project management and access to federal funding and programs.

ACI RECENT SUCCESSES

 Supported four Tribal clients in receiving \$192 million in broadband funding from the U.S. Department of Commerce

ACI CAPABILITIES AND OPPORTUNITIES

- Project management and accessing federal funding
- Expert project development and management

 from concept to application, from
 engineering to deployment, and ultimately
 from reporting and long-term sustainability
- Comprehensive grant management, delivery, and fiscal sponsorship services
- Feasibility planning & federal funding applications support and advisory services

TRIBAL INFRASTRUCTURE DEVELOPMENT THROUGH FEDERAL FUNDING OPPORTUNITIES

- Building modern broadband 21st Century
 networks Fiber, Wireless, Media
- Building adjacent additional critical infrastructures – energy, buildings, utilities, etc.
- Federal Contracting Advisory 8(a)'s, Section
 17's, Tribal corporations, and businesses
- Economic development and internal business operations support
- Digital Inclusion training and outreach on adoption uses