

Hoopa Valley Tribe is Closing the Digital Divide

Submitted on October 21, 2022



Friday, October 21, 2022

Weekly Digest

Hoopa Valley Tribe is Closing the Digital Divide

You're reading the Benton Institute for Broadband & Society's Weekly Digest, a recap of the biggest (or most overlooked) broadband stories of the week. The digest is delivered via e-mail each Friday.

Round-Up for the Week of October 17-21, 2022



Tepper

The Hoopa Valley Tribe has worked hard to connect its northwestern Californian community to high-speed internet despite the barriers to access, adoption and application that Tribal members face. Through Tribal initiatives, regional partnerships, and state and federal funding, the Hoopa Valley Tribe is bringing broadband services to this area which has had a lack of investment in connectivity.

Hoopa Valley's Digital Divide

The Hoopa Valley Tribe (<http://www.hoopa-nsn.gov/>)—home to the Natinixwe or Hupa People—primarily resides on the Hoopa Valley Indian Reservation around the Trinity River in northwestern California. Over 3,300 people live on the reservation. The valley is 64 miles northeast of Eureka, California, and just south of the Yurok and Karuk Native American Reservations. Surrounded by mountainous, forested terrain, the 92,000-acre Hoopa Valley Reservation is the largest Indian reservation in the state of California.

The region's rural and mountainous geography makes it challenging to build fixed broadband networks to homes on the reservation. Only 53 percent of Hoopa Valley's 1,030 households have a broadband internet subscription compared to the United States average of 85 percent connected households, according to Census data (<https://www.census.gov/tribal/?aianihh=1490>).

Linnea Jackson, General Manager for the Hoopa Valley Public Utilities District, stressed, "There's no wired fiber in this region yet, although there are three regional projects that are happening. Our only option for internet right now is a wireless backhaul."

The Hoopa Valley Public Utilities District (HVPUD) (<https://www.hoopavalleypubd.com/>) is a chartered entity of the Hoopa Valley Tribe established 40 years ago. Starting out as the Tribe's water utility, HVPUD now offers energy services, waste management and broadband services. HVPUD added the latter to bridge the digital divide and provide a remedy to the lack of access on the reservation. When the pandemic hit, Tribal leaders quickly recognized that broadband was a necessity for the Natinixwe community for distance learning, telework and telemedicine. HVPUD has since been making progress on expanding internet access on the reservation.

Jackson, who has been at HVPUD for more than three years, said the Tribe's members have felt the mental draw of the pandemic and being unable to do many things in person. "We have a large Tribal-elder population here," she said. "That's the population that wasn't born utilizing a computer. Now online access is critical to daily functions, such as online billing, accessing services, or even connecting with their grandchildren." But many Tribal elders don't have the help or the resources they need to connect.

Currently, the lack of robust broadband in Hoopa Valley presents a number of challenges for its residents. Without access to telehealth, some people have to drive long distances to receive specialized care. Jackson said that high-speed internet could also bring access to online higher education, opportunities to preserve traditional practices—such as language classes, basket weaving, and food preservation—increased economic development, and better communication between the Tribal government and off-reservation membership.

Creating Acorn Wireless During COVID-19

In 2020, the Tribal Council allocated \$2 million in CARES Act funding to create Acorn Wireless (<https://acornwireless.net/>), a tribally-owned and operated wireless internet access service provider. Acorn Wireless was serving its first customers less than a year later, in February of 2021.

"I think it's been absolutely amazing, what we've been able to achieve in that timeframe," said Jackson. "We still have hurdles to overcome but we are working diligently to address connectivity issues."

One benefit of HVPUD's structure as a public utility, Jackson said, is its immense reach in the small Tribal community. This was crucial when it was time for HVPUD to roll out broadband services quickly in 2020.

"Broadband is a perfect fit under the tribal utility as our entity already provides many of the foundational services for our reservation," she said. "The majority of the residents are already a client of HVPUD, so we are building on that customer relationship."

In the height of the pandemic, almost half of the Hoopa Valley Tribe's government departments shut down. In all, 30 non-essential departments closed their doors. Reservation residents with internet access at home relied on digital services to continue functioning, but many weren't able to. Schools were shut down and the student's ability to access learning platforms was also a struggle.

"Since HVPUD provides foundational utilities providing safe water, disposal services, and broadband, we were not able to shut down and more importantly had to thrive during the pandemic."

Acorn Wireless currently offers speed packages for both residential and business needs. For residential customers, its basic service plan offers 10 megabits per second (Mbps) download and 1 Mbps upload speeds for \$40 per month, and its Premium service plan provides 25 Mbps download speeds and 5 Mbps upload speeds for \$75 monthly.

While Acorn Wireless was up and running quickly after HVPUD received funding, the provider missed the statutory deadline for when services had to be available in order to participate in the Federal Communications Commission's (FCC) Emergency Broadband Benefit Program—now the Affordable Connectivity Program—by just a few weeks. Velocity Wireless, the other internet service provider which serves a small portion of Hoopa Valley, also does not participate in the program.

Under the Affordable Connectivity Program, qualifying low-income consumers can receive a \$30 discount on their monthly broadband subscription, and that discount increases to \$75 on Tribal lands. For Tribal nations with high populations of low-income households, that can make a huge difference. As of 2020, 2,289 Hoopa Valley residents were below 200 percent of the federal poverty level, the threshold for Affordable Connectivity Program eligibility. HVPUD was recently granted authority to be an ACP provider and will be able to offer \$75 per month for customers, which will be a great benefit to the community.

There is an overwhelming amount of work to be done to ensure sustainable broadband access, adoption and application for members of the Hoopa Valley Tribe and HVPUD is diligently working. The utility is juggling so many needs at once, Jackson said, and more funding and more employees are required to do this as well as to keep developing Acorn Wireless and continue HVPUD's other broadband infrastructure plans for Hoopa Valley.

"We live in a rural area that lacks economic development opportunities," said Jackson. "The goal is to make the broadband endeavor sustainable and affordable for our residents."

The Hoopa Valley example illustrates how infrastructure and affordability funding programs can be leveraged to ensure sustainable digital divide solutions.

Tribal and State Investments in Broadband Infrastructure

In addition to launching Acorn Wireless, HVPUD is working with a variety of partners to find solutions for Hoopa Valley's digital divide. In 2021, Hunter Communications, in partnership with the Tribe, was funded for the Hoopa Valley Broadband Initiative (HVBI), which is a hybrid fiber-optic and wireless last-mile infrastructure project that includes backhaul via licensed microwave and a fiber-optic, middle-mile component critical to the last-mile distribution.

The HVBI was awarded \$8,638,778 from the California Advanced Service Fund (<https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund>) (CASF) towards this initiative in January 2021. The Hoopa Valley Tribe leveraged that grant funding with an investment from the Hoopa Valley Tribal Council. Construction for the project is anticipated to be completed by early 2023.

HVBI will connect Hoopa Valley to two other regional broadband projects on either side of the reservation—the Digital 299 Project and the Klamath River Rural Broadband Initiative (KRRBI)—to further broaden the scope of high-speed connectivity throughout the region.

Once complete Hoopa will have increased connectivity and route diversity. This makes the internet provider's services more resilient, which is especially important given that Hoopa Valley is in a high fire-threat district.

Soon after the January 2021 CASF grant award, Hoopa Valley was awarded another grant of almost \$150,000 through CASF's Tribal Technical Assistance Program (<https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/tribal-technical-assistance>). This program was created to assist tribes in California with developing market studies, feasibility studies, and business plans which support improved communications networks.

Planning a broadband infrastructure project of this size is a challenge in itself, Jackson said, outside of the need to secure funding.

"No one realizes what it takes to secure frequency licenses, tower leases, ensure alignment and a robust signal, and make sure that your network configurations are correct," she added. However, HVPUD has spent years preparing for and tackling these issues with the assistance of its staff and trusted consultants.

The combination of Tribal, state and federal investments is helping bring these regional builds to fruition, which Jackson said will finally be able to provide sufficient connectivity in Hoopa Valley.

Tribal Broadband Connectivity Program and Digital Navigator Awards

In August 2022, the Hoopa Valley Tribe was awarded over \$65 million in funding for broadband infrastructure through the National Telecommunications and Information Administration's (NTIA) Tribal Broadband Connectivity Program (<https://broadbandusa.ntia.doc.gov/tribal-broadband-connectivity-program-awardees#hoopavalley>).

Hoopa Valley's Broadband Infrastructure Deployment project will further efforts to install fiber and wireless networks to directly connect over 1,000 unserved households, 64 businesses, and 19 community anchor institutions with fiber-to-the-home broadband. The Tribal Broadband Connectivity Program mandates that projects provide of at least 25 Mbps download and 3 Mbps upload speeds. The project will also help construct a Tribal data center, install a tower, and provide workforce development training.

According to Jackson, HVPUD is ready to go.

"We're ready to rock and roll," she said. "We want to get our tower built and we want to order [equipment] because the lead times on certain network equipment is almost a year. HVPUD is preparing to procure the engineering and environmental contracts as soon as possible."

Supply chain delays have the potential to stall projects, said Jackson, as all federal broadband infrastructure program grantees are rushing to stock up on supplies. HVPUD is keeping this and workforce development in mind as it begins to implement its broadband infrastructure plans. The utility wants to balance the need to hire and train Tribal members with the scope of its project.

"We're looking to see how we [can] keep the money local, but also meet the technical requirements of it," Jackson said. "We want to make sure that we're utilizing the dollars that have been invested here to the best of our ability, making sure that we're able to sustain the infrastructure. The goal is for us to build the fiber and get our people trained up."

Sustainable workforce development is a large part of making this massive broadband infrastructure effort work in the long term. All told, HVPUD expects to almost double its staff using funds from the Tribal Broadband Connectivity Program while the infrastructure build is in progress, going from the current staff of 16 up to at least 25.

Hoopa Valley also recently received one of eighteen Digital Navigator Corps Grants (<https://www.digitalinclusion.org/blog/2022/09/07/ndia-awards-18-national-digital-navigator-corps-grants-in-rural-tribal-areas/>) from the National Digital Inclusion Alliance (NDIA). The program provides funds for hiring community-based digital navigators alongside programmatic and technical support to help thousands of residents in selected areas to gain much-needed access to the internet, devices, and digital skills training. The grants for Digital Navigators last for a period of two and a half years, and range between \$320,540 and \$389,840 each.

"We're going to utilize the Digital Navigator to make sure that we are assisting our community to apply for the [Affordable Connectivity Program]," said Jackson. "Almost everybody's going to qualify, so that Digital Navigator will help people sign up for that program which will be a great benefit to our entire community."

The influx of funding awards given to the Hoopa Valley Tribe in the last few years displays the depth of the community's need for broadband infrastructure and digital navigators to aid with adoption. With all its recent efforts, HVPUD is working to bring the connectivity necessary for telemedicine, educational opportunities, and economic development.

Jackson is looking forward to seeing the results of the Tribe's work. "When I take a step back and look at what the impact will be, I think that's what keeps you going," she said. "Because it will upgrade everything from education to how we take care of all our elders. I am proud of being a small part of this legacy project."

Quick Bits

- President Biden's internet promises in limbo amid long battle over FCC nominee (<https://www.washingtonpost.com/technology/2022/10/14/fcc-deadlock-gigi-sohn/>) (Washington Post)
- NTIA CostQuest Data Support (<https://sam.gov/opp/bd39121e15a548659ab49728cbd86d0b/view>) (Department of Commerce)
- Comcast wanted \$210,000 for Internet—so this man helped expand a co-op fiber ISP (<https://arstechnica.com/tech-policy/2022/10/comcast-wanted-210000-for-internet-so-this-man-helped-expand-a-co-op-fiber-isp/>) (Ars Technica)
- Maryland Digital Equity Index (<https://communitydevelopmentmd.org/digital-inclusion>) (Community Development Network of Maryland)

Weekend Reads (resist tl;dr (<https://en.wikipedia.org/wiki/TL;DR>))

- Dollars to Megabits, You May Be Paying 400 Times As Much As Your Neighbor for Internet Service (<https://themarkup.org/still-loading/2022/10/19/dollars-to-megabits-you-may-be-paying-400-times-as-much-as-your-neighbor-for-internet-service>) (The Markup)
- Sounding the Alarm: Disparities in Advertised Pricing for Fast, Reliable Broadband (<https://www.calfund.org/wp-content/uploads/Pricing-Disparities-Report.pdf>) (California Community Foundation)
- Workforce Planning Guide: Guidance for BEAD Program Eligible Entities (https://broadbandusa.ntia.doc.gov/sites/default/files/2022-10/DOC_NTIA_Workforce%20Planning%20Guide_FINAL_100722.pdf) (NTIA)
- The Impact of Tech Companies' Network Investment on the Economics of Broadband ISPs (<https://www.incompas.org/Files/2022%20Tech%20Investment/FINAL%20Analysis%20Mason%20Report%20-%20Impact%20of%20tech%20companies%20network%20investment%20on%20the%20economics%20of%20brc>) (Incompas)

ICYMI from Benton

- FCC's ACP Pilot Programs Coming Soon (<https://www.benton.org/blog/fccs-ACP-pilot-programs-coming-soon>) (Kevin Taglang)
- Don't Discount the Investments in Internet Infrastructure that Content and Application Providers are Making (<https://www.benton.org/blog/dont-discount-investments-internet-infrastructure-content-and-application-providers-are-making>) (David Abecassis)
- Michigan All-In on Closing the Digital Divide with American Rescue Plan Support (<https://www.benton.org/blog/michigan-all-closing-digital-divide-american-rescue-plan-support>) (Kevin Taglang)
- Massachusetts to Launch Broadband Infrastructure Gap Networks Grant Program with Capital Projects Fund Award (<https://www.benton.org/blog/massachusetts-launch-broadband-infrastructure-gap-networks-grant-program-capital-projects-fund>) (Kevin Taglang)

Upcoming Events

Oct 24—Indigenous Connectivity Summit 2022 (<https://www.benton.org/event/indigenous-connectivity-summit-2022>) (Connect Humanity and Internet Society)

Oct 24—Good Jobs: Making the Most of Infrastructure Investments (<https://www.benton.org/event/good-jobs-making-most-infrastructure-investments>) (New America)

Oct 25—Internet For All: Connecting Wisconsin Kickoff (<https://www.benton.org/event/internet-all-connecting-wisconsin-kickoff>) (Public Service Commission of Wisconsin and NTIA)

Oct 25—Satellite Mega-Constellations: Why Smart Sharing Rules Matter in Space (<https://www.benton.org/event/satellite-mega-constellations-why-smart-sharing-rules-matter-space>) (New America)

Oct 27—Open Federal Communications Commission Meeting (<https://www.benton.org/event/october-2022-open-federal-communications-commission-meeting>) (FCC)

Nov 1—Disability Advisory Committee Meeting (<https://www.benton.org/event/disability-advisory-committee-8>) (FCC)

Nov 16—California and the FCC Unite to Eliminate Digital Discrimination (<https://www.benton.org/event/california-and-fcc-unite-eliminate-digital-discrimination>) (Michelson 20MM Foundation)

Nov 17—Open Federal Communications Commission Meeting (<https://www.benton.org/event/open-federal-communications-commission-meeting>) (FCC)

The Benton Institute for Broadband & Society is a non-profit organization dedicated to ensuring that all people in the U.S. have access to competitive, High-Performance Broadband regardless of where they live or who they are. We believe communication policy - rooted in the values of access, equity, and diversity - has the power to deliver new opportunities and strengthen communities.

© Benton Institute for Broadband & Society 2022. Redistribution of this email publication - both internally and externally - is encouraged if it includes this copyright statement.

For subscribe/unsubscribe info, please email headlines@benton.org



Kevin Taglang
Executive Editor, Communications-related Headlines
Benton Institute
for Broadband & Society
1041 Ridge Rd, Unit 214
Wilmette, IL 60091
847-328-3040
[headlines AT benton DOT org](mailto:headlines@benton.org)

Share this edition:

[f](https://www.facebook.com/sharer/sharer.php?u=http%3A//benton.org/node/[nid]) ([https://www.facebook.com/sharer/sharer.php?u=http%3A//benton.org/node/\[nid\]](https://www.facebook.com/sharer/sharer.php?u=http%3A//benton.org/node/[nid])) [in](https://www.linkedin.com/shareArticle?mini=true&url=http%3A//benton.org/node/[nid]&title=Read%20the%20latest%20Benton.org%20newsletter&summary=&source=Benton.org) ([https://www.linkedin.com/shareArticle?mini=true&url=http%3A//benton.org/node/\[nid\]&title=Read%20the%20latest%20Benton.org%20newsletter&summary=&source=Benton.org](https://www.linkedin.com/shareArticle?mini=true&url=http%3A//benton.org/node/[nid]&title=Read%20the%20latest%20Benton.org%20newsletter&summary=&source=Benton.org)) [t](https://twitter.com/home?status=Read%20the%20latest%20Benton.org%20newsletter%20at%20http%3A//benton.org/node/[nid]) ([https://twitter.com/home?status=Read%20the%20latest%20Benton.org%20newsletter%20at%20http%3A//benton.org/node/\[nid\]](https://twitter.com/home?status=Read%20the%20latest%20Benton.org%20newsletter%20at%20http%3A//benton.org/node/[nid]))



Broadband Delivers Opportunities and Strengthens Communities

By Grace Tepper.

[\(/#facebook\)](#) [\(/#twitter\)](#) [\(/#reddit\)](#) [\(/#linkedin\)](#) [\(/#email\)](#) [\(/#print\)](#)

<https://www.addtoany.com/share#url=https%3A%2F%2Fwww.benton.org%2Fblog%2Fhoopa-valley-tribe-closing-digital-divide&title=Hoop Valley Tribe is Closing the Digital Divide>

CONTACT

Benton Institute

for Broadband & Society
1041 Ridge Rd, Unit 214
Wilmette, IL 60091

847-328-3040

[Contact Us \(/contact-us\)](#)

[Log In \(/user/login\)](#)

[Terms & Conditions \(/terms-and-conditions\)](#)

[Accessibility Statement \(/accessibility\)](#)

[Privacy Statement \(/privacy\)](#)

[Press Room \(/press-room\)](#)

© 1994-2023 Benton Institute for Broadband & Society. All Rights Reserved.