

## WHAT'S WORKING IN RURAL CASE STUDY



# Making Broadband Work for Rural Communities and Native Nations

## VISION: DIGITAL EQUITY FOR EQUITABLE RURAL PROSPERITY

There is no denying the central role of the internet in 21st-century life. Just as electricity and telephone service became essential a century ago, fast, reliable broadband is now necessary for full participation in commerce, education, healthcare, the workforce, and civic and social life.

The social distancing requirements of the COVID-19 pandemic highlighted the cost of inadequate access and the deep geographic inequity that affects communities and Native nations that do not yet have reliable, affordable connectivity. The resulting push for digital inclusion is making headway, with historic levels of federal and philanthropic funding for broadband deployment in previously unserved and underserved areas. While the current public-private infrastructure effort has had significant success, serving remote and low-income areas in rural regions will require different strategies.

To understand where we are and what it will take to achieve true digital equity for rural communities and Native nations, the Aspen Institute Community Strategies Group (Aspen CSG) spoke with some of the practitioners working on the ground to deploy broadband and make sure communities can use it to advance equitable rural prosperity. These conversations identified lessons learned, gaps in current approaches, and potential models that could move the country toward full broadband coverage at a sustainable cost.



### **Zaki Barzinji, Aspen Digital:**

*"COVID created a rush to solve persistent digital equity issues. The positive is that it meant a new appetite for funding and risk. The challenge is that there has been a focus on temporary solutions. As we move past this phase, temporary solutions will be obsolete, and without long-term solutions, there's a danger of returning to the pre-COVID status quo."*



## Making Broadband Work for Rural Communities and Native Nations

### DEFINITIONS

The definitions below are terms and concepts used in this case study. These definitions should not be considered exhaustive or final but act as a baseline for readers to understand the issues discussed in this document.

**Broadband:** high-speed Internet access that is always on, including technologies such as fiber, wireless, satellite, and cable, with a benchmark of 100 megabits per second (Mbps) download speed paired with 20 Mbps upload speed. ([Federal Communications Commission](#))

**Digital equity:** a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services. ([National Digital Inclusion Alliance](#) (NDIA))

**Digital inclusion:** the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs). This includes five elements: 1. Affordable, robust broadband internet service; 2. Internet-enabled devices that meet the needs of the user; 3. Access to digital literacy training; 4. Quality technical support; and 5. Applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration. Digital Inclusion must evolve as technology advances. Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional, and structural barriers to access and use technology. ([NDIA](#))

**Equitable rural prosperity:** the ultimate outcome of Aspen CSG's [Thrive Rural Framework](#) — communities and Native nations across the rural United States are healthy places where each and every person belongs, lives with dignity, and thrives.

## WHAT IT WILL TAKE TO ADVANCE RURAL DIGITAL EQUITY: ACKNOWLEDGMENT, ALIGNMENT, SUSTAINABILITY, LEARNING

### Acknowledgment

The first step toward digital equity for rural regions and Native nations is a clear acknowledgment across governments and organizations that broadband is an essential utility that all communities and people need to be able to access. Acknowledging this reality means policymakers at multiple levels of government need to grapple with how to best provide, regulate, and sustain this public good for all community members.



**Alex Kelley, Rural Innovation Strategies, Inc.:**

*"We need routine investments in technology and people to provide technical assistance. Broadband should be treated like a basic utility—like water or electricity, it needs ongoing attention and support."*



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### Alignment

Misalignment among people, agencies, and organizations can create barriers to broadband deployment and use at all levels. For example, it makes sense for states and Native nations to align digital equity plans, but the recent timing of funding availability under the Digital Equity Act meant that states' plans were finalized before Native nations were able to access funding for planning, leading to missed opportunities for alignment and cooperation.



**Connie Stewart, Cal Poly Humboldt:**

*"We keep throwing money at this problem—why isn't it solved? We need to actually sit down and create one permitting agency with the expertise to permit all federal lands rapidly."*

Misalignment between government permitting agencies at the buildout stage can be costly and challenging. When multiple jurisdictions (e.g., federal, state, local, tribal) need to provide permits for building infrastructure, delays at one level can derail an entire project. Misalignment within a single agency can also be a major barrier; for example, the United States Department of Agriculture may fund a broadband project through its ReConnect program but withhold permitting for that same project through its US Forest Service.

At the level of broadband use, programs aimed at increasing access to the internet by providing devices or connectivity may not be fully aligned with participants' needs. Programs focused on a single sector—e.g., education, healthcare—might provide a device or service oriented toward that sector, but people's lives and needs extend across sectors. Devices tailored for one sector might not provide all the access that an individual needs to thrive. At the same time, programs aimed at helping people learn to navigate the internet safely and effectively might use a "one size fits all" model that isn't aligned with each community's unique culture and needs.



**Abi Waldrupe, NDIA:**

*"The segmenting can be frustrating (like providing hotspots just for healthcare). People have whole lives, and we need to be responsive to that."*

Misalignment between programs aimed at increasing broadband use and those intended to facilitate buildout can also create challenges. For example, the National Telecommunications and Information Administration's (NTIA's) Broadband Equity, Access, and Deployment (BEAD) program required subgrantees to participate in the Affordable Connectivity Program (ACP), which helped low-income households access internet service. However, that program recently ended due to lack of funding, and while policymakers are working on a solution, this lack of funding may [reduce the impact](#) of the BEAD program because it will reduce the potential revenue for Internet Service Providers (ISPs) serving lower-income areas.

Funding programs and regulatory guidance need a comprehensive community focus that allows for holistic planning and implementation at the regional and community levels. A focus on alignment at all levels will require people, agencies, and organizations to come together around a common purpose, identify barriers to implementation, and cooperate to find ways to streamline processes and align programs with community needs.





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### Sustainability

The current market-based approach to broadband has not worked for the most remote rural communities and Native nations because they simply do not have enough density of customers to allow private ISPs to make a profit. Acknowledging that broadband is an essential utility, as described above, should allow governments and communities to shift their thinking to find ways to provide affordable, sustainable connectivity to people and businesses. For example, a century ago, communities came together to form rural electric cooperatives to bring electrification to remote communities that private corporations were not likely to serve. This could be a model for broadband connectivity in remote areas today.



**Connie Stewart, Cal Poly Humboldt:**

*"You can't just beg one provider to serve a rural community—that hasn't worked. We have to create an environment of "coopetition" (cooperative competition) with multiple providers and types of service."*

Sustaining high-quality connectivity and maximizing positive impact in rural communities will require ongoing investment in operation and maintenance, upgrades in infrastructure and devices as technology changes, and continued investment in programs that provide education and support, such as [digital navigators](#). These investments will require a commitment to digital equity for rural communities and Native nations—on the part of policymakers, community leaders, and the general public. Partnering with organizations grounded in local communities and aligning these programs with community needs, as described above, will be necessary to make them efficient, effective, and ultimately sustainable.



**Davida Delmar, AMERIND Critical Infrastructure:**

*"We need more resources and advocacy for Tribes in the digital equity space. Resources that are specific to Tribes would be great at the federal level. If you help Tribes, you help everyone, especially rural communities."*

### Learning

The many new broadband and digital inclusion projects currently underway provide fertile ground for learning about what works to bring effective connectivity to rural communities and Native nations—and leverage that connectivity to drive equitable rural prosperity. But without intentional efforts to learn from this experience—and the efforts centered on COVID-19 pandemic response—governments and practitioners may end up repeating mistakes or continuing efforts that need to shift. For example, local practitioners report significant challenges where a single corporation owns broadband infrastructure but lacks the motivation to serve all of a local community or allow other ISPs to use the infrastructure. Learning from this experience could help communities move toward systems of cooperative or public ownership of infrastructure that encourages "coopetition" and ultimately serves the community better.

Communities of practice for government entities (e.g., local governments, state and local federal offices like USDA Cooperative Extension), educational institutions (e.g., Tribal Colleges and Universities, Historically Black Colleges and Universities), and community-based organizations (e.g., libraries and other organizations that provide digital navigation services) could be an important tool to exchange information, document what works, and ultimately increase the effectiveness and impact of efforts to move toward digital equity for rural communities and Native nations.



**Davida Delmar, AMERIND Critical Infrastructure:**

*"Tribal Colleges and Universities, workforce development programs, libraries—these are good places to start digital inclusion programs that cater to the community with a holistic approach. We need communities of practice in those places to test out how digital equity and digital inclusion will play out and to inform a model of practice and lessons learned."*



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### WHAT COMES NEXT?

While historic investments in broadband infrastructure funded by the Infrastructure Investment and Jobs Act will expand access to connectivity in rural regions and Native nations, it is clear that these investments will not be enough to fully connect the most remote and low-income communities. And while digital navigation and device access programs piloted during the COVID-19 pandemic have increased digital inclusion in rural regions and Native nations, these programs are not fully funded, and some (such as the Affordable Connectivity Program (ACP)) have already ended. Achieving geographic digital equity will require policymakers, leaders, and community members at all levels to come together to learn from past efforts and align around sustainable solutions..



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Since 1985, the [Aspen Institute Community Strategies Group](#) has been committed to equitable rural prosperity. We work towards a future where communities and Native nations across the rural United States are healthy places where each and every person belongs, lives with dignity, and thrives.

Aspen CSG serves as a connecting hub for equitable rural community and economic development. We design and facilitate action-inducing peer learning among rural practitioners, national and regional organizations, and policymakers. We build networks, foster collaboration, and advance best practices from the field.

The foundation of our work is the [Thrive Rural Framework](#) — a tool to take stock, target action, and gauge progress on equitable rural prosperity.

Aspen CSG's consultant Rebecca Huenink led the writing process for this case study. We are grateful for her contributions.

*This work was supported by the Robert Wood Johnson Foundation. The views expressed here do not necessarily reflect the views of the Foundation.*