

Bringing Broadband to Rural America: The Role for Philanthropy

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Introduction

By now almost everyone knows broadband’s critical role in fostering vibrant rural communities. It enables students to learn remotely, seniors to connect with health care providers and loved ones, and both farmers and small businesses to access customers in distant markets.

Americans in some rural communities benefit from the same internet speeds and affordable prices as their peers in large cities. Unfortunately, this isn’t the case everywhere. For some, broadband simply isn’t available. According to a Pew Research study from August 2021,¹ just 72% of rural adults have internet that meets the minimum standards to be considered broadband [download speeds of at least 25 megabits per second (Mbps) and upload speeds of 3 Mbps]. Internet connections slower than this won’t support the needs of today’s households or small businesses.

TABLE 1
Internet Speed Varies by Type of Connection

TECHNOLOGY	DSL	FIXED WIRELESS	CABLE	FIBER-OPTIC
Median Down (Mbps)				
Urban	18.000	15.000	400.000	940.000
Rural	10.000	12.000	300.000	1,000.000
Median Up (Mbps)				
Urban	0.768	4.000	30.000	880.000
Rural	1.000	3.000	20.000	150.000

SOURCE: *The Daily Yonder*.²

Where broadband is available, it isn’t always affordable. Affordability may explain why just 86% of adults with incomes under \$30,000 use the internet

at home compared with 99% of adults with incomes above \$75,000.³ Where one lives really matters when it comes to not just internet speed but how much that speed costs. In rural northwest Missouri, for example, an internet service provider offers residents in the town of Gallatin internet speeds of 20 Mbps down and 4 Mbps up (too slow to be considered broadband) for \$94.95 per month. Just 24 miles away in Maysville, a provider offers 200 Mbps down and up (“symmetrical”) for just \$49.95. Inequities like this can be found across the country.

Key definitions

Broadband Availability vs. Adoption

These terms are sometimes used interchangeably but are not the same.

Broadband availability means that if a person or business wants it, it’s available.

Broadband adoption means that someone actually has a broadband subscription. Sometimes the broadband is available but is simply not affordable.

Federal Communications Commission data in 2017 showed 96% of urban households and 61% of rural households live in areas where high-speed broadband infrastructure is available. U.S. Census Bureau American Community Survey data from 2015 found that the nationwide residential broadband adoption rate at that time was 76.6%.

Digital Inclusion

Digital inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of information and communication technologies. At the most basic level, this can be thought of as a three-legged stool supported by:

1. affordable, robust broadband internet service,
2. internet-enabled devices that meet the needs of the user, and
3. access to digital literacy training.

Experts and practitioners increasingly are adding the following elements to the definition: high-quality technical support, and applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.

Why Some Rural Communities Still Lack Affordable Broadband

The federal government has spent billions to expand broadband in recent decades, so why do some communities still lack this essential infrastructure? In short, it's complicated.

Multiple funding streams exist at federal and state levels, and eligibility requirements vary. One common eligibility requirement is that the funding be spent in communities that don't already have an internet service provider offering services at broadband speeds. The intent is to ensure funding goes to areas that need it most. Unfortunately, though, data on which locations do or don't have broadband are widely viewed as inaccurate, with some rural areas' being reported as having it when they actually don't.

There are also multiple broadband technologies, each with its own pros and cons. Fiber typically offers the fastest internet speeds; however, it's also the most expensive to deploy. Fixed wireless can be less expensive to deploy in rural areas, but it doesn't work well in hilly or mountainous regions.

Another variable in how broadband is deployed is the regulatory environment. Adding this to the issues outlined above creates a very complex puzzle that makes it nearly impossible to develop a national or even state-wide approach. "Broadband is a local issue because communities are unique and may require varying solutions to closing persistent gaps," said Crystal Ivey, broadband director with Tennessee's Department of Economic and Community Development.

The Role of Philanthropy in Supporting Communities

Like broadband, philanthropic organizations also play an important role in fostering vibrant communities. These grant-making organizations typically take income earned from investments and use it to fund causes that align with their missions. A health foundation, for example, might fund initiatives like access to healthy food, disease prevention or mental health services. Community foundations often fund initiatives broadly seen as advancing the well-being of the community's residents. Philanthropies rarely, if ever, fund initiatives that don't align with their missions.

Affordable broadband and digital literacy are foundational to the missions of almost all philanthropic organizations. Unfortunately, it can be

difficult for them to tie support for digital inclusion to their missions. A health care foundation may recognize that patients need broadband to benefit from telehealth services, but the idea of the foundation's helping to fund a broadband project might be harder to justify. Some philanthropies, though, have proven it is possible to make that connection.

The Federal Reserve Bank of Kansas City identified several foundations that have cracked the code to funding digital inclusion projects while staying true to their missions. Each takes a unique approach. Some provide smaller grants to assist with broadband plans, for example, and others provide loans to internet service providers. Here are a few examples.

Hutchinson Community Foundation: Investing Donor Assets in the Foundation's Mission

Hutchinson Community Foundation uses its \$80 million endowment to advance the well-being of the 60,000 residents of Reno County, Kansas. It focuses on generating three long-term outcomes:

- a strong, diverse and inclusive economy,
- healthy, livable and resilient neighborhoods and communities, and
- a community that is open to change with a culture of shared ownership and pride.

The foundation looks for creative ways to use its assets. For example, it has invested in an early childhood learning center and an effort to rehabilitate historic buildings for use by small businesses. President and CEO Aubrey Abbott Patterson said, "Traditionally, foundations invest in the stock market and use the earnings to make grants. We'd been asking ourselves, 'Wouldn't it be better if we could solve big issues through investing some funds in loans to local businesses?' It's a win-win for our community."

Patterson said the "digital divide" wasn't a secret in Reno County. When the COVID-19 pandemic struck, however, many were stunned to learn that more than 30% of students lacked the home internet necessary for online learning. "We realized we have resources right here, right now, to spark investment and address these kinds of social issues," Patterson said. "We just have to think creatively to deploy our resources differently, in ways that attract other funding to our community."

Patterson quickly joined other community partners to tackle the problem. Partners included the Hutchinson/Reno County Chamber of Commerce, the United Way of Reno County and IdeaTek, a local internet service provider. IdeaTek already was expanding its coverage to parts of Reno County, but despite those plans, many rural households remain without service.



Carolyn Bontrager’s longtime Arlington, Kansas, restaurant, Carolyn’s Essenhaus, is one of the businesses in rural Reno County benefiting from IdeaTek’s broadband-expansion project. Photo courtesy of IdeaTek.

Patterson worked with the foundation’s Impact Investment subcommittee and several donor-advised funds to offer IdeaTek a five-year, \$215,000 loan at 3.5% interest. The foundation also contacted the Kansas Health Foundation and NetWork Kansas—both recognize the vital role broadband plays in rural health and economic development. They added a loan of \$225,000 and a grant of \$25,000 from their Kansas Community Investment Fund partnership. The Hutchinson/Reno Chamber of Commerce gave IdeaTek a \$30,000 workforce development grant; in exchange, IdeaTek promised to create 30 new full-time jobs in the next four years.

With local matching funds, IdeaTek was able to secure \$2 million in Coronavirus Aid, Relief and Economic Security (CARES) Act grants through the state of Kansas. By January 2021, IdeaTek had expanded service to 515 new premises and upgraded 2,300 additional locations to 100 Mbps.

Collaborative

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Patterson sees this philanthropic-public-private partnership as a model for communities nationwide to use to address myriad challenges. “Broadband is just one of many issues we can address through philanthropic investment in private ventures,” she said. “I am excited about the possibilities not only for our community, but for communities across Kansas and the nation.”

Blandin Foundation: Supporting Economic Vitality by Expanding Broadband’s Reach

The Blandin Foundation enhances the economic viability of rural communities and the well-being of residents in rural Minnesota. The foundation has assets of about \$465 million. It supports leadership training programs that develop healthy communities. Program graduates may apply for funds for community-building projects such as feasibility studies, technical assistance and strategic planning.

The Blandin Foundation views broadband as critical to the economic viability of rural communities. From the foundation’s website: “Without robust broadband access and fully technologically literate populations, rural communities will be unable to take advantage of the extraordinary benefits that ultra high-speed, next-generation internet can provide.”

Bernadine Joselyn is the foundation's director of public policy and engagement. She considers the foundation's role as "upstream," ensuring that communities are ready for broadband when it arrives. "People come together around health, education and jobs, not broadband. But we know all of these things are better with broadband." Joselyn suggests starting the conversation by asking, "What is it that we want for our community, and what role does broadband play in that?"

The Blandin Broadband Communities program is an intensive, two-year partnership between rural Minnesota communities and the foundation. The communities can be cities, counties, tribes, or other self-identified communities of interest or place. Selected communities define their technology goals and measure the current levels of broadband access and use. Then they seek technical help and resources to meet their goals, which may include a \$75,000 matching grant from the foundation.

Tailored

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The foundation also supports broadband readiness efforts, including an annual conference and a broadband webinar series.

Maine Community Foundation: Helping Rural Communities Become Broadband-Ready

The Maine Community Foundation has a variety of programs to support broadband advocacy, technical assistance and planning, coalition-building and digital literacy training. The foundation provided a multiyear grant (\$44,000 in 2019 and \$49,000 in 2020) to the Maine Broadband Coalition to build statewide support among the public and policy leaders for broadband expansion and digital inclusion. Its Community Broadband Grant Program

provides community grants up to \$15,000. Maggie Drummond-Bahl, senior program officer, said this is a “very broad program designed to meet the wildly varying needs of communities and regions working on this issue at many different levels.”

The foundation also recognizes the importance of ensuring people have the necessary skills to use computers and the internet. It provides a multiyear grant (\$50,000 a year for three years) to fund digital literacy classes through library and university systems statewide.

Additional funding supports technical assistance to communities through the Island Institute and the Northern Forest Center. These organizations assist communities working to advance digital inclusion. Grants range from \$15,000 to \$25,000 a year.

Islesboro, Maine, is a great example of what can be accomplished when small and remote communities take matters into their own hands and receive support from key partners. The island community of 566 is 3 miles off the Maine coast. Residents were determined to build a broadband network affordable to all residents. The community received technical assistance and small-grant support to help with its planning by way of the nonprofit Island Institute and from the state’s broadband authority. With the technical plan in place, residents voted to partially fund the network through property taxes. Now, with the build-out complete, 90% of residents have subscribed to the network, paying just \$30 a month for gigabit speeds.

The Islesboro example underscores findings from previous research: Rural communities that are the most connected also are the most likely to see population growth. In less than three years since the broadband build-out, six new families have moved in.

Four Tips for Foundations Considering Digital Inclusion Initiatives

Support efforts to engage the community early in the process. Every community is unique. One thing that remains consistent, however, is that solving the digital divide requires input and resources from many stakeholders. Libraries, schools, local governments, nonprofit organizations and internet service providers each have unique insights, needs and resources to offer.

Crystal Ivey, with Tennessee’s Department of Economic and Community Development, has spent the past six years overseeing the state’s broadband efforts and has consulted other states on best practices. “Maximizing the vast benefits of true digital inclusion and broadband access can best [be] accomplished through significant community involvement and input on the local level. One of our most important roles as a funding entity is to convene local stakeholders who have a pulse on the specific needs of their community to discuss and support those solutions.”

Make affordability part of the objective. Just making broadband available doesn’t mean it will benefit everyone. The average internet plan costs \$57 a month and easily can exceed \$100 depending on where you live. This is one reason lower-income households are less likely to have broadband. Foundations can make better use of their funds by requiring low-cost options for low-income households. IdeaTek—the Hutchinson, Kansas, internet service provider—offered low-income households a year of free internet with a discounted subscription of \$20 afterward.

Inclusive

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Pair broadband efforts with digital literacy training. Broadband efforts are most effective when they are paired with digital skills training. This is why the Maine Community Foundation supports digital literacy training. Maggie Drummond-Bahl of the foundation said, “We think investing in infrastructure without the essential understanding of the value the technology can bring to people’s lives is like making an amazing meal and not having the plate or the silverware to serve it, eat it and take advantage of all of the nutrition it provides. We can have the fastest fiber network in the world, but if the fisherman or the farmer doesn’t realize how she can access new markets and customers using it, or the student doesn’t know how to get online to finish their assignments, the return on this amazing investment just hasn’t been realized.”

Define a realistic, meaningful framework for reporting outcomes. In recent years, government agencies, private foundations and community-based organizations have increasingly sought to understand how programs that promote digital inclusion lead to social and economic outcomes for individuals, programs and communities.

According to the U.S. Institute of Museum and Library Services (IMLS), outcomes-based evaluation is the measurement of results: achievements or changes in skill, knowledge, attitude, behavior, condition, or life status for program participants. Outcomes-based evaluation:

- 1. identifies observations that can credibly demonstrate change or desirable conditions;*
- 2. systematically collects information about these indicators; and*
- 3. uses that information to show the extent to which a program achieved its goals.⁴*

Adrienne B. Furniss, executive director of the Benton Institute for Broadband & Society, said, “In an era of increasing pressure to show funders, policymakers and constituents the impact of digital inclusion programs, community-based organizations in particular face significant barriers in conducting outcomes-based evaluation and showing that dollars are being used efficiently to improve lives rather than simply to deliver services.” Benton Institute-funded research, resulting in the report *Digital Inclusion Outcomes-Based Evaluation*, provides frameworks, logic models and resources to help guide the development of outcomes-based evaluation efforts.

Conclusion

Philanthropy serves a vital role in addressing societal needs, filling voids that the government and the business sector can't. Regarding broadband, however, it will be tremendously expensive to ensure everyone has affordable access and the skills and technology to reap its benefits. Philanthropic organizations cannot address the issue alone, but they can play pivotal roles in the effort by filling voids that align with their organizations' missions. Meanwhile, community leaders must reflect on what they want for their communities, how digital equity supports that vision, and what

opportunities exist for them to be the catalyst for change. Working together, philanthropies and communities can ensure broadband is accessible to and affordable for all.

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Endnotes

- ¹ See Vogels.
- ² See Gallardo and Whitacre.
- ³ See Statista.
- ⁴ See Rhinesmith and Siefer.

