

Broadband Adoption And Economic Opportunity

Lessons from an NTIA-supported broadband program in Minnesota show that adoption is as important as access in ensuring the benefits of broadband to communities.

By Bernadine Joselyn / *Blandin Foundation*

Editor's Note: The following is excerpted from the testimony of Bernadine Joselyn, Director, Public Policy & Engagement, Blandin Foundation, before the U.S. Senate Committee on Commerce, Science and Transportation's Subcommittee on Communications, Technology and the Internet on October 29, 2013. Blandin Foundation, based in Grand Rapids, Minn., works with rural communities in Minnesota; supporting rural broadband is one of its missions.

When we met Kristin Fake, a sole proprietor in tourism-dependent Akeley, Minn., it was a leap of faith for her to come to the workshop hosted by the University of Minnesota Extension Service, one of our partners in our broadband work. Like so many, she couldn't imagine how technology might benefit her home staging business. At the workshop, she quickly discovered that her clients were being misdirected by Google Maps, how keywords drive inquiries and how she might use a smartphone to dramatically improve her customer service.

Her annual sales now are much higher than before she took the class, and products she advertises on Facebook often are purchased before she even gets them displayed in her shop. Kristin is poised to take her business to a new level as Akeley continues to recover from a very tough economic patch. Kristin went from not being able to imagine how technology might be helpful to her business to creating demand for products and services that the marketplace hadn't yet imagined.

Empowering people through technology also was the focus of our partnership with the Leech

Lake Band of Ojibwe. Janice Gale, director of the Leech Lake Band's Temporary Employment Program, had long seen the digital challenges that her neighbors and workers faced in seeking even temporary employment. She quickly put to work the resources and relationships available through our network of partners to teach online job search and work skills and to expand the availability of computers on the reservation. A computer lab at the Boys and Girls Club, for example, attracts 250 students each month.



Photo: Leech Lake Band of Ojibwe

A student at the Leech Lake Band's Temporary Employment Program learns digital skills.

Refurbished computers, training and subscriptions for kids and families were distributed through Head Start. Temporary workers who participate in the digital literacy program upgrade their skills and qualify for higher pay. Temporary Employment Program student workers help learners in the computer labs, which is a great benefit to both trainers and learners. Janice, in her quietly passionate way, grins when she tells how many participants have been inspired to pursue their GED [certificates of high school equivalency].

Multiply Kristin Fake and Janice Gale times hundreds. The stories continue to roll in from communities all across rural Minnesota, where adoption is not just a policy imperative but also a community imperative.

From [Blandin Foundation's] experience, realizing the promise of the Internet is as much about investing in human capacity as it about investing in technological capacity – maybe more.

After a career in the Foreign Service, I became Blandin Foundation's first-ever public policy director in 2003. When I looked out over the rural landscape, one issue stood out as having great potential to help rural communities thrive into the new century: access to high-speed Internet and the capability to take advantage of its many social and economic benefits.

Today, the digital divide remains far too real for rural America, especially for those who face other types of barriers – poverty, language, isolation. The work of bringing the promise of the Internet to all Americans clearly is not done.

We believed in 2003, and still do today, that

1. Broadband is the indispensable infrastructure of the 21st century.
2. Rural communities need broadband access, and the ability to use it, in order to thrive – and even survive – in an ever more globalized world.

To this end, Blandin Foundation has invested in a body of work focused on strengthening community broadband leadership and adoption. One of these projects, the Minnesota Intelligent Rural Communities Initiative (MIRC),

Participants in the MIRC digital literacy program upgrade their skills and qualify for higher pay. Many have been inspired to pursue certificates of high school equivalency.

had the support of the American people through the American Reinvestment and Recovery Act, which connected our work to national goals.

Blandin Foundation administered MIRC on behalf of a coalition of 19 statewide partners – regional development commissions, state workforce and educational institutions, etc. – and 11 rural demonstration communities. Our work was partially funded through the federal Broadband Technology Opportunity Program (BTOP), one of 44 sustainable adoption grants awarded nationwide.

MIRC began in 2010 and was largely completed by the end of 2012, putting to work \$4.8 million of federal grant dollars, \$1.8 million in matching funds and countless hours of work by community leaders to create a network of resources and support to rural Minnesota communities, business owners, students, health care facilities, local governments, the poor and the un- and underemployed.

We sought to

- Support and encourage vibrant rural economies through broadband adoption as a strategy for job growth and wealth creation.
- Increase “culture of use” of broadband services.
- Improve efficiency and effectiveness of digital literacy training service delivery.
- Accelerate broadband adoption by 2 percent over its statistically anticipated growth (increasing broadband subscribers by 38,556 more than could otherwise be expected).

In sum, helping rural communities keep up globally was our real task. Thanks to the federal funding we received, we were able to take on an ambitious, comprehensive, multisector effort that wove together work at the local community level all the way up to statewide engagement.

MIRC set measurable goals. All were accomplished or exceeded.

OUTCOME	GOAL	ACCOMPLISHED
New households subscribed to broadband	38,556 (2 percent above statistically anticipated growth)	40,496
Number of public-access computer sites	0	60
Number of people who participated in at least 16 hours of training/education	3,640	9,000
Refitted and licensed computers distributed to first-time computer owners	1,000	2,067
Number of people reached through outreach and awareness	160,000	250,000

“I’ve gone back to school. Now I don’t have to go to the library and find a sitter to do research. I can stay home with my kids.”

Overall, broadband adoption in participating communities grew close to 15 percent faster than in the rest of rural Minnesota, and communities that reported the highest rates of participation in MIRC activities also experienced the highest rates of broadband subscription growth.

Dr. Jack Geller of the EDA Center at the University of Minnesota, Crookston and lead researcher for MIRC concluded in his final evaluation, “It’s hard not to connect the MIRC project ... as a contributor to Minnesota’s leading position in rural broadband adoption.”

Persuaded by the effectiveness and impact of these efforts, and mindful of the critical role that broadband access and adoption play in the economic and social life of rural places, Blandin Foundation’s board of trustees has committed an additional \$1.5 million to continue to support broadband adoption efforts in rural Minnesota in 2013 and 2014.

THE CHALLENGE OF BROADBAND ADOPTION

Blandin Foundation’s strategies include

- Offering individuals training in computer literacy and knowledge-worker career development strategies.
- Providing technical assistance and customized training to small businesses and entrepreneurs.
- Distributing refurbished computers to low-income, rural Minnesota residents.
- Partnering with Internet service providers to offer subsidized subscriptions to connect those computers to the Internet.
- Helping communities identify their unique goals and providing the technical assistance and grant

funding needed to turn those goals into accomplishments.

At the heart of our approach is high-touch, multisector, sustained community engagement. This includes communitywide visioning and goal setting and a community-driven grant proposal solicitation process to generate project ideas and community commitment upfront.

To help drive home the recognition that broadband is a necessary but not sufficient element of economic development and community vitality, MIRC used indicators developed by the New York-based Intelligent Community Forum (ICF) to help communities baseline and measure their competitiveness in the broadband economy. These indicators include ensuring broadband infrastructure, developing a “knowledge workforce,” supporting innovation, redressing the digital divide and effectively using marketing and advocacy to tell a community’s technology story.

Community leaders used the ICF indicators to identify and select community projects that best fit local needs and focus their efforts on short-term, achievable goals that would have meaningful impact over the long term. More than 100 community-identified community projects have been funded so far. Here are a few examples.

ENSURING THE AVAILABILITY AND USE OF BROADBAND INFRASTRUCTURE

Thief River Falls launched Computers for Our Community, a collaboration between local broadband providers and MIRC partner PCs for People. Over 18 months, the project delivered 126 refurbished computers, 91 reduced-rate broadband subscriptions and nine multiweek digital literacy courses for low-income families. Most recipients

(84 percent) continued their broadband subscriptions even after subsidies ended.

Lac qui Parle County created a mobile computer lab that brings broadband access to one of Minnesota’s most sparsely populated regions. A local partner testified, “The Computer Commuter connects patrons to people and places they had no idea they could connect to!”

FOSTERING INNOVATION

An immigrant resource center in Winona launched digital literacy training in Hmong and Spanish for more than 60 recent immigrants. The project “built bridges among cultures and organizations” and led to the realization that a “connected city helps everyone.”

A consortium of nine school districts in Stevens County developed a broadband-based system to provide specialized distance learning services for students with disabilities. Their takeaways: “[Realization] that the world is able to communicate and work cooperatively using technology and that the world is not limited to Stevens County.”

Benton County added new computers in libraries, schools and senior housing and created 13 new Wi-Fi access points in a variety of businesses and community sites, including an elder care facility. According to the county’s economic director, “Our elected officials now see the importance of broadband for economic development and community vitality.”

DELETING THE DIGITAL DIVIDE

The nonprofit MIRC partner PCs for People, in addition to surpassing its goal to refurbish 1,000 computers and redistribute them to low-income rural households, opened affiliate storefronts in four rural Minnesota communities in each corner of the state. Said one computer recipient: “I’ve gone back to school; I have two kids, and now I don’t have to go to the library and find a sitter to do research. ... I can stay home with my kids.” When expressing her appreciation for receiving a computer



Schoolchildren in Stevens County, Minn., participate in a distance learning program.

and Internet connection, another recipient explained that the computer was going to be a Christmas present for her child; receiving it meant that she wouldn't have to choose between buying gifts or feeding her kids over the Christmas break.

BUILDING A KNOWLEDGE WORKFORCE

Cook County opened a computer lab as part of a higher-education, distance learning partnership. During the project's 18 months, the site provided 21 training sessions attended by 185 people in this remote community with a population of 1,351. The lab continues to be available to all community residents and is used as a public Internet access site and distance learning resource. The partnership offers credit courses from more than 25 institutions of higher learning.

MARKETING AND ADVOCACY

A local-access television station in Itasca County upgraded its software, hardware and website interface to live stream and archive public meetings online. The move has improved access to these

meetings for permanent and seasonal residents. Several other communities enhanced their government and business online presences, including Windom in far southwest Minnesota, which planned, launched and maintains the Finding Windom community portal Web presence.

Here is a sampling of some the voices of rural Minnesotans who participated in MIRC reflecting on the impact of these broadband adoption efforts on their overall community vitality:

"We've turned a corner and become a community that's actually growing and thriving, instead of stagnant and dying, with what we've learned from the MIRC program."

—Kristin Fake, owner,

Just a Stage/Second Stage home staging, Akeley, Minn.

"This project has permanently changed the way we think and the way we work together."

—Della Schmidt, Winona

Area Chamber of Commerce, Winona, Minn.

"These technology classes have encouraged our Hispanic and Somali immigrants to interact, really for the first time."

—Fatima Said,

Project FINE, Winona, Minn.

"This effort has helped us develop wonderful community connections. We have reached out to our whole community."

—Keri Bergeston,

Principal, Dawson/Boyd (Minn.) High School

"MIRC efforts have really contributed to creating a 'culture of use' amongst tribal members. Overall, MIRC has helped the Leech Lake Reservation increase the economic vitality of our community. Tribal community members are more familiar with the tools of broadband and the economic opportunities that are available."

—Mike Jones, Chief of Staff to Tribal Chair, Leech Lake Band of Ojibwe, Walker, Minn.

"This framework brings people together that have not always

Federal investment in broadband access and adoption made a difference to communities' ability to be globally competitive.

worked together – technology advocates, workforce, social service agencies and economic development professionals.”

–Danna MacKenzie, IT Director, Cook County, Minn.

“The families in our community will see benefits for many years to come as a result of everyone’s hard work and dedication on this project.”

–Kristen Lee, Independent School District #381, Two Harbors, Minn.

LESSONS LEARNED: KEY ELEMENTS OF SUCCESSFUL ADOPTION EFFORTS

1. Communities know best. Involve citizens directly in articulating their community’s broadband adoption and utilization goals to catalyze long-term engagement needed to increase adoption.
2. Local leadership matters. Help local broadband champions get and use skills to frame issues, build and sustain relationships and mobilize people to build a community’s capacity to achieve its broadband goals.
3. Broadband is not an end in itself. It is a means to the higher ends of increased economic vitality and improved quality of life. Framing it this way helps.
4. High-touch outreach works. Effective recruitment strategies are intracommunity, hyperlocal and personalized. Change follows relationship lines.
5. Peers make great teachers. Peer-based learning formats are popular, low-cost and easily sustainable tools to build a community’s technological savvy.

6. Cross-community communication is key. Signage, local media support and aligned social media are effective, low-cost ways to spur and sustain energy and excitement for community projects.
7. Engage tomorrow’s leaders today. Recognize and authentically engage the talents of young people. This generation of leaders brings energy and sustainability to any community initiative.
8. Connect the economic dots. Framing increased sustainable broadband use as a necessary but not sufficient ingredient in a whole-systems approach to strengthen community vitality can help communities see and leverage the connection between the technology and benefits to community life.
9. Have patience. This work takes time. Look for and celebrate early and easy wins, but think long term and build capacity and energy for the long haul. Money and other resources follow vision and commitment.

CONCLUSIONS AND POLICY IMPLICATIONS

- Broadband access alone is not enough. Without concerted, community-based efforts to ensure that all citizens are able to take advantage of the Internet, the digital divide will continue to grow and to undermine America’s promise as a democracy where equal opportunity is available to all.
- Community-based broadband literacy and market development efforts can and do help ensure that all Americans can participate fully in [the] nation’s economy and civic and cultural life.

- Eliminating the digital divide is an urgent challenge that must be part of [the] national agenda. States and communities need the federal government and its resources as a partner in this work.
- Federal investment in broadband access and adoption made available to Minnesota through the American Recovery and Reinvestment Act [has] made a significant positive difference to rural Minnesota communities’ ability to be globally competitive and ensure a high quality of life for their residents.

NTIA has been a very helpful partner in our efforts to bring to rural Minnesota communities the full benefits of the broadband-enabled economy. NTIA’s Broadband Adoption Toolkit, released in May of this year, is an especially powerful tool for shining a light on best practices and making them available to community champions across the country.

In sum, access to broadband is key: Evidence abounds that high-speed Internet access has economic benefits (positive impact on median household income, employment and business growth). But so is adoption. According to the report “Broadband’s Contribution to Economic Health in Rural Areas: A Causal Analysis,” by B. Whitacre, S. Strover and R. Gallardo (March 26, 2013), “Non-metro counties with high levels of broadband adoption in 2010 had significantly higher growth in median household income between 2001 and 2010 compared to counties that had similar characteristics in the 1990s but were not as successful at adopting broadband.”

This point was eloquently echoed in a recent edition of “The Daily Yonder,” published on the Web by the Center for Rural Strategies, a nonprofit media organization based in Whitesburg, Ky., and Knoxville, Tenn.: “While most government broadband policies have traditionally focused exclusively on providing infrastructure, there is a case to be made for focusing on demand. Investments in people, education and training are essential to achieve meaningful use of the Internet.” ❖