

ANNUAL PERFORMANCE PROGRESS REPORT FOR SUSTAINABLE BROADBAND ADOPTION

General Information

1. Federal Agency and Organizational Element to Which Report is Submitted Department of Commerce, National Telecommunications and Information Administration	2. Award Identification Number 27-43-B10515	3. DUNS Number 828185087
4. Recipient Organization C. K. Blandin Foundation 100 N Pokegama Ave, Grand Rapids, MN 55744-2739		
5. Current Reporting Period End Date (MM/DD/YYYY) 12-31-2012	6. Is this the last Annual Report of the Award Period? <p style="text-align: center;"> <input checked="" type="radio"/> Yes <input type="radio"/> No </p>	
7. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.		
7a. Typed or Printed Name and Title of Certifying Official Mary Magnuson	7c. Telephone (area code, number and extension) 218-327-8738	
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7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 02-15-2013	

PROJECT INDICATORS																																																
<p>1. Does your Sustainable Broadband Adoption (SBA) project foster a particular broadband technology or technologies? If so, please describe this technology (or technologies) (600 words or less). The Minnesota Intelligent Rural Communities (MIRC) project does not foster a particular broadband technology or technologies. Rather, it is designed to promote broad public access and use of high-speed networks generally as indispensable infrastructure for economic vitality and quality of life.</p>																																																
<p>2a. Please list all of the broadband equipment and/or supplies you have purchased during the most recent calendar year using BTOP grant funds or other (matching) funds, including any customer premises equipment or end-user devices. If additional space is needed, please attach a list of equipment and/or supplies. Please also describe how the equipment and supplies have been deployed (100 words or less).</p> <table border="1"> <thead> <tr> <th>Manufacturer</th> <th>Item</th> <th>Unit Cost per Item</th> <th>Number of Units</th> <th>Narrative description of how the equipment and supplies were deployed</th> </tr> </thead> <tbody> <tr> <td>na</td> <td>na</td> <td>0</td> <td>0</td> <td>na</td> </tr> <tr> <td colspan="2">Totals</td> <td>0</td> <td>0</td> <td></td> </tr> </tbody> </table> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Add Equipment Remove Equipment </div>					Manufacturer	Item	Unit Cost per Item	Number of Units	Narrative description of how the equipment and supplies were deployed	na	na	0	0	na	Totals		0	0																														
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<p>2b. To the extent you distribute equipment/supplies to beneficiaries of your project, please describe the equipment/supplies you distribute, the quantities distributed, and the specific populations to whom the equipment/supplies are distributed (600 words or less). At the completion of the MIRC project, PCs for People, a MIRC subawardee, had secured, refurbished, and distributed 2067 computers -- more than double their project goal -- to low-income individuals and families in at least 65 rural of Minnesota's 87 counties The average household size of recipient families was 3.31 persons the average family had 1.81 school-age children average household income of recipient families was \$12,146.75 35.82% of recipient head of households were employed with 64.18% unemployed 50.74% reported that the PC they received would be used for job-related activities (including looking for work) 66.55% reported that the PC would be used for education-related activities 60.32% of families were White, 19.74% African-American, 7.49% Latino/Hispanic, 9.74% Asian/Pacific Islander, 4.51% Native American and 3.68% did not report their race.</p>																																																
<p>3. For SBA access and training provided with BTOP grant funds, please provide the information below. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent calendar year. For each type of training (other than open access), please count only the participants who completed the course.</p> <table border="1"> <thead> <tr> <th>Types of Access or Training</th> <th>Number of People Targeted</th> <th>Number of People Participating</th> <th>Total Training Hours Offered</th> </tr> </thead> <tbody> <tr> <td>Open Lab Access</td> <td>0</td> <td>1,894</td> <td>8,900</td> </tr> <tr> <td>Multimedia</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Office Skills</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>ESL</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>GED</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>College Preparatory Training</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Basic Internet and Computer Use</td> <td>2,700</td> <td>3,177</td> <td>18,022</td> </tr> <tr> <td>Certified Training Programs</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Other (please specify): Business Internet Training</td> <td>4,000</td> <td>3,805</td> <td>13,428</td> </tr> <tr> <td>Total</td> <td>6,700</td> <td>8,876</td> <td>40,350</td> </tr> </tbody> </table>					Types of Access or Training	Number of People Targeted	Number of People Participating	Total Training Hours Offered	Open Lab Access	0	1,894	8,900	Multimedia	0	0	0	Office Skills	0	0	0	ESL	0	0	0	GED	0	0	0	College Preparatory Training	0	0	0	Basic Internet and Computer Use	2,700	3,177	18,022	Certified Training Programs	0	0	0	Other (please specify): Business Internet Training	4,000	3,805	13,428	Total	6,700	8,876	40,350
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<p>4. Please describe key economic and social successes of your project during the past year, and why you believe the project is successful thus far (600 words or less). In 2010 the MIRC project embarked on a collaborative effort to advance broadband awareness, adoption and deployment across rural Minnesota. This was done in 11 demonstration communities, with specific local projects and programming, as well as across all of rural Minnesota through statewide outreach and awareness. Due to a number of demographic and socio-economic factors, at the beginning of the project the 11 MIRC communities collectively lagged behind the rest of rural Minnesota in the adoption of broadband (61.7% vs.</p>																																																

64%). The reasons for this were multiple, including many of the MIRC communities having a disproportionately high percentage of elderly residents; some communities (particularly tribal communities) having a high poverty rate; while others (for example, Cook County) simply had limited access to broadband. Nevertheless, assessment results indicate the MIRC projects have positively impacted broadband growth. Specifically, quarterly tracking of broadband subscriptions documents that by the end of the project, the collective growth rate in broadband adoption in the 11 demonstration communities was close to 15 percent faster than the rest of rural Minnesota. Given MIRC's focus on broadband outreach and awareness across all of rural Minnesota, another way to examine the overall impact of MIRC is to view rural Minnesota with respect to rural America. According to research reports from Connect Minnesota, the Center for Rural Policy and Development, as well as our own project estimates, when MIRC began the adoption rate in rural Minnesota was estimated at 61% (Connect MN spring 2011); 65.4% (CRPD spring 2010) and (65.7% (MIRC spring 2011). Data examining the adoption rate for rural America must equally be viewed as an estimate. In January 2012, FCC Commissioner Clyburn cited the national broadband adoption rate in rural America at 51%. In 2011 the National Telecommunications Cooperative Association released a report citing the broadband adoption rate in rural America at 55%. And a 2011 NTIA report cited the broadband adoption rate for rural America at 57%. Accordingly, regardless of which measure you choose, it is clear that rural Minnesota is well ahead of the rest of rural America in broadband adoption. In a memo to Blandin Foundation's Board of Trustees, the project's third-party evaluator concluded that, due to the breadth and scope of the project's multi-pronged and integrated activities, "it is hard to not connect the MIRC project as a contributor to Minnesota's leading position nationally in rural broadband adoption."

The MIRC project has focused on under-served rural communities, small businesses, and low income families and individuals, and dislocated, un- and under-employed workers. Highlights include:

2,067 refurbished computers - almost double the project goal - distributed to qualifying low income families across rural Minnesota;

completion of nearly 100 community-designed and implemented projects in 11 demonstration communities;

over 31,000 hours of technology and digital education, training and support delivered to almost 9,000 individuals and over 2,000 small rural businesses that are under utilizing the Internet to help them capitalize on the opportunities broadband can bring;

more than 250,000 rural Minnesotans reached with messages about the benefits of digital communications technology through a coordinated public awareness campaign;

new user-driven, scenario-based digital literacy curricula developed, including translations into the Somali language, and delivered at Minnesota's Work Force Centers across the state, with discussions well underway across systems on leveraging this resource with other intermediary institutions serving dislocated workers;

creation and delivery of a new 16 hour online "Knowledge Worker" course designed for dislocated workers created and posted to <http://globallearningcommons.org> for public access and use;

MIRC's adopted "Intelligent Community" framework being applied by a number of participating communities to galvanize the attention of community leaders around knowledge economy-related challenges and opportunities beyond broadband adoption and access. One resident from Winona, MN commented, "MIRC has changed the way we think about ourselves and act as a community." In Akeley, MN (pop 432), MIRC trainees catalyzed a community campaign to reinvigorate the dying Chamber of Commerce, which saw its membership grow from just 4 to over 44. The project champion explained, "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 with the MIRC program."

a total of 60 public wifi "hot spots" created;

with over 183,005 views to date (now averaging 500-700 per week), and a total of 2,467 posts, the Blandin on Broadband blog has become the recognized "go to" information resource about broadband related news in Minnesota;

a final report from Intelligent Community Forum comparing baseline and benchmark data gathered about the 11 demonstration communities showed that over an 18-mo period between 2010 and 2012 the communities improved across all ICF components, in the following order from greatest to least improvement: Marketing and Advocacy; Digital Inclusion; Broadband Infrastructure; Knowledge Workforce; Innovation. Communities will use these data to inform planning and decision making;

through MIRC, partners have increased their capacity to deliver programs and services that address critical rural economic and community development needs: University of Minnesota Extension has reinvigorated and modernized its e-commerce training programs for delivery to rural communities and small business;

On November 1, 2012, Blandin Foundation, on behalf of the MIRC partners, was awarded the 2012 Tekne Award for Innovative Collaboration of the Year from the Minnesota High Tech Association for its efforts on behalf of rural Minnesota communities.

5. Please estimate the level of broadband adoption in the community(ies) and/or area(s) your project serves, explain your methodology for estimating the level of broadband adoption, and explain changes in the broadband adoption level, if any, since the project began.

<p>5a. Adoption Level (%):</p>	<p>Narrative description of level, methodology, and change from the level at project inception (600 words or less).</p>
<p>69</p>	<p>The methodology used to estimate the level of broadband adoption at "baseline" was by conducting telephone surveys of randomly selected households throughout rural Minnesota. Approximately 4,300 completed surveys were utilized to estimate adoption rates across rural Minnesota, as well as specifically in the 11 demonstration areas of the MIRC project. Subsequently we worked with a third party vendor (ID Insight) to track unique IP addresses conducting Internet transactions in the same selected regions. We used these changes in unique IP addresses to estimate new broadband subscriptions and then to calculate current broadband adoption rates. At the beginning of the project the 11 MIRC communities were collectively lagging behind the rest of rural Minnesota in the adoption of broadband (61.7% vs. 64%). By the end of the project the gap had somewhat narrowed. Overall, the growth in broadband subscriptions throughout rural Minnesota grew at a pace of 10.3% during the MIRC project, increasing the overall adoption rate from 64% in 2010 to 70.6% toward the fall of 2012. However, most of the MIRC communities increased their adoption at a faster rate. In other words, while the MIRC communities began the project somewhat further behind the rest of rural Minnesota, their average growth rate (11.94% - ranging from a low of 9.31% (Leech Lake Band of Ojibwe) to a high of 15.9% (Cook County)) was close to 5 percent faster than the rest of rural Minnesota, thereby closing that gap somewhat.</p>
<p>6. Please describe the two most common barriers to broadband adoption that you have experienced this year in connection with your project. What steps did you take to address them (600 words or less)?</p>	
<p>According to MIRC project evaluator University of Minnesota Crookston's EDA Center, the six socio-economic factors which are either known to impact broadband adoption in communities or one would intuitively expect to impact adoption, include: median income, percent of families in poverty, median age, percent of the population between the ages of 5 and 19; percent of the population 65 and older, and the percent of the population 25 and older who have taken some college classes or earned any undergraduate, graduate or professional degree.</p>	
<p>The two most common barriers to broadband adoption experienced to date have been and remain socio-economic and demographic: elderly and low-income residents have substantially lower broadband adoption rates than the general population. This is an especially big problem in rural Minnesota, as we have a disproportionate number of elderly and low-income residents. Accordingly, the MIRC project focus has been on closing the adoption gap, including between rural and urban residents. One strategy has been to increase access on the part of low-income families to computers and internet subscriptions. MIRC partner, PCs for People, has distributed 2,067 refurbished computers (more than double their goal) to low-income families who have never before owned computers (average household income of \$12,147) in 65 (rural only) of Minnesota's 87 counties. PCs for People reports that this figure represents 5,876 people, with 3,184 of these being school-aged children. MIRC provided PCs for People its first opportunity to work outside the Minneapolis-St. Paul metro area. MIRC provided PCs for People reported: "We developed new relationships that we hope will last many years beyond this project." Their report highlights three types of new relationships built: 1) with communities: many of the communities have shown an interest in continuing to partner with PCs for People to bring technology to their low-income citizens through mobile refurbishing events; 2) Regional Development Commissions (RDCs): PCs for People reported that "Partnering with RDCs was a great opportunity to get inside the business community in a region - including to identify sources of used computers; and 3) PCs for People Affiliates: by project end, PCs for People (PfP) established affiliate offices in three rural Minnesota communities (Willmar, Grand Rapids and Brainerd). These affiliates will function independently from PfP headquarters, while benefiting from PfP technical and business skills. Each has developed a business model tailored to fit their local community to provide an ongoing source of home computer access and service to low-income community members. To ensure success of the mobile computer refurbishing operation, PfP partnered with United Way, community action organizations, chambers of commerce, and local computer repair business partners. Through MIRC, Blandin Foundation developed a grant program called Digital Inclusion Community Partnership that helped incentivize and support partnerships with local incumbent service providers who offered discounted broadband subscriptions to support these computers.</p>	
<p>One more barrier encountered among rural "mainstreet" businesses not yet using digital communication networks was helping them understand the potential benefits to their business of making the digital leap. MIRC training and technical assistance provider partners found that hosting opportunities for local business folks to learn from one another ("business-to-business") rather than from an intermediary organization, were successful. For example, MNREM partnered with a number of demonstration communities to develop and sponsor a series of "social media breakfasts" at local restaurants. Local businesses were invited to present and hear from one another about how they were using social media to advance their businesses. In the community of Redwood Falls, the breakfasts proved to be excellent examples for the economic developer to prove the case for the need for more robust broadband in the community, after the participants took down server capacity when there was not adequate bandwidth to livestream at the event.</p>	
<p>7. To the extent that you have made any subcontracts or sub grants, please provide the number of subcontracts or sub grants that have been made to socially and economically disadvantaged small business (SDB) concerns as defined by section 8(a) of the Small Business Act, 15 U.S.C. 647, as modified by NTIA's adoption of an alternative small business size standard for use in BTOP. Please also provide the names of these SDB entities. (150 words or less)</p>	
<p>None.</p>	

8. Please describe any best practices / lessons learned that can be shared with other similar BTOP projects (900 words or less).

Lessons learned. Most of the lessons learned cited in last year's annual report remain true. We have repeated here some of those that seem to us to be most insightful, and added some as well:

While most incumbent providers and some citizens may disapprove of government entry into the telecommunications business, we have observed time and again that those communities with a third facilities-based telecommunications provider (public or private) enjoy better and cheaper service than those communities served only by a duopoly of providers. Few communities have been able to attract a third private sector provider without significant community involvement. It is our observation that local governments generally are the leaders in promoting enhanced broadband in their communities, usually in response to identified community needs voiced by business owners and citizens. Well-served communities rarely engage in significant discussions of municipal telecommunications investments. Broad-based citizen initiatives that bring together community champions from multiple sectors (health care, education, government, business) can be effective in identifying, describing, quantifying and aggregating demand.

Across wide swaths of rural Minnesota, the telecommunications network is quite old and inadequate for the task of providing ubiquitous high-speed Internet. In order to deliver high capacity broadband across the state this network must be upgraded. Some parts of rural Minnesota, due to demographics and terrain, cannot support market-driven telecommunications investment; the costs are too high with too few customers to generate returns on investment necessary to attract market capital. It appears that absent incentives for existing and prospective telecommunications providers to leverage private and public sector investments it will be difficult for Minnesota to reach its own ubiquity goals (10 to 20 Mb per second to every household in Minnesota by the year 2015) or Federal Communications Commission goals.

Aggregation of public sector broadband needs can help drive down costs. The state's Broadband Task Force continues to explore policy and finance options (including both public financing and public-private partnerships) to help address this fundamental market failure.

Lessons Learned

Given the socioeconomic and demographic barriers to increasing broadband adoption cited above, it is our experience that programs designed to increase computer access for low-income populations show potential to address these disparities, along with initiatives to demonstrate the benefits that broadband can bring to individuals, organizations and businesses and communities as a whole. However, recruiting these target populations to participate in offered programs remains a challenge. (Incidentally, the same is often true of those businesses most in need.)

Our experience in Minnesota supports research results showing that economic growth follows telecommunications investment. Companies seeking new locations quickly bypass communities without world-class broadband. Many of Minnesota's highest earners, including retired or semi-retired professionals, would prefer to live next to a lake or river or on a hobby farm. Unconnected communities stand little chance of attracting or retaining these potential taxpayers, not to mention recent college graduates.

"If you build it they will come," does not apply to broadband. Concerted, sustained cross-sectoral engagement at the community level is required to create the "culture of use" necessary to address the digital divide.

The biggest impacts are achieved when decisions are made closest to home. Empowering and resourcing local decision makers to set goals and then craft and implement initiatives to address those goals increases impact. It has been our experience that rural communities can achieve big results with relatively small amounts of funding when that funding is locally controlled.

Best Practices:

Communities know best and each community is unique. Involving citizens directly in articulating their community's broadband adoption and utilization goals can help catalyze the sustained engagement required for increased adoption.

Local leadership matters. Helping local broadband champions acquire and utilize the skills necessary for effective issue framing, building and sustaining relationships (using social capital), and mobilization can be an effective approach to building a community's capacity to achieve its self-defined broadband goals.

Broadband is not an end in itself. The need to increase broadband access and utilization can be effectively promoted as a means to the broader ends of increased economic vitality and improved quality of life. Our project has been successful in framing increased sustainable broadband use as part of an integrated economic development framework, "Intelligent Communities," that includes broadband infrastructure, knowledge workers, innovation, marketing, and digital inclusion.

Effective recruitment strategies -- both for technologically-challenged small business and for historically marginalized populations -- are intra-community, hyper-local, "high touch," and personalized.

Peer-based learning formats that encourage local businesses to share practices, questions and experiments with one another have proven to be a popular, low-cost, and easily sustainable tool for building a community's technological savvy.

Communication is key. Signage, community self-marketing, local media engagement, and use of social media (Facebook groups, etc.) are effective and low cost ways to spur and sustain energy and excitement around community projects, including broadband enhancements.

Recognizing and authentically engaging the talents and of young people as a key community asset can bring energy and sustainability to any community initiative. In our project, youth have served as co-trainers, technology mentors, partners in computer refurbishment projects, inspired community messengers (using video and other social media to promote their communities).

Cynicism and apathy can be powerful disincentives to citizen engagement. Effective meeting facilitation can make a big difference in keeping folks coming back to the planning and implementation table. Investment in training community leaders and champions to use participatory facilitation skills can pay big dividends in terms of ensuring sustained community engagement with the project.

Our experience suggests that the "Intelligent Community" framework for community and economic development is a best practice that helps community leaders see how workforce, infrastructure and inclusivity (as well as innovation and marketing & advocacy) are mutually interdependent aspects of community vitality.