



Champion Report

Theme Area: **Connectivity**

Cheryal Hills, Pam Mahling, Janelle Riley, Kevin Larson, Kristi Westbrock, Stacey Stockdill, Sally Fineday, Paul Drange, Anna Gruber, Janet Johnson, Rich Utech, Matt Killian, Mary Gottsch, Sheila Haverkamp, Megan Rehbein, Maureen Ideker, Brenda Thomas, Cindy Moore, Dawn Espe, and Chad Bullock

REPORTING PERIOD:

September 2016

What NEW success have you had in moving your theme goals forward over the reporting period?	
Goal 1: All Action Steps	<p>Since 2012, more than \$8.64 Million has been raised & leveraged for broadband related projects!</p> <p>Since 2012, NJPA has provided more than \$200,000 in support and assisted the Virtual Highway Project team by serving as Resilient Region Champions and on the Blandin Broadband Community Steering Committee. <i>New: August 2016: NJPA awarded \$100,000 to continue to expand broadband infrastructure. Thank you NJPA!</i></p> <p>Since 2012, Blandin Foundation has invested \$205,000 in R5DC/Virtual Highway projects:</p> <ol style="list-style-type: none"> 1. \$50,000 to R5DC for Connectivity of Fire Departments 2. \$17,000 to R5DC for PCø for People Development 3. \$8,000 for Tele-health project 4. \$75,000 to BBC 5. \$15,000 to City of Long Prairie for Pre-Engineering/Feasibility Study 6. \$10,000 to BLAEDC for Hackathon 7. \$15,000 Pre-Engineering/Feasibility Study Long Lake Township 8. \$15,000 WCTA and Todd Wadena Electric Cooperative for Pre-Engineering Study <p>BBC Projects 2014-2016: \$92,950 grants, \$77,000 match/leverage = \$169,950 Total</p> <ol style="list-style-type: none"> 9. \$1,000 planning grant 10. \$10,000 to Essentia Health for <i>Learn How to Add Telehealth to your Healthcare Setting</i> 11. \$10,000 to LLBO for <i>Replication of the Pc4People Project</i> 12. \$5,000 to CTC for <i>Use of Smart Boards in Early Childhood Project</i> 13. \$4,000 to BLAEDC for <i>Enhanced Marketing of our Technology Sector</i> 14. \$7,500 to BLAEDC for <i>Advanced Video Conference System</i> 15. \$10,000 to BLAEDC for <i>2016 Tech Ready Brainerd Lakes Area Hackfest</i> 16. \$6,000 to BLAEDC for <i>High Tech Center Research, Concept Planning, and 'Next Steps'</i> 17. \$9,950 to M-State for <i>What the Tech?</i> 18. \$5,000 to The Shop for <i>PCs for People</i> 19. \$10,500 to CTC for <i>Economic Impact of Broadband Infrastructure Expansion & Subscription</i> 20. <i>New August 2016: \$15,000 to BLAEDC for Brainerd Lakes Talent Recruiter Launch</i>
	<p>In addition, the NJPA and Blandin Foundation investments led to:</p> <ol style="list-style-type: none"> 1. DEED to CTC (\$2 Million from DEED with \$2.22 Million Match by CTC) 2. DEED to CTC (\$759,525 from DEED and \$839,472 match by CTC) 3. DEED to WCTA (\$193,515 from DEED and \$1,925,503 match by WCTA)
How are you working with any of the other RR Theme areas?	
Many Resilient Region Champions continue to write letters of support for State Broadband grants. Thank you!!	
List any Goals or Recommendations within the plan that your team are struggling to address?	
How to truly serve the needs of the region and make sure that the system is sustainable and scale-able.	

Project Summaries:

Resilient Region Fiber Reports:

CTC Phase I: Project Update: Fiber Build for Fairview Township and Fort Ripley. "Phase I has been completed and was so successful. Thank you for the impact The Resilient Region Champions and Blandin Broadband Community Steering Committee have made to these customers and to CTC. We are very proud of how it all turned out." Kristi Westbrook, COO, CTC

CTC Phase II: Project Update: "On Fort Ripley Phase II, we have been awaiting environmental approvals. Yesterday we received those approvals from MNSHPO and will be starting to plow Fort Ripley Phase II by June 15, 2016. Onward and upwards!" Kristi Westbrook, COO, CTC

WCTA PHASE I: Project Update: Technical work is progressing. Construct is underway; various stages of construction and customer installation. Report by: Chad Bullock, CEO

Resilient Region BBC Reports:

"Learn How to Add Telehealth to your Healthcare Setting" Report Submitted by:

Maureen Ideker, Director of Telehealth, Essentia Health **Project Description:** Five Central MN Counties located in the "Resilient Region 5 Development" area were offered education sessions on the basics of Telehealth and how to implement services.

Early Childhood Project Report Submitted by: Kristi Westbrook, Chief Operations Officers, Consolidated Telephone Company (CTC) **Project Description:** Teachers were trained and the youngest learners in the ISD 181 school district are utilizing the SMART boards that were installed on August 11, 2015. Recent discussions with the new Superintendent show a desire for the SMART board in the classroom project to continue and expand.

What the Tech? Report Submitted by: Janet Johnson, Instructor, M-State Wadena College Foundation. **Project Description:** Minnesota State Community and Technical College hosted a one-day tech expo event in Wadena that combined active learning by MNSCU students and displays and seminars for the general public.

The PCs for People Youth Project @ TheShop Submitted by: Cindy Moore, Director, The BBYC Shop **Project Description:** The PCs for People (PC4P) Youth Project @ TheShop continues to create a pathway for at risk youth to develop IT literacy skills.

Enhanced Marketing of Our Technology Sector Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation **Project Description:** The project continued to develop the High Tech Services marketing plan.

Advanced Video Conferencing System Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation **Project Description:** This project enhanced the "CTC Technology

Roomö at the BLAEDC/Chamber offices by bringing video conferencing, face to face connectivity, and remote presentation capabilities connecting key rural business entities and their members.

2016 Tech Ready Brainerd Lakes Area Hackfest Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation **Project Description:** During the process, participants had the opportunity to work alongside people from various sectors of the community, introducing them to an unlimited number of potential opportunities for future collaboration. Five projects came out of the 2016 Tech Ready Brainerd Lakes Area Hackfest:

High Tech Center Research, Concept Planning, and ‘Next Steps’ Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation **Project Description:** The öHigh Tech Center Research Projectö report was written and is being used as a guide to grow and attract workforce and technology business to our area, as well as be a resource for other communities interested in creating a tech center for their area.

Brainerd Lakes Talent Recruiter Launch Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation **Project Description:** This project was created to enhance the Brainerd Lakes Region as a viable business area by ensuring that a highly qualified workforce is available to the business community to support their growth and competitiveness.

LLBO Replication of the Shop PC 4 People project Report Submitted by: Sally Fineday, Wireless Telecommunications Business Manager, Leech Lake Band of Ojibwe **Project Description:** The Leech Lake Band of Ojibwe (LLBO) has responded to the lack of affordable broadband capacity in the tribal lands by developing and implementing its own telecommunications company in 2013. The company provides fixed wireless internet to citizens residing in the tribal lands. The Leech Lake Band of Ojibweø (LLBO) telecommunications company has been successful with its model in the cities of Cass Lake and Bena in meeting the needs of low income household in the tribal lands.

This plan includes the LLBOø telecom company and the Tribal College Library. The Leech Lake Telecom already sells low cost fixed wireless broadband to low income families and will be the distributor of refurbished computers. In addition, the Resilient Region Blandin Broadband Community had received a donation of 50 computers with their grant and have agreed to give the 50 computers to the LLBO broadband project.

BLANDIN BROADBAND COMMUNITIES

Final Narrative Report

Due September 30, 2016

Organization Name: Resilient Region Connectivity/Virtual Highway

Report Compiled By: Dr. Stacey Stockdill

Date Submitted: September 13, 2016

PC's FOR PEOPLE:

The Resilient Region BBC Steering Committee supported PCø for People in 3 ways: 1) Through distribution of the 50 PCs to Leech Lake Band of Ojibwe, 2) Through a grant to LLBO for a PCø for People project, and 3) through a grant to The Shop for their PCø for People Project. See Pages 23 through 27 for these reports.

STEERING COMMITTEE-LED ACTIVITIES:

1. Project Name: Resilient Region BBC Steering Committee/Connectivity Champion Work

Brief description of activity:

We developed a Steering Committee, members attended the BBC Kick Off in January 2015, met with Bill Coleman and Karl Samp in February, completed a self-assessment, organized and facilitated a March 2015 Community Visioning Meeting where 60+ attended and where goals and projects were identified, and used the meeting output to ask for project idea papers. Since that time, the BBC Steering Committee/Connectivity Champions have met by phone each month. Many of us have also attended quarterly face-to-face meetings with other Resilient Region Champions and Blandin Foundation conferences.

Major accomplishments/impact:

Through the support of Blandin Foundation, NJPA, and the Minnesota Office of Broadband Development we have raised and leveraged more than \$8.64 Million for broadband related projects.

For the BBC work, the region was awarded \$92,950 and leveraged more than \$77,000; a total investment in the region of \$169,950.

Resources Leveraged (Funds, technical assistance, and other resources) for BBC Projects

Grantee	Project	Grant Amount	Match Amount	Total
Essentia Health	<i>Learn How to Add Telehealth to your Healthcare Setting</i>	\$10,000	\$11,600	\$21,600
LLBO	<i>Replication of the Pcs for People Project</i>	\$10,000	\$5,100	\$15,100
CTC	<i>Use of Smart Boards in Early Childhood Project</i>	\$5,000	\$4,500	\$9,500
BLAEDC	<i>Enhanced Marketing of our Technology Sector</i>	\$4,000	\$2,700	\$6,700
BLAEDC	<i>Advanced Video Conference System</i>	\$7,500	\$5,000	\$12,500
BLAEDC	Hackfest	\$10,000	\$3,500	\$13,500
M-State	<i>What the Tech?</i>	\$9,950	\$6,600	\$16,550
The Shop	<i>PCs for People</i>	\$5,000	\$5,000	\$10,000
CTC	<i>Economic Impact of Broadband Infrastructure Expansion & Subscription</i>	\$10,500	\$3,000	\$13,500
BLAEDC	<i>Brainerd Lakes Talent Recruiter Launch</i>	\$15,000	\$30,000	\$45,000
BLAEDC	<i>High Tech Center Research, Concept Planning, and 'Next Steps'</i>	\$6,000		\$6,000
TOTAL		\$92,950	\$77,000	\$169,950

The amounts do not reflect the tremendous amounts of time each of these grantees, Region Five Development Commission Staff and BBC Steering Committee have put into the BBC project. In addition, Maureen Ideker, Rick Utech, Sally Fineday, and Kristi Westbrook have used company and personal resources to attend the required state-wide BBC meetings. We are truly grateful to everyone who worked so hard to make the BBC project a success!

What, if any, plans are in place to sustain this work into the future?

The Connectivity Champions and Blandin Broadband Community Steering Committee would like to continue as a BBC Alumni. The steering committee would remain essentially intact and would expand to include some important new partners. Coming on board will be: Chad Bullock (CEO/General Manager) West Central Telephone Association (WCTA). Pam Mahling will continue to serve in her new role as Special Projects and Development Associate for Honor the Earth. Lee Seipp, Regional Coordinator, Region Five Development Commission will support Dawn Espe as our R5DC contact.

GRANTS IN GREATER DETAIL STATUS UPDATE CTC AND WCTA FIBER PROJECTS

CTC PHASE I & II

AUGUST 2016 REPORT:

Report by: Kristi Westbrook, COO, CTC

We have now closed out Phase I of the Fairview Fort Ripley project. This is the accomplishment:

- 100% Percentage of project completeness based on project schedule
- 716 Number of households, establishments passed, since the beginning of the project
- \$5,665 cost per establishment passed (for project overall)
- 108.14 miles Number of miles/feet of fiber installed overall, if applicable, since beginning of the project
- \$37,512 cost per fiber mile (for project overall)
- 337 Total number of customers connected to state speed goal service and above (10 Mbps download & 5 Mbps upload) thus far.
- Number of Households connected: 315
- Number of businesses connected: 19
- Number of community institutions connected: 3 (schools, township halls, fire stations, etc.)
- 47.1% Current take rate out of possible target customer base in grant project area

We are now working on Phase II and construction is underway!

õPhase I was so successful. Thank you for the impact The Resilient Region Champions and Blandin Broadband Community Steering Committee have made to these customers and to CTC. We are very proud of how it all turned out.ö Kristi Westbrook, COO, CTC

õOn Fort Ripley Phase II, we have been awaiting environmental approvals. Yesterday we received those approvals from MNSHPO and will be starting to plow Fort Ripley Phase II by June 15, 2016. Onward and upwards!ö Kristi Westbrook, COO, CTC

WCTA PHASE I: BORDER TO BORDER BROADBAND PROJECT

MOST RECENT - AUGUST 2016 REPORT:

Report by: Chad Bullock, CEO

Completed:

- *Prepare detailed maps, census blocks for application.*
- *Begin route review for right-of way to determine existing easements and permits.*
- *Consultation with underground contractors about timelines, rates, material orders.*
- *Obtain property descriptions to prepare private property easements needed.*
- *Transmit Environmental notifications to appropriate organizations, hire additional review as required.*
- *Obtain PE Certifications on design, Budget and Scalability of system.*
- *Complete Environmental study and Archaeological study if required.*
- *Prepare detailed staking sheets with unit designations.*

In progress:

- *Obtain permits from DNR, MN DOT, County Highway agencies as required*
- *Obtain easements from private landowners.*
- *Assemble material lists and schedules for construction with route priorities.*
- *Order fiber optic cables, splicing material and pedestals for 2015 construction.*
- *Meeting with Engineer and contractors on construction schedules*
- *Contact prospective customers along construction routes for services.*
- *Construction underway; Various stages of construction and customer installation*

25% Percentage of project completeness

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS

Final Revised Report: September 2016

Project Name òLearn How to Add Telehealth to your Healthcare Settingö

Report Submitted by: Maureen Ideker, Director of Telehealth, Essentia Health

Grant Amount: \$10,000

Amount Leveraged: \$11,600

Current Status: 100% complete

Project Description: Five Central MN Counties located in the òResilient Region 5 Developmentö area will be offered education sessions on the basics of Telehealth and how to implement services.

Significant accomplishments this reporting period: This grant project's goals and objectives have been completed as of this report. The reconciliation of the budget needs to be completed yet and turned in to the Blandin Foundation. All 7 classes have been conducted at the five Resilient Region 5 counties and 64 attended. The interactions and collaboration remained at a very high level in all the classes. The evaluations were all positive and feedback for changes were incorporated into each upcoming class.

Challenges encountered during this reporting period and/or anticipated during the next period: The class sizes varied from 2 to 25 attendees. One class in Morrison County had no one sign-up and needed to be rescheduled; it ended up with 25 attendees. One challenging aspect of each class was working with the varying levels of audio-visual and videoconferencing capability. It all worked out in the end, but assistance was really necessary at each site. Volunteers from the specific sites were very helpful.

One challenge that was encountered was assembling the invitation list for each county. It required much more time and hands-on work than anticipated. To assure participation individual contacts were needed to recruit appropriate and targeted professionals. Professional relationships helped with this and many phone calls and e-mails contacts were needed.

Please comment on any ways in which Blandin staff/consultants might provide assistance or value to project implementation: Blandin was helpful in terms of communication on the Blog of upcoming classes. In looking back, a mailing list from Blandin might have helped. Instead, a Region 5 list was used, but it was very outdated.

Is there anything else about this project about which Blandin Foundation should be aware? Attendees did express appreciation for these classes and the Blandin sponsorship.

Please comment on anything you're learning that might impact project implementation or outcomes. Budget may not have reflected the time allocations correctly, main staff and preparation time was under-estimated.

What, if any, plans are in place to sustain this work into the future? This project will be sustained by participants who identified projects actually doing them. I can speak to Essentia Health and a developing community partnership for sharing videoconferencing equipment and clinic location space for video visits with Northern Pines Mental Health and Lutheran Social Services. Two groups of patients will be served: the shared patients who receive care from both Essentia Health and one of the mental health centers and those that are not current patients of Essentia Health. That development work has started this summer already and has a 4-6 month projected timeline.

Class participants are implementing telehealth programs and services as a result of the classes. An example of this is tele-medical weight loss services starting between the Essentia Health Baxter Clinic and the Ely Clinic obesity specialists. Also, the dietician from Brainerd Hospital will implement a tele-nutritional services to 5 rural clinics in the Resilient Region 5 counties. She attended the class to learn the basics and see if there was a fit for her specialty.

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS, continued

Final Revised Report: September 2016

Project Name: Early Childhood Project

Report Submitted by: Kristi Westbrook, Chief Operations Officers, Consolidated Telephone Company (CTC)

Grant Amount: \$5,000

Amount Leveraged: \$4,500

Current Status: % complete: 100%

The Early Childhood Project. The youngest learners in the ISD 181 school district are utilizing the SMART boards that were installed on August 11, 2015. The 4 SMART boards were installed with projectors for the ECFE program. All 8 teachers were trained on SMART board on August 24th for 3 hours by a district employee. Ongoing trainings and teacher collaboration regarding the implementation of the SMART board in the classroom will continue during teachers' professional learning communities. The district will also review how implementation is going and teacher comfort level to determine if future full group trainings are needed.

Teachers have learned how to create learning tools and lessons on the SMARTboard to allow students to manipulate and work on the screen. All SMARTboard classrooms have created check in procedures using the board as well as many other visual opportunities like picture schedules and visual timers that are very helpful for preschool aged children.

Six Mini ipads have arrived and need to be assigned out to teachers. ISD181 lead teacher, Tahnee Flowers, has worked with CTC to create specific training modules. CTC has created those videos which will be very helpful for teachers to review at their leisure and refer to as they work with the device. Ms. Flowers goal is to provide some optional after school times for teachers with ipads to gather together and explore on the ipads together.

Our goal is to continue to integrate learning opportunities using the SMARTboard and ipads and increase staff's comfort level with the technology throughout this school year.

Superintendent Bob Gross stopped by while the classroom was learning about the letter Bb so he wrote his name on the SMARTboard for everyone to see. The one of the boy drawing a person was an extension to the mat man create where they built it and then made their own person.



Teachers have continued to seek funding to upgrade technology in their classrooms.

<http://www.brainerddispatch.com/news/3743532-grants-boost-technology-isd-181-classrooms>

An updated report regarding the value of this program came from Tahnee Flowers, Early Childhood Coordinator, and Brainerd Public Schools:

Things are going very well with the new technology! Devices are working great. We have had more training from our district technology team around implementation and integration.

Since our Blandin grant we have also secured a Brainerd Public Schools Foundation grant as well as a personal donation to purchase additional ipads so that every teacher now has an iPad. We also purchased blue tooth speakers and 2 apple TV devices. Blandin was the catalyst that has helped us accomplish some of our long term technology goals in early childhood. We are excited to continue our implementation using what we have learned and experienced using the devices purchased with your generous grant dollars.

Here are a couple of recent classroom stories using the technology:

One preschool room spend time learning the "3 little pigs" story. They learned about props and characters of a story. They developed the props and practiced acting out the play. The teachers were able to record the students acting out the play using the iPad from the Blandin grant and email it to the parents. They also had a "movie showing" on their classroom SMARTboard so that the class could watch themselves acting out the play. The children and parents loved it!

One preschool class was talking about building towers etc. and the conversation came up about a wrecking ball. Many of the children did not know what a wrecking ball was. The teacher used her SMARTboard to show the class videos of a wrecking ball in action. The kids loved it and wanted to make their own wrecking ball. So they got a ball and a string and made their own wrecking ball. During station time groups of kids worked together to build towers and buildings and use the wrecking ball to crash them down.

These are a couple stories of many great things happening in our classrooms using technology to expand on the learning going on.

What, if any, plans are in place to sustain this work into the future?

The early childhood program is completed. All of the equipment and materials have been in use for the past year at Early Childhood. All reports back from administration are very positive and the tools were used consistently. Last week we met with Laine Larson, the new Superintendent of Schools. She is a large proponent of one to one devices in the school system. Moving forward, we will be working with ISD 181 on these initiatives and the add-on equipment will be leveraged with the equipment that is currently in use.

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS, continued

Final Report: September 2016

Project Name: *Economic Impact of Broadband Infrastructure Expansion & Subscription*
Report Submitted by: Kristi Westbrook, Chief Operations Officers, Consolidated Telephone Company (CTC)

Grant Amount: \$5,000

Amount Leveraged: \$3,000

Current Status: 100% complete

Project Description: CTC received a \$5,000 grant to work with Vantage Point Solutions (VPS) to: 1) Review Broadband Impact Studies and 2) Survey Impact Households of the households and businesses who became new customers with the MN DEED Office of **Broadband Development Phase I** grant (the first round of State of MN funding). This project evolved from the original community visioning sessions and continued to percolate as a primary need to provide the region and MN Office of Broadband Development with data regarding the impact from the state, regional and local fiber investments of both in terms of "subscription" and the impact that is having on all sectors (public, private, nonprofit and philanthropic) as well as on the ability for the region to expand in the areas of economic development, telework, telehealth, online learning, efficiency and effectiveness of government of and quality of life for all. Vantage Point Solutions (VPS) is a customer-focused, technology-driven engineering and consulting firm serving the telecommunications and financial industries.

Significant accomplishments this reporting period: The broadband impact study report has been completed. It obtained feedback from customers who were served in the first MN Border to Border grant for Fairview and Fort Ripley Townships. There are key findings in this report that continue to justify the need for Border to Border robust broadband in our state.

Key findings include:

Half of the respondents own four or more personal computing devices and 70% have two smart phones. The older adult population surveyed is far more connected than the older adult population nationally. 14% of respondents are no teleworking.

Over 20% have a home based business or farm and 36% reported that internet reduced their overall operating costs.

9% of these respondents plan to start a home based business in 1-3 years.

30% are utilizing their internet connection for health care services.

40% said they could not live in a home without reliable high speed internet.

Challenges encountered with this project. We were hoping for 200 responses. We obtained responses from 131 customers. We will continue to tweak and perfect this process in hopes to have it more unified for other projects within the state

What, if any, plans are in place to sustain this work into the future?

This report will be leveraged by using the statistical evidence acquired to bring additional grant funding into Region 5 and also to educate legislators on the impact of broadband and the grant programs in their communities. In addition, support from NJPA will enable CTC and WCTA to expand this study to include customers served through the second round of Border to Border Broadband grants. The report will be posted on the Resilient Region Website in October.

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS, continued

Final Revised Report: September 2016

Grantee Name: M State Wadena College Foundation

Report Submitted by: Janet Johnson, Faculty Member and Denise Layman, Director M State Wadena College Foundation

Project Name: What the Tech? Technology Expo

Grant # G-2015-0554

Grant Amount: \$9950.00

Grant Match: \$6,600

Percent Complete: 100%

Project Description: Minnesota State Community and Technical College is hosting a one-day tech expo event in Wadena that will combine active learning by MNSCU students and displays and seminars for the general public as part of the Broadband Program in rural Minnesota

What was accomplished with the grant?

The grant allowed Minnesota State Community and Technical College ó Wadena (M State) campus and College Foundation to host a technology expo. M State met the goal of 15 exhibitors coordinating with 22 businesses within Region V who were very receptive to sharing new technologies they were using to improve their business or technologies to help improve everyday living. Considering today we are entering a technology era of "The Internet of Things" (IoT), with hundreds of personal and household gadgets connecting to the Internet, M State and the exhibitors were able to connect and demonstrate some of these technologies. Exhibitor information was shared with members of Region V.

Here is a sample of some of the exhibits:

- M State HVAC program thermostat with an iPhone app to control a household HVAC system.
- West Central Telephone Association demonstrated a "secure" house including video surveillance, motion detection for light controls, intruder alerts, all controlled through a phone app.
- The Maszlowski Wellness and Research Center with the help of M State students connected tools such as a **Fitbit** and fitness apps on the iPad.
- Lakewood Health Systems demonstrated a **telemedicine** doctor's visit.
- Joey's PC demonstrated backup and recovery
- Friendly Rider showed their new website that uses GPS tracking to show bus location and enables riders to schedule a pickup and order gift certificates.
- Todd Wadena Electric and Wadena City Water and Light demonstrated technologies to **manage energy usage** and how they are working to **develop smart grid technologies**

Another important accomplishment was the expo met the goal of providing M State networking students the opportunity to design, test and build a network responding to the needs of the exhibitors and complying with the security requirements of MNSCU. The students were involved in all aspects of the project ó creating Google Docs surveys, contacting exhibitors,

working on the marketing, equipment pricing and selection, network design/build, expo set-up, tech support. It was exciting to watch the students working together with the exhibitors to connect all of the technologies. Two halls of the campus were technology as far as the eye could see. The exhibitors commented in the survey they were very impressed with the customer service and technical support received ó quote, õStaff was wonderful.ö

The third accomplishment was hearing comments from the students and community members attending the expo regarding how much they were learning about the new technologies. The expo had roughly 100 attendees and provided approximately 170 plates for lunch when counting exhibitors. The number of attendees did not meet the goal of 200, but cold calling to area businesses brought more individuals to the event. Many exhibitors commented for the first year of an event the attendance was as expected and exhibitor survey results indicate they are all willing to return. The expo provided an opportunity for business to connect with the community and allowed different business groups to connect and share ideas with each other. There were training seminars scheduled throughout the expo topics included: wireless networking, network-how it works, identify theft, secure online banking, backup and recovery, IMS systems beyond the classroom, technology in the classroom.

What was learned?

We learned there are many businesses excited to exhibit their technology and yet many of the area businesses are just starting to look at upgrading their technology and did not feel ready to õshowö anything. We learned that many of the IoT devices are not capable of supporting 802.1x advanced security protection that requires user information in the authentication information. Another important lesson is you can market an event and personally reach out to the communities, but the number of attendees depends on individual interest, weather conditions and other factors outside our control. Many attendees hesitated approaching the exhibitors to ask questions and had to be convinced to complete the survey.

A Summary of how funds were expended

The budget for food, equipment and marketing was very close to the budgeted amount. The college offered students a free lunch preparing and serving the leftover food so it would not go to waste. We purchased Monitors, PCs, Fitbit, power and lighting controls and security equipment, routers, switches and firewalls for the event. Students used over 1000øof cable making connections between the switches, routers and connecting devices. The marketing included Facebook posts, postcards, posters, flyers both hand- delivered and mailed to area businesses and schools plus newspaper ads in Rural Living magazine and the Todd Wadena courier. The students with support from our marketing department created and mailed a thank you flyer to all of the participating exhibitors. There were 13 stipends mailed to exhibitors for their organization ó exceeding the 10 budgeted.

What, if any, plans are in place to sustain this work into the future?

The planning tools and project template for organizing and hosting an Internet of Things (IoT) event exists. The event shed light on two important issues - Industry is excited to share their technologies and IoT capabilities and there are security concerns and issues when IoT devices attempt to connect to secure production networks.

Responding to industry requests, Minnesota Advanced IT and Minnesota State CSCI/IT faculty worked this summer on an IoT research grant project. The project tasks are to create a list of current IoT education and training information along with a list of IoT references and work with industry to identify their needs related to IoT education. Share the findings in a central repository that all Minnesota State and K-12 schools are able to access. Share the findings with the Association of Computer Machines (ACM) Education groups for instance the Special Interest Group for Information Technology Education (SIGITE) at their fall conference.

MN Advanced IT plans to use the findings to write IoT curriculum and make the curriculum available to K-12 and MNSCU programs. Some of the faculty had proposed sharing the findings by hosting another Technology Expo but there are not any concrete plans for hosting an event.

I attended an IoT conference this past spring that was hosted by MN Advanced IT and the value of collaborating with industry at an event such as the Technology expo was discussed.

Sustaining the work is not through the Blandin Group, but working with all Minnesota State CSCI/IT faculty and MN Advanced IT.

List of Exhibitors

Group	Topic
Knute Nelson Home Care and Hospice	GrandCare - customizable smart home technology which includes: blood pressure cuff, glucometer, oximeter, thermometer, scale and unlimited monitors and sensors. Personal Emergency Response Systems Medication Dispensers
Rural Minnesota CEP, Inc. / Wadena WorkForce Center	We will be using laptops to show customers how they can look for work on the internet, explore careers, find out what jobs are in demand, etc.
West Central Telephone	Smart Home Automation, Surveillance & Security Display
Friendly Rider Transit	New Website which will have online reservation form, Online purchase of pass and tickets, plus integration with social media and videos.
Maslowski Wellness and Research Center	Information on Fitness on Demand, phone apps to use related to fitness/wellness,
Arvig	We would bring a network to demonstrate how it works/how we create a network.
Minnesota State Community and Technical College	Smart board, smart pad, tablet, document camera, webcam, microphone, laptop (2), and tablet (2)
Arvig	Farm/Ag Security
Minnesota State Community and Technical College	Learning Management System - Online Learning Tools and Resources
Central Minnesota Credit Union	Internet and Mobile Banking
West Central Economic Development Alliance (WCEDA)	County Wide Business Directory
Ryan's PC Repair and Media Transfer Service	Audio Video
Mid Minnesota Federal Credit Union	Online and Mobile Banking
Forum Communications	Digital Advertising
Lakewood Health System	Telehealth / Telemedicine
Todd Wadena Electric Cooperative	Mobile technology
Wadena City Water and Light	Energy saving bulbs - rebates
Wadena Deer Creek Schools	Technology in the Classrooms
Tri County Hospital	Digital Mammogram, One Chart

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS, continued

Final Report: September 2016

Project Name: Video Conferencing System at the BLAEDC/Chamber Facility

Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation

Grant Amount: \$7,500

Grant Match: \$5,000

Current Status: 100% complete

Project Description: This project will enhance the CTC Technology Room at the BLAEDC/Chamber offices by bringing video conferencing, face to face connectivity, and remote presentation capabilities connecting key rural business entities and their members. This video conferencing initiative will allow access for one-on-one meetings, for daily business operations, or the opportunity for online presentations. The project will include the installation of one high definition pan and tilt camera, one microphone, and a two speaker audio system to accommodate small to large group meetings and presentations.

Significant accomplishments this reporting period:

BLAEDC, the Brainerd Lakes Chamber, CTC and a Marco representative met on February 29, 2016 to review the plan of the Video Conferencing System installation. The Marco representative informed us that the system would work better in a smaller setting, and it was decided that we move the system to the RiverWood Bank room. Sheila has since connected with Diana Daigle and Mary Magnuson to approve the change of location for the system. We have received approval for the change to the RiverWood Bank room as of March 11, 2016. The system was installed the week of May 9th and is now fully functional! We have not had anyone who has rented to room use the technology yet, but both the chamber and BLAEDC have used it and it works great!

Challenges encountered during this reporting period and/or anticipated during the next period:

The main challenge we encountered was realizing the system provided by Marco would not sufficiently meet the needs of the large CTC Training Room. Instead it was proposed that we move the system into the small RiverWood Bank Room. Other than that, everything went smoothly!

Please comment on any ways in which Blandin staff/consultants might provide assistance or value to project implementation:

We are finished with the project, so we should not need any assistance.

Is there anything else about this project about which Blandin Foundation should be aware?

Not at this time.

What, if any, plans are in place to sustain this work into the future?

This system is currently in use and working effectively. We will look at options to have a videoconferencing system put in the CTC Room in the future.

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS, continued

Final Report: September 2016

Project Name - Enhanced Marketing of Our Technology Sector

Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation

Grant Amount: \$4,000

Grant Match: \$2,700

Current Status: 20% complete

Project Description:

This project will continue developing and implementing our Tech Services marketing plan with high priorities around awareness building and other media outlets. This grant would help us to market and enhance our website and to explore possibilities for billboards, articles, stories on a statewide level, and other avenues of marketing.

Significant accomplishments this reporting period:

Sheila and Megan have met with our marketing consultant to review and update the Tech Services Marketing plan for 2016. As part of our goals for 2016, our marketing consultant will be producing a series of articles for local and state-wide newspapers based on local technology companies, our Tech Ready brand, and our efforts to build and attract a skilled workforce to the area. His work plan for the remainder of 2016 is included.

Challenges encountered during this reporting period and/or anticipated during the next period:

We don't foresee any issues at this time.

Please comment on any ways in which Blandin staff/consultants might provide assistance or value to project implementation:

We do not need assistance at this time.

Is there anything else about this project about which Blandin Foundation should be aware?

Not at this time.

What, if any, plans are in place to sustain this work into the future?

Marketing our area as Tech Ready is an effort we will continue for years to come. We will continue to support our area technology companies and use marketing strategies to attract skilled talent to our area. Our marketing plan was designed to guide BLAEDC over the next few years at which time we will reevaluate.

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS, continued

Final Report: September 2016

Project Name: Brainerd Lakes Area Talent Recruiter Launch

Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation

Grant Award: \$15,000

Grant Match: \$30,000

Current Status: 20% complete

Project Description: The Brainerd Lakes Area Talent Recruiter Launch program was primarily created to enhance the Brainerd Lakes Region as a viable business area by ensuring that a highly qualified workforce is available to the business community to support their growth and competitiveness.

BLAEDC will hire or contract with an individual to:

1. Support BLAEDC in growing and expanding the Business in Crow Wing County
2. Establish working relationships with Companies in the Brainerd Lakes Area and provide them assistance and advisory services on how best to attract and retain top professional talent.
3. Assist firms to strategically promote & market the Brainerd Lakes Area to help with talent recruitment (college campuses, industry associations, industry events, social media, state and national news stories, etc.)
4. Create process, communication strategies, and knowledge path to understand positions companies are recruiting for.
5. Recruit key talent for Brainerd Area Companies (develop hiring budget with company, advertising, communication methods, pre-screening process, coordinate interviews, etc.)

Significant accomplishments this reporting period:

BLAEDC has finalized the preliminary details, and has gotten the program approved by the BLAEDC board. We are currently interviewing for the position and will host a meet and greet in the next few weeks with the final two candidates.

Challenges encountered with this project.

So far, there have been no challenges.

Is there anything else about this project about which Blandin Foundation should be aware?

Additional funding resources during the first few years of the program would be very much appreciated and helpful to the success of the program.

What, if any, plans are in place to sustain this work into the future?

BLAEDC has created a detailed budget projection to sustain this program. The program will continue to succeed with membership dues and finder's fees.

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS, continued

Final Revised Report: September 2016

Project Name: 2016 Tech Ready Brainerd Lakes Area Hackfest

Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation

Grant Award: \$10,000

Grant Match: \$3,500

Current Status: 100% complete

Project Description:

The Tech Ready Brainerd Lakes Area Hackfest was a two-day event that leveraged the technological and creative assets of local residents for social and civic good. People with ideas to influence web and mobile applications in support of projects for improving the quality of life in our region, worked alongside application developers to design creative data and communications solutions.

The Friday, May 6th social event and Saturday May 7th hackfest were hosted by the Blandin Foundation, the Brainerd Lakes Area Economic Development Corporation, Region Five Development Commission, and the Rural Information Technology Alliance program at Central Lakes College.

The Hackfest pulled together the talents of a diverse group of local residents around the goal of enhancing the area's overall quality of life. It connected interesting adults and students who might otherwise never have a chance to collaborate with, and learn from each other. During the process, participants had the opportunity to work alongside people from various sectors of the community, introducing them to an unlimited number of potential opportunities for future collaboration.

Five projects came out of the 2016 Tech Ready Brainerd Lakes Area Hackfest:

1. Virtual Welcome Wagon ó App or mobile friendly website to promote social connections, clubs, associations, event calendar/mapping, service opportunities
2. Lakes Area Service Opportunities - App or mobile friendly website where people can add potential community or personal projects/needs (ex. Elderly couple needs trees removed), as well as add their services (ex. Someone who is willing to volunteer to grocery shop for someone in need once a week).
3. County Historical Information ó App or mobile friendly website that provides cultural history information for self-guided tours
4. High School Information App for Students/Parents - App or mobile friendly website to distribute student information. Engage students who are not checking e-mail or other calendars.
5. Local Foods Locator ó App or mobile friendly website to help consumers locate which restaurants serve local foods and points out where farms the Sprout source from are located

Detailed summaries and outcomes of each of the five projects can be found at www.techreadyhack.com. Following the event, BLAEDC collected feedback from participants. Feedback was overall positive and many attendees were interested in attending or volunteering for a future hackfest event.

Significant accomplishments this reporting period:

BLAEDC hosted the first ever Tech Ready Brainerd Lakes Area Hackfest.

Challenges encountered with this project. N/A

Is there anything else about this project about which Blandin Foundation should be aware? No.

What, if any, plans are in place to sustain this work into the future?

Many attendees communicated their interest in attending or volunteering for a future event. BLAEDC will need to decide if we have the ability to host another hackfest event, or if we should support another organization with hosting a future event.

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS, continued

Final Report: September 2016

Project Name: High Tech Center Research, Concept Planning, and Next Steps Outline

Report Submitted by: Sheila Haverkamp, Executive Director, and Megan Rehbein, Office Administrator, Brainerd Lakes Area Economic Development Corporation

Grant Amount: \$6,000

Current Status: 100% complete

Project Description:

BLAEDC, along with a Steering Committee made up of well-educated, professional individuals in the Brainerd Lakes area explored the possibility of a high-tech live/work center for our area. This tech center would continue to build on our region's technology sector initiatives by not only connecting technology employees and entrepreneurs with each other, but also by attracting talent to our area and creating an environment that is efficient and also welcoming to the technology community.

Initial research on the types of high-tech centers available today and what options would be best for our community was compiled by a summer intern. Once these options were identified, we determined the possible options and toured Brainerd buildings and sites that could potentially be the future site of the center. We finished working with our summer intern in August and hired a professional writer to put the finishing touches on our "High Tech Center Research Project" document. This document is to be used as a continuum to grow and attract workforce and technology business to our area, as well as be used as a resource for other communities interested in creating a tech center for their area.

Significant accomplishments this reporting period:

Completed in 2015. See accomplishments above.

Challenges encountered with this project.

This project and document is meant to be a first "stepping stone" to a live/work tech center proposal for our area. During our research, we have found that there are community professionals interested in being involved in this initiative and we do have possible locations that would work, but we need to dig deeper and create more concrete strategies if we want to act on this idea in the near future.

Is there anything else about this project about which Blandin Foundation should be aware?

No

What, if any, plans are in place to sustain this work into the future?

There are no immediate plans to build a tech center, however this document will serve as a great reference should the opportunity arise.

PC's FOR PEOPLE:

The Resilient Region BBC Steering Committee supported PCø for People in 3 ways: 1) Through distribution of the 50 PCs to Leech Lake Band of Ojibwe, 2) Through a grant to LLBO for a PCø for People project, and 3) through a grant to The Shop for their PCø for People Project.

PCø FOR PEOPLE: LLBO

Report Submitted by: Sally Fineday, Wireless Telecommunications Business Manager, Leech Lake Band of Ojibwe

Brief description of activity implementation during the grant: The primary goals are to increase digital literacy and decrease the digital divide in the LLBO tribal lands by creating a means for low income families to access necessary computer equipment to adopt their broadband capacity VIA a new partnership and becoming an affiliate member with the PCs for People Organization of St. Paul, MN.

Significant accomplishments/impacts: This grant initially engaged the Boys and Girls Club of Cass Lake. However, due to many obstacles, the grant was redirected to the Leech Lake Band of Ojibwe who will administer the grant via becoming an affiliate member of the PCs for People Organization of St. Paul. The LLBOø Telecom staff will refurbish and operate the project and the LL Tribal College will assess and both will record for measuring the outcomes. To date, the affiliate membership agreement was redrafted to fit the needs of both the PCs for People and the Leech Lake Band of Ojibwe, a tribal nation; and now is on its last review before the program may be administered. **There were 50 PCs for People computers and monitors that were donated to the Leech Lake Band of Ojibwe for distribution.** There has been a new relationship with the Leech Lake Tribal College Library that will enable the College to assess for literacy and document for reporting. The distributions will be ongoing at the Leech Lake Band of Ojibwe. Currently, through another new relationship with the Veteranø Administration of St. Cloud, there are 20 computers donated by the Veteranø Administration and is pending refurbishing after the execution of the affiliate agreement.

Suggestions for how your community's partnership might have been improved. A focus on flexibility and perseverance has helped this project to stay in the tribal lands of the Leech Lake Band of Ojibwe.

Will a PFP-type activity continue in your community once the BBC program ends? If so, please describe: It is a good fit for the community where 53.8% of household are below poverty level and many have not had a personal computer in their home. With the help of Blandin and Region 5ø increasing awareness of lack of broadband in the tribal lands, it is hopeful that soon will be history.

BLANDIN FOUNDATION-FUNDED COMMUNITY PROJECTS:

Project Name: Leech Lake Band of Ojibweø Pcs for People

Grant Amount: \$ \$10,000

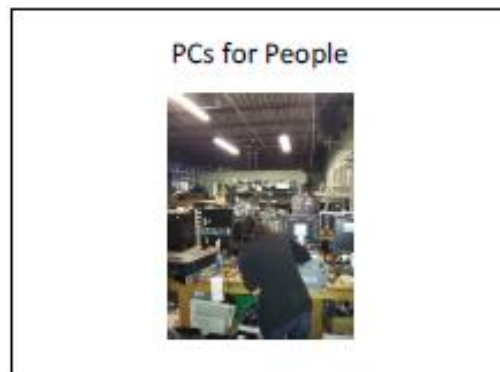
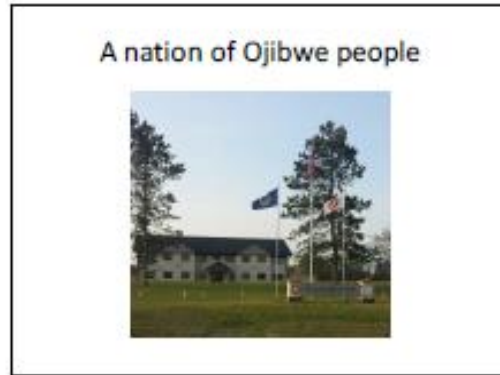
Current Status: 25%

Significant accomplishments this reporting period: An agreement is near ready to execute

Challenges encountered with this project: Many unforeseen obstacles occurred, but perseverance has paid off.

Is there anything else about this project about which Blandin Foundation should be aware? It is a project that has potential to bring about a great level of digital literacy and will inevitably decrease the digital divide in Indian Country.

What, if any, plans are in place to sustain this work into the future? The project will be supported from its own income and with subsidies from grants and Leech Lake Band of Ojibwe donations.





FOR MORE INFORMATION

Sally Fineday, Business Manager
Leech Lake Telecommunications
218-335-3490

Final Report: September 2016

Report Submitted August 2016 by: Cindy Moore, Director, The BBYC Shop

Project Description:

The PCs for People (PC4P) Youth Project @ TheShop creates a pathway for at risk youth to develop IT literacy skills. Working within Microsoft Refurbishing Protocols youth learn through practical hands on competence training as donated computers are repaired and refurbished to distribute to low-income families and individuals. Youth learn all aspects of the project including donation, refurbishing, recycling, inventory, sales, customer service and repair. Additionally, PC4P connects eligible applicants to low cost Internet service to offset the digital divide in our rural communities.

Grant Amount: \$5000.00

Grant Match: \$5,000

Current Status: 100% complete

Significant accomplishments this reporting period:

Our new manager, Brandon, took on a large responsibility and has learned a great deal about entrepreneurial aspects of managing PC4P. It is a great opportunity for him to have this project available and to be able to offer tools that will help him succeed.

The PC4P Youth Project focus this period was to complete a curriculum before July 31st. Working with our VISTA, Matt Benjamin and our advisor, Roger S, we have an 8-week curriculum using components to work within the strengths of youth from the beginning of the PC program in St Paul to recycling, repair, refurbishing and sales. Given the educational challenges many of our youth face we have adjusted our Microsoft Refurbishing Guide to fit into their needs.

Our VISTA, Matt Benjamin's year of service is complete. He left a legacy file of contacts, his thoughts on who we need to collaborate with next and his impressions of the metrics we need to gather for future funding requests. Our new VISTA has been tasked with this and she is spending time learning the PC4P Project in addition to the other 5 focus areas we have at TheShop.

As of April 1, 2016t the PCs for People Youth Project @ TheShop offers high speed Sprint 4G LTE internet service through Mobile Beacon for as low as \$10 per month. Plans are prepaid with no credit check or hidden fees. Devices are shipped from our St Paul office in 3 to 5 business days. Income eligibility applies.

We are doing what we can to close the digital divide for those who struggle the most to bring 21st century skill building assets into their homes.

Sign up on line or in our offices at: <https://www.pcsrefurbished.com/internet/theshop>

Challenges encountered during this reporting period and/or anticipated during the next period:

Working with youth from the alternative schools is challenging. Our PC4P staff is only slightly older than students who arrive weekly. Peer leadership comes with experience. Having set weekly curriculum will keep youth, staff, volunteers and students on task. Working with youth who have difficulty reading

or staying on task directed our curriculum and we believe we have enough variety each week for the many learning styles we encounter.

We are still seeing a lack of quality computers come through our donation cycles. On the average about 20% of the donations we receive can be refurbished. Out of the 450 donations received in 2016 about 90 are computers we can work with. This is a huge limitation for us and for the families we distribute to. We firmly believe that poor people do not need poor computers. It's hard enough to live within their budget without frustrating "computer" issues. Cell phones have limited abilities but often are better option for those in poverty. Our hope is that we have "collected" enough computers from basements and corporate storage rooms that waited for years for strong young bodies to haul them away for free.

Sometime in September, Microsoft will no longer support Microsoft 7. Current refurbishing will move to Microsoft 10. Many of the systems we have will be supported but will be unable to be updated. With extra time on our hands we will appeal to our business community for new donations.

Is there anything else about this project about which Blandin Foundation should be aware?

We believe that working under the umbrella of the Brainerd Baxter Youth Center give us the ability to operate for \$30,000 a year. Expansion remains a possibility as we look to market our "product" especially in terms of staff to be available weekend and evening hours for those needing computers. We are currently "open" 20 hours a week and often run out of time.

We are excited to help close opportunity and achievement gaps for those who struggle in our community. In the near future we would appreciate help in pursuing funding for "apprenticeship positions" we can offer to students and at risk youth in our community. Learning a "trade" and being comfortable within that field can only propel youth to attend Central Lakes College and reach for IT Certification or a Two-year AA degree. We want to make it easy for youth who have struggled to succeed in their futures.

What, if any, plans are in place to sustain this work in the future?

Distribution of computers needs to increase to bring in more dollars to purchase items such as hard drives, flat screen monitors and batteries / charging cables for laptops. Our manager is looking for volunteers to help him with the refurbishing processes allowing him extra time for networking and marketing.

We will continue making connections with foundations and community development organizations for funding to keep PCs for People Youth Project viable.

Resilient Region Plan: Connectivity

Connectivity Issue

Connectivity: Extending high-speed internet access to the entire region increases telecommuting opportunities, provides greater access to customers and markets for businesses, and allows all residents access to civic resources and commerce.

Connectivity Issue Goal

Connectivity: The number of households in the region served by high-speed internet-services rises from the current level of 40% to 95% served. The (region/rural areas) community is willing to invest to increase coverage. This will include both public and private investment in service.

Access: Promote, support and develop high-speed internet access throughout region for telecommuting, educational benefits, and supporting business activity.

Recommendation 2

Efficiency: Local units of governments will work across political boundaries to share equipment costs/facilities for more efficient delivery of high-speed internet.

Action Step 2A

Efficiency in installation: Lay conduit for fiber optics when upgrading sewer and water or digging trench.

Recommendation 3

Access for entrepreneurs: Provide access to technology needs and support to retain businesses and encourage potential entrepreneurs

Action Step 3A

Economic development: Determine the compatibility and interface between communications, smart grid technologies, and internet systems. Develop a recruiting initiative encouraging technology-oriented companies to explore opportunities offered in non-urban spaces.

Telecommuting: Create a business plan that facilitates legitimate telecommuting jobs and promotes high-speed internet connection in the region. Upgrade and expand high-speed internet infrastructure in housing so residents may work from home.

Action Step 3C

Map of access sites: Develop map or list of accessible sites within region to conduct web-type meetings, free Wi-Fi etc.

Action Step 3B

Recommendation 4

Access for children: All school aged children will have access to a computer with high-speed internet capabilities.

Action Step 4A

Support sites: Make available sites providing educational, internet, support, financial resources, etc.

Recommendation 5

Funding: Identify and pursue state, federal, and philanthropic grants to fund connectivity recommendations.