The Resilient Reader

Resilient Region Stories

Connectivity

October 2015

Strengthening Broadband Internet Access in Region Five

WHO:	
Champions of the Connectivity Theme:	**Blandin Broadband Community (BBC) Steering Committee**
Pam Mahling (former Information Research Specialist with WCTA) currently CEO of Rural Solutions Services; Kevin Larson (CEO)-CTC, Kristi Westbrock (COO)-CTC, Joe Buttweiler-CTC; Janelle Riley (CEO) Syvantis Technologies; Stacey Stockdill (CEO) EnSearch; Sally Fineday (Wireless Telecommunications Business Manager)-Leech Lake Band of Ojibwe; Paul Drange (Director of Regional Programs)-NJPA; Janet Johnson (Instructor)-MN State Community and Technical College; Rick Utech (Executive Director)-Todd Co. Economic Development Corp.	Cheryal Lee Hills (ED) Region Five Development Commission; Anna Gruber (City/County Manager) National Joint Powers Alliance (NJPA); Mary Gottsch (Director) Brainerd Lakes Chamber of Commerce - Bridges Workplace Connection; Maureen Idker (RN, BSN, MBA) Director of Telehealth) Essentia Health; Sheila Haverkam (ED) and Megan Rehbein (Administrator) Brainerd Lakes Economic Development Corporation (BLAEDC); Brenda Thomes (Administrator) City of Long Prairie

WHAT: The Connectivity Theme was created because action items on every Resilient Region theme's action plans assumed internet connectivity; for example:

> Efficiency & Effectiveness Theme: Local units of governments will work across political boundaries to share equipment costs/facilities for more efficient delivery of high-speed internet.
> Economic Engine Theme - Access for entrepreneurs: Provide access to technology needs and support to retain businesses and encourage potential entrepreneurs.
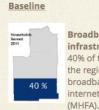> Economic Engine Theme - Telecommuting: (moved from transportation theme) Create a business plan that facilitates legitimate telecommuting jobs and promotes high-speed internet connection in the region. Upgrade and expand high-speed internet infrastructure in housing so residents may work from home.
> Education/Workforce Development Theme - Access for children: All school-aged children will have access to a computer with high-speed internet capabilities.
> Health Care Theme: Expand the use of telemedicine to deliver health care in patients' homes and to address the need for specialty health care.

However, there were large gaps in connectivity throughout the region. The Connectivity Champions' mission is therefore to find creative solutions to bridging the connectivity "digital divide", including searching for ways to fund broadband infrastructure in the region.

The Resilient Region goals for Broadband are to increase from the current 40% to 95% served.

INDICATORS OF SUCCESS

Baseline

Households Served 2011

40 %

Broadband infrastructure. Currently 40% of the households in the region are served by broadband service for their internet connection (MHFA).

Benchmarks for Success

Abundance

95 %

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.

Highway 371 Fiber-to-the-Home Project - When the State of Minnesota announced a new grant for "shovel-ready" fiber infrastructure projects in 2014, the theme members put their heads together to find a project most likely to meet the State's requirements. CTC was in the best position to tackle such a project, but the application required detailed engineering studies, which is a costly (and often prohibitive) first step.

During a Resilient Region Champions quarterly meeting, Connectivity Theme area Champion Paul Drange met with Dr. Chad Coauette, who is a Champion with the Education and Workforce Development Theme. Paul spoke on behalf of the need for broadband access and how it directly links to the success of the Education and Workforce Development Theme area. He shared how students in underserved broadband areas must find access at or outside of local businesses to complete assignments or homework. The lack of access is directly effecting learning outcomes in the region.

From these meetings a new partnership was formed between NJPA, EnSearch, Region Five Development Commission, CTC in Brainerd, and WCTA in Sebeka/Menahga to expand broadband infrastructure to underserved areas. NJPA pledged $100K toward the project in 2014. This support allowed CTC to quickly complete the 2014 engineering studies and find a project that met all of the grant requirements. The Champions then worked together on the extensive grant application, with in-kind support from Ensearch, Region Five and WCTA.

The group also wanted to have the story of the region's need for broadband come alive and be less of an abstraction for the State and others. NJPA had in-house video equipment and staff which they donated to the group to create a video testimony. Over 12 hours of moving stories about the need for broadband were edited down to a 9:54 minute video that was shared not only with the State as part of the application, but shown at other broadband-related meetings throughout Minnesota. https://www.youtube.com/watch?v=2aGx572Juvc&feature=youtu.be

Along with the NJPA support, $41,300 of in-kind contributions toward the regional planning meetings and grant application process resulted in a $2 million state grant, matched by a CTC investment of $2.4 million in building fiber-to-the-home to 391 locations. In addition, with the regional plan in place, the groundwork laid, and lessons learned from the 2014 application process, plus another $100K from NJPA in 2015 that leveraged an additional $216,000 for engineering and coordination of regionally prioritized broadband projects (from funders such as Blandin Foundation, Intiative Foundation, City of Long Prairie, Long Lake Township, and Todd County Development Corporation), theme members completed four additional applications in 2015 totaling over $6.7 million. If funded, local telcos will match with investments of over $9.6 million more to lay 355 miles of fiber and reach over 2,500 households and businesses, ***and will have sufficient fiber backbone laid to continue expanding out for years to come.***

WHERE: The $4.2 million CTC 2014 project serves Fairview Township and Fort Ripley areas in rural central Minnesota. Along with the project area's 391 residents and businesses, the township halls now have fiber connections, enabling the fire halls to better handle emergencies. Both the Fairview and Fort Ripley townships halls are also receiving free wi-fi hotspots which can be accessed by visitors and those still lacking reliable internet access. The Fort Ripley project area includes the State's rest area on Highway 371 just outside of Brainerd, Crow Wing State Park, and Crow Wing Lake Campground where wi-fi hotspots have also been installed, providing internet access to the estimated 200,000 tourists who pass through the area annually.

WHY: As stated in the Connectivity Theme goals, *"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."*

These are no off-the-cuff guesses; extensive research done for the 2014 grant application documented numerous needs for, and benefits from, high-speed internet connectivity, including increases in property values, at least a 1% increase in GDP, 31% business retention and 14% entrepreneurship start-ups, a variety of health-care cost savings such as up to $84,000 per year for each avoided long-term-care residence, energy savings, and many more.

Additionally, the stories and letters gathered in the grant application process detail the the more personal examples of the frustrations and limitations caused by a lack of broadband. Below is just a small sampling of the powerful testimonies received.

<u>**Economic:**</u>

Lost 251 high-paying FTE jobs because the lack of broadband. *"One of our local businesses had over 500 employees. They are now around 275 with the remainder placed in short-term, temp services. The business relocated out of our area because of the lack of high-speed internet. We also were approached by a business research center that would have employed 12-15 high level researchers and we would have realized spin-off businesses as a result of them locating in Todd County, probably for an additional 12-15 employees. We had the opportunity to attract 2 data centers (with an anticipated 6-12 employees for each business). All of this would have happened if we had had broadband capacity!"[1]*

<u>**Public Safety:**</u>

"During emergencies and trainings, the importance of our country's communications systems becomes clear … The Pillager Area Fire Protection Association maintains two fire halls, Station #1 and Station #2 … There is no internet access currently available at Station #2 … There is no streamlined way of providing maps, directives, guidelines, or copies of "essential personnel" credentials during emergencies without … internet access!"[2] **Chief Randy Less, Pillager Area**

<u>**Health Access Needs:**</u>

Unable to access medical records. *"When I am on call as an orthopedic surgeon and receive calls from the Hospital/emergency room regarding needs for managing injured patients I am **presently unable to access the digital x-rays and electronic records** to allow me to formulate treatment plans or give directives to Hospital staff or Emergency Physicians."[3]* Letter of Support from Dr. Brian T. Briggs

<u>**Without Fiber telehealth does not exist:**</u>

*"Telehealth uses video conferencing and telecom technology to promote health for people in their typically non-urban, rural homes, hospitals and clinics . **The underpinning of telehealth is to equalize access to specialty care so people in rural environments have the same opportunities to be diagnosed quickly, to be treated more aggressively,** using specialist* medical

---

[1] Rick Utech, Executive Director, Todd County Economic Development Corporation. (2014). Letter of Support, Video Testimony and Email Correspondence. He also serves as the Resilient Region Connectivity Champion and Economic Engines Champion. NOTE: Todd County is one of our next phase priority projects.
[2] Chief Randy Less, Pillager Area Fire Protection. (2014) Letter of Support Region Five Virtual Highway Project.
[3] Dr. Brian T. Briggs. (2014). Letter of Support for Region Five Virtual Highway Project.

*care that people in the urban settings have access to. **Without broadband telemedicine doesn't happen."*** [4]

Government:
"I have to work a lot with our Cass County offices in Walker. They can't download a map to me because I cannot get a long enough internet connection to get a map...I have to go [drive] somewhere else to pick it up...[5]"

WHEN: The regional plan and CTC application were developed during the summer and fall of 2014. Construction on the project began immediately in the spring of 2015, and by fall 2015, CTC was already providing internet access to the residents, businesses, tourist centers and township halls within the project area. Additional applications to the state program were submitted in fall of 2015, with the hopes of many more projects beginning in spring of 2016.

HOW: Champion Dr. Stacey Stockdill has agreed that the fiber project has definitely influenced other theme areas and shares that all of the Resilient Region Champions were instrumental in supporting, and thus obtaining, the state grant. Expertise and testimonies from Healthcare, Affordable Housing, Changing Populations, Education and Workforce Development, Economic Engines, Efficiencies in Government, and others enabled the group to fortify the application with solid research as well as moving human impact stories. New relationships with the 50+ Champions and the Blandin Broadband Community Steering committee have strengthened with the fiber network project. http://www.njpacoop.org/statewide-regional-solutions/cities-and-counties/newsletter/broadband/

Links for Connectivity:

Virtual Highway Whitepaper:
http://www.resilientregion.org/cms/files/Presenting_the_Virtual_Highway_Project_September_13_2013_new_logo.pdf

Thank You to the Region:
http://www.resilientregion.org/cms/files/FINAL%20R5DC%20CTC%20Press%20Release.pdf

---

[4] Marueen Ideker, RN, BSN, MBA, Director of Telehealth, Essentia Health. (2014). Letter of Support and Video Testimony for the Region Five Virtual Highway Project.
[5] Marla Yoho, Clerk, Fairview Township (2014). Video testimony, Region Five Virtual Highway Project.