

Public-Public Partnerships: Leveraging Your Neighbor

Southwest Minnesota Broadband Services, a consortium of eight Minnesota communities, is building a fiber-to-the-home network through an unusual arrangement with WindomNet, a municipal fiber provider in a nearby city.

By John Schultz ■ *U-reka Broadband Ventures*

On April 23, 2009, more than 30 people interested in developing better broadband in rural southwestern Minnesota met to discuss preparations for a possible broadband stimulus grant application. This meeting, held at a local golf course in Lakefield, Minn., began the process that led to the deployment of fiber-to-the-premises services to eight rural communities by Southwest Minnesota Broadband Services (SMBS).

The cities of SMBS have a long history of building their own technology solutions to help their communities keep pace with urban counterparts. In the 1970s, during the great cable television land grab, three communities – Jackson, Lakefield and Windom – that had no viable options for cable services decided to leverage their existing electrical operations to provide cable television. In the early 2000s, when Round Lake's incumbent provider would not deploy DSL services to the community, Round Lake offered wireless Internet services not only to its constituents but also to neighboring communities.

This spirit of self-reliance led to the development of SMBS. Windom became the first FTTP municipal service provider in Minnesota in 2005 after the failure of a three-year effort to bring competitive broadband services to its community. After the city built its own FTTP network, WindomNet, it held discussions with individual surrounding cities about extending the network beyond Windom city limits.

All these efforts led to that important

The SMBS cities have long histories of building their own technology to keep pace with urban counterparts. As soon as the stimulus program was announced, they hit the ground running.

meeting in Lakefield. After the meeting, the communities quickly created SMBS to take advantage of the stimulus opportunity. SMBS decided to begin preparing initial marketing, operational and engineering estimates even before the stimulus program rules were in place to make sure it could meet any required time frames. Each of the eight member cities contributed dollars to the project in proportion to their populations, and the Blandin Foundation matched those dollars to prepare a feasibility study.

SMBS secured the services of U-reka Broadband Ventures to prepare the feasibility study and the application for American Recovery and Reinvestment Act (ARRA) dollars. By starting early, SMBS was ready when the ARRA application process was opened and was fortunate to be awarded a first-round

loan-grant combination of \$12.8 million from the Rural Utilities Service (RUS) in January 2010. SMBS was one of the few non-telco organizations to receive an RUS award.

However, the award announcement was only the beginning of the process. RUS requirements are stringent to ensure that the projects it funds are successful.

The good news is that, though the RUS funding process was long and difficult, the engineering for the project began in October 2010 and construction began in July 2011 after a community ground breaking event.

The project is now in year two of construction. By the end of 2012, when it is completed, the network will offer services to more than 3,700 homes and businesses.

About the Author

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Community Broadband

BUILDING THE COALITION

SMBS took on responsibility for all customer service, technical support and sales and marketing for the project. Currently the project has seven staff members who work with customers, and the member communities provide additional support.

All the cities quickly realized they could provide services to more people by including smaller communities that lay along the routes linking the larger

communities. Including the smaller communities also helped the project meet the requirements of the broadband stimulus program. In addition, the project serves 200 rural homesteads, giving them their first chance to receive triple-play services.

Jackson County, which is not an SMBS member, agreed to provide an additional \$500,000 to the project in exchange for future Internet, telephone and television services. This anchor

tenant relationship was key to final funding to the project. Dennis Fields, information systems manager for Jackson County, comments, "We strongly believe that next-generation broadband services are important not only to our county government functions but also to all our constituents."

WORKING TOGETHER, WORKING SMARTER

As is typical in rural communities, a real sense of community arises when residents realize that if they work together they can accomplish much more than they can working alone. This has been especially obvious during the creation of SMBS and now during the rollout of services. Most projects have a single champion, but SMBS has a champion in each community who assists in spreading the good news about SMBS. These champions are also the filters that bring issues back to the board to ensure that SMBS is meeting the expectations of its customers.

SMBS board members not only think about their cities' desires but also take a measured approach to make decisions that are good for the entire operation. For example, Jackson is the largest city on the network but is the farthest away from the interconnection with Windom; therefore it will be the last community to receive full services on the network. Instead of fighting this decision, Jackson was supportive in making sure the network was built in a logical and cost-effective manner. Darrell Nissen, vice chair of the SMBS board, says, "Our communities realize that none of us could have done this on our own. Many of us have tried, and when we ran the numbers, it just didn't work. By working with our member cities, we are able to deploy a technology that might have never reached us if we waited for our incumbent providers."

The most important example of working smarter was designating WindomNet as the wholesale service provider. WindomNet had successfully built its own FTTP network and was looking for additional ways to increase revenues. SMBS wants to concentrate on providing the end services to its customers and did not want to re-create infra-

ABOUT SMBS

SMBS is a nonprofit corporation formed by a joint-powers agreement of eight communities. Five are voting members that have board seats and will see a return on their investments when the project reaches cash flow positive. The other three are nonvoting members that do not have board seats and will not see a return on their investments. Each voting member made a financial contribution to the project to cover operational losses of the project until it reaches cash flow positive.



COMMUNITIES PARTICIPATING IN SMBS

Voting Members

Bingham Lake
Heron Lake
Lakefield
Jackson
Round Lake

Non-Voting Members

Brewster
Okabena
Wilder

The populations of the communities in the project range from 3,400 in Jackson to 66 in Wilder.

Community Broadband



SMBS is installing fiber to many businesses in its service areas, including grain elevators and other agriculture-related businesses.



More than 125 miles of construction connect the eight communities of SMBS.

structure that already existed only a few miles away.

The partnership is mutually beneficial in many ways. Because SMBS will be the largest customer on WindomNet, it will help WindomNet reach its cash-flow objectives. In turn, WindomNet allowed SMBS to save more than \$1.5 million in start-up costs by not having to deploy its own telephone switch, video headend or ISP infrastructure.

Most important, because WindomNet already has services up and running, SMBS could begin turning up customers almost immediately after construction was completed in each neighborhood. This has a tremendous positive effect on the SMBS cash flow.

The additional bandwidth required to support SMBS allowed WindomNet to increase its transport capacity to the 511 building in Minneapolis. As a result, WindomNet could upgrade the speed tiers of all its customers in addition to supporting the SMBS customers. The interconnection of the two networks also allows all the communities to receive one another's public access channels.

The final benefit of SMBS's collaboration with WindomNet is that the two organizations can share a general manager, Dan Olsen. This strengthens the link between the two projects and, as Keith Stubbe, chairman of SMBS, explains, "By utilizing Dan across both projects, we leverage the extensive experience of WindomNet while at the same

time eliminating the overhead of a full-time general manager."

SMBS is already working with other providers in the region in several ways, including sharing construction with other regional carriers to reduce construction costs and providing last-mile dark fiber services to wireless carriers to increase their 3G coverage in the area.

EARLY SUCCESS

During its first construction phase in 2011, SMBS built out the communities of Brewster, Heron Lake, Lakefield, Okabena and Round Lake and delivered drops to each customer who had signed up for service. Through concentrated marketing efforts, the project has already reached 65 percent market penetration in those communities.



SMBS Board Chair Keith Stubbe presents an iPad to David Reyes, a student who won the contest to design the SMBS logo.

Many businesses are moving to the network and realizing substantial savings. "We see business customers cutting their pricing by 50 percent in some instances while dramatically increasing their level of services," says Brian Estrem, U-reka Broadband project and sales manager. He adds, "Residential customers are also seeing substantial savings while increasing their level of services compared with their providers today."

Because of an early spring, construction on phase two has already begun, and customer penetration numbers are trending slightly higher than in phase one. The project continues to meet its financial benchmarks, and construction continues to come in on budget.

In addition to standard residential and business offerings, new applications are already being developed over the network. For example, SMBS and WindomNet provide Firefly Imaging Services, a regional mobile diagnostic imaging company, with drive-up 1 Gbps connections at extended-care facilities. In the past, a Firefly technician had to drive back to the office to upload X-ray images; now a technician can plug in at the facility and upload files immediately, allowing a radiologist to review the X-rays sooner.

Although a majority of the area's population is able to receive services from the network, the most rural areas still have limited broadband options. SMBS is currently working with 4G wireless provider LocaLoop to place towers along the fiber route to serve the most

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rural customers with fixed wireless services. The system will be able to migrate to a mobile platform in the near future. None of these services would be possible without the core SMBS network.

WHY IS THE PROJECT A SUCCESS?

SMBS is a success in the eyes of its satisfied customers and the member cities. What makes this project so successful?

- There really was a need for services. Incumbent providers had not stepped up to offer next-generation services.
- Communities realized they could not do it alone. For a single community to succeed at building a fiber optic network would have been difficult; banding together aggregated the communities' demand and allowed the financials to work.
- The project has several champions. Because multiple communities participate, there is a champion in each community. Jackson County has



SMBS ground breaking (l to r): Darren Kalvig, SMBS treasurer; John Hay, SMBS secretary; Keith Stubbe, SMBS chairman; Darrell Nissen, SMBS vice chairman; Colleen Landkamer, USDA state director for Minnesota; John Bessler, husband of U.S. Senator Amy Klobuchar; Ken Temple, SMBS assistant secretary; Dan Olsen, general manager of WindomNet and SMBS.

- also been very supportive of the project both financially and politically.
- SMBS has a strong partner in WindomNet, and the two entities are linked in their success. Sharing both technology and expertise improves the bottom line of both entities.
- Good project management discipline was used. Projects such as SMBS are very complicated and have many moving parts. Having a project plan and follow-up ensures that nothing is missed and that any missteps are fixed and learned from. ❖



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