

# Broadband After Google

Many communities are determined to move ahead with FTTH projects – with or without Google.

By Craig Settles ■ *Industry Analyst, Speaker, Author*

Google's quest to find the ideal community in which to build a gigabit network set off a frenzy as more than 1,100 cities and towns vied for digital manna from California. What happened to those broadband dreams after the two Kansas Cities (Missouri and Kansas) came away with the gold?

People often find creative ways to keep big dreams alive. The communities described in this article are at different points along the broadband path, but all are determined to take their broadband future into their own hands.

## POWELL, WYO.

Powell, Wyo., would have been a good candidate for a Google Fiber Community, but it decided to build a fiber-to-the-home network in 2006, well before Google's program was in place. With a population of around 5,500 in a county whose population density is four people per square mile, the town had a difficult time getting incumbents to provide high-speed broadband services.

Powell's answer was to partner with two private companies. One is US MetroNets, a Utah-based broadband strategy firm that brings together engineers, telecom lawyers, top municipal bond counsel, a municipal investment banker and traditional business planners. The other partner is Tri County Telephone (TCT), a regional provider that serves Cody, Wyo., and other nearby communities.

US MetroNets ensured that the network design and buildout cost models would survive intense scrutiny and persuade a strong service provider to be the network's anchor (lead) provider. It secured firm commitments from institutions that they would not only subscribe

*Powell, Wyo., was able to reach break-even point quickly and make its network open access.*

to the network but also entice their customers to subscribe. In addition, it recruited businesses to move to Powell or expand operations there.

According to Ernie Bray, the founder and CTO of US MetroNets, valuable marketing support was provided by its infrastructure partner, Calix. He says, "They helped fund local advertising of FTTH benefits and promotional materials and helped plan and implement the network kickoff event."

The city gave TCT exclusive rights to provide services over the network for six years or until the network became cash-flow positive, though the city owns the network. The contract offered incentives for TCT to reach the break-even mark quickly, relinquish exclusivity and allow the city to have a true open-access network. (This occurred in 2010.) In addition, TCT was obligated to cover the costs if the network didn't break even – a critical provision that removed financial risks to taxpayers.

## SIBLEY AND RENVILLE COUNTIES, MINN.

Powell is representative of small-town America, but in Minnesota, the com-

bined efforts of tiny Winthrop (population 1,400) in Sibley County, five other towns in Sibley County and one in next-door Renville County qualify as a truly rural broadband project. Together, these towns and surrounding rural areas have just 7,500 residences and businesses, and they intend to bring fiber to all of them.

The RS Fiber project was born of sheer frustration. For more than two and a half years, these communities pleaded with providers to partner with them on a high-speed network, offering to put up the money for the network themselves and allow the provider to keep most of the retail revenues. Yet the best broadband these towns currently receive is DSL service at 256 Kbps downstream and 128 Kbps upstream.

The communities decided the only way to get broadband was to build it themselves. They received a grant in 2010 to do a feasibility study and evaluate options. Mark Erickson, city administrator and economic development agency director of Winthrop, reports, "Our analysis determined we can break even if we get a 70 percent consumer take rate by year four, even if subscribers

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select only two of the voice/video/data triple-play [products].” Revenue from commercial subscribers would represent extra profit.

The seven communities, along with the two counties, formed a joint powers board (a cooperative is not a legal option in Minnesota). As a joint powers board, the group has the low-interest bonding authority granted to cities that is critical to making the project affordable. The communities plan to initially offer VoIP, 20 Mbps symmetrical Internet access and an 80-channel television lineup. They also hope to link the towns and rural areas with a 100 Mbps intranet.

Erickson and his constituents believe they have two viable options: signing a capital lease with an option to buy or issuing 30-year bonds to build and own the network outright. Either option must be approved by 55 percent of constituents. Whichever option they choose, the communities will find a company to operate the network.

“We’re requiring the provider we choose to bring certain things to the network,” states Erickson. “We want them to come with programming skills and a desire to educate school districts, businesses and other constituents on how to maximize the network. They need to find ways to make broadband relevant for connected communities. This will increase the number of customers on the network. We’ll even help the big providers build a business case for using our network. If they end up competing with us, that’s fine, too. We’ll have a fast car, and they’ll have draft horses.”

## WIREDWEST, WESTERN MASSACHUSETTS

Western Massachusetts offers further proof that there is strength in numbers and that economies of scale can result from partnerships among small towns and rural communities. In this case, the partnership vehicle is a community cooperative, WiredWest, which may form public-private partnerships with one or more providers.

A number of BTOP stimulus grants were awarded for middle-mile projects that will link anchor institutions throughout a county or region with fiber infrastructure. These middle-mile

## *WiredWest plans to connect 47 Massachusetts towns to the middle-mile infrastructure that the Massachusetts Broadband Institute is building.*

networks should improve the business cases for FTTH in the areas they serve. However, who will build the last-mile infrastructures for broadband access, and how it will be done, is still unclear. WiredWest proposes to resolve this issue in Massachusetts with a massive community partnership.

Forty-seven towns voted to become members of WiredWest, formally a “cooperative of municipal light plants” – a designation created by a 100-year-old law that enables towns to distribute their own electricity. They will collectively create a last-mile network to link up with the 1,300 miles of BTOP-funded middle-mile fiber being built by the Massachusetts Broadband Institute (MBI).

“We submitted the Google application for a gigabit network though we didn’t fit their ideal density goals,” says Monica Webb, co-chair and spokesperson for WiredWest. “We felt it was worth it to try.” However, rather than waiting for Google to announce the winner, WiredWest funded the initial phase of its broadband project last year through an MBI grant, regional planning agencies, individual and corporate donations and pledges of in-kind services. “Everyone’s consensus was that control of Internet access needed to stay in hands of the community,” continues Webb. “Private providers just cherry-pick the best areas and offer empty promises to everyone else.”

Though the group hasn’t decided on a final operating structure, it will likely create a public-private partnership of some type. WiredWest has established a board of directors with one member from each town. A seven-member executive board handles smaller decisions and brings recommendations for major decisions to the larger board. In addition, the board will hire a manager to take charge of day-to-day operations. Once the cooperative officially launches in July, it will have the legal authority to

apply for grants, contract with providers and take other actions.

## SUNRIVER, ORE.

One of the most interesting communities to submit an application to Google was Sunriver. Set in central Oregon, this unincorporated community is clearly rural and has only 4,200 residents. However, it is a year-round resort. “We’re an affluent community, mainly residential, and we don’t have a lot of businesses,” says Dick Luebke, chair of the telecommunications task force for the Sunriver Owners Association. “The majority of our residents are retirees, but we have a growing number of telecommuters who work for nearby Apple, Oracle, Boeing and, recently, Facebook.”

The local cable company rebuffed the owners association when it asked the company to replace its old coax cables with fiber to the home. The association subsequently told the cable company that Sunriver would not renew its agreements after they expire in 2015. As a not-for-profit, the Sunriver Owners Association can either partner with a single private-sector company to operate an FTTH network or build and operate a network solo. Sunriver is also considering forming a co-op with some of the adjacent homeowners associations.

Luebke says Sunriver eagerly jumped on the Google opportunity. “We’re small, but we get a million visitors a year. We have 40-year-old cable infrastructure, and our telephone systems are just as old. We didn’t want to stop and wait for incumbents to get around to us, so we decided to get gigabit infrastructure and do it ourselves.” However, like WiredWest, Sunriver didn’t wait for Google to announce a winner. Luebke’s task force has been laying the groundwork for a network for quite a while. “We want to be just like Chattanooga, where whoever wants a gig can buy it –

*"We want to be just like Chattanooga, where whoever wants a gig can buy it," says the telecom task force chair for Sunriver, Ore.*

and we plan to beat Kansas City to the punch," he says.

According to Leubke, several service providers and other private firms appear seriously interested in making financial investments in the community's network. "Because we're a resort, we have high take rates for cable and satellite services," states Leubke. "We're somewhat isolated, we have few options, and people can afford to subscribe. A preliminary analysis from others involved with FTTH indicated we're looking at a four-to-seven-year ROI."

#### **TOPEKA, KAN.**

In one of the most memorable publicity stunts by a city bidding for Google's

gigabit network, Topeka, Kan., officially changed its name to Google for a month. Although the intensity of its desire for super-fast broadband hasn't waned after its nearby neighbor won the prize, Topeka has not progressed as far down the broadband path as some other former contenders. Topeka's situation might, in fact, be typical of quite a few other Midwestern cities and towns.

"We get caught between big providers that are holding us hostage and the challenges of most cities hammered by the economy," says Mark Biswell, director of information technology for the city of Topeka. "Incumbents have a monopoly, but they're not willing to make the investment until they can see

a profit. Yet when we try to enter into the space, they're not happy. The biggest issue, though, is money. Under normal conditions, we'd have more flexibility in finding ways to pay for a network, but in 2009 we saw tax revenues, as well as help from the state, nose-dive."

The city is not without internal resources. It has quite a bit of fiber that was put in place in 2001 and is capable of gigabit speed. Biswell would love to emulate Santa Monica, Calif., which reduced its municipal telecom costs with an institutional fiber network and then provided low-cost services to businesses over excess fiber. However, following this path would be an uphill struggle. "We tried a wireless initiative after Google came in with its contest, but [an incumbent provider] went to the City Council, upset." It was a subtle reminder of the \$1 million donation the provider had made to the local college.

Community broadband proponents in Topeka believe that at some point, the city will have to make a move to build a fiber network and face the consequences from incumbents for the benefit of the citizens. In this regard, Topeka echoes the sentiments of other cities that missed out on the Google network. "Municipal broadband is a pro-business, pro-community endeavor. It's not about their shareholders, it's about our constituents," declares Winthrop's Erickson.

WiredWest's Webb concludes, "If constituents want to ensure that they have last-mile solutions that are future-proof and universal, community-run initiatives need to be done. We see the urgent need for near-universal, robust broadband with huge capacity, so communities need to create coalitions, either alone or with local providers."

Biswell sees the younger generation of Topekans as key to moving the ball forward there. "We have a grassroots group, Think Big Topeka. Its members are really into technology. Synergy from that group could put political pressure on the Council. They got a lot of momentum going with the Google application. It's hard to keep this synergy going, but if you want broadband badly enough, you have to keep pushing forward until you get it." ♦

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