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MAGAZINE

Muni Broadband Sees the Light

Bringing Fiber to Communities: Success Stories

By Craig Settles

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Community Fiber Networks Succeed Through Marketing

Marketing is about more than ads and billboards, say managers of community broadband networks. It involves learning what customers expect – and meeting those expectations.

By Craig Settles ■ *Communities United for Broadband*

Marketing often means the difference between success and failure. Community broadband operators, including municipalities, nonprofits and co-ops, must understand early that, although serving the public good is a common and worthwhile reason for building a network, the network's future is uncertain at best if it doesn't generate enough revenue. Effective marketing is the way to generate that revenue.

a student at the University of Wisconsin, Platteville, Rice worked as an intern at Genuine Telecom, a company with which RUC had a relationship. When RUC launched its network in 2003, it recruited Rice to take the marketing helm.

RUC and the local government began exploring the option of building a network for this town of 9,000 while the utility was planning to upgrade its electricity service infrastructure, a project that began in 2000. "RUC hired a

tional Internet and cable provider," Rice says. "RUC was building an extension to its electricity infrastructure, so the company decided to lay fiber in test beds simultaneously since it would be less expensive than building out from scratch. Once that buildout was completed, the formal marketing campaign started."

In many respects, however, the marketing began with the initial surveys. Rice continues, "All the discussions about whether to proceed were open to the public, and this helped a lot. The city council and the mayor frequently talked about the network, so the community was aware of what was coming. There was a lot of resistance, and RUC had to jump through hurdles to become a competitive local exchange carrier (CLEC). There were often questions about 'should a government entity be providing telecom services.' A couple of bills were written that tried to prevent the network [from being built], but the council decided to let this go through."

THE UPSIDE OF CONTROVERSY

The controversy that exploring community broadband generated had two positive outcomes: First, it created much awareness through the resulting publicity,

The controversy generated by Reedsburg's decision to offer community broadband created public awareness of the network and forced the municipality to make its case to the public.

Reedsburg, Wisc., and Jackson, Tenn., have done tremendous jobs marketing their public utility-run networks in the face of stiff competition and opposition from incumbent providers. Both entered the community broadband game quite early – 2003 and 2004, respectively – and definitely have earned the moniker "pioneers."

marketing firm to come in and do surveys to see if consumers wanted another provider," says Rice.

The two main incumbent providers were Verizon, whose wireline assets were later bought by Frontier, and Charter Communications. "Customer feedback strongly supported the desire for an addi-

MARKETING BEGINS ON DAY ONE

Catherine Rice, marketing and sales director for Reedsburg Utility Commission (RUC), can honestly say her marketing career has grown along with RUC's marketing program. In 2002, as

About the Author

Craig Settles, the cofounder of Communities United for Broadband, is an industry analyst and broadband strategy consultant who delivers on-site training to private- and public-sector organizations. Follow him on Twitter (@cjsettles) and on his blog, Fighting the Next Good Fight (<http://roisforyou.wordpress.com>).

and second, the municipality and utility had to prove their case to the public. By winning support from key stakeholders and elected officials early on, RUC built a stronger position from which to market its broadband services. The community understood and supported the network before it was a reality.

As the network went live in 2003, Rice and RUC used the pride of community ownership generated through those public discussions to fuel their marketing campaign. Rice says, “We heavily promoted the fact that we’re the local provider, RUC’s been here since 1894, and we’re up front. The incumbents are very contract-focused. We avoided adding fine print and openly address all aspects of our services. We showed how our bill, when compared to competitors’ terms and conditions buried in fine print, turns out to be lower. Some consumers, particularly the elderly, had been burned by competitors’ contracts, so they turned to RUC.”

EMPHASIZING SERVICE AND VALUE

Of course, a marketing campaign cannot rely just on the theme “We’re the hometown team.” It also cannot subsist solely on flashy ads and promotional materials. RUC understands that offering a better service is crucial. Says Rice, “We emphasized service and value. We structured our service packages to be similar to what the existing providers were offering but tweaked ours with a couple of new services on the cable side, plus more bandwidth and offerings on the Internet access side.”

Regarding telephone service, RUC advertised great value for the price, such as special promotional rates and free installation when customers signed up. The broadband service that RUC offered while it was building out the infrastructure generated word-of-mouth support. The utility didn’t lock customers into three-year contracts. Rice concludes, “We provide a lot of education about what to do with our services, particularly for business customers. Our theory is that if our service isn’t good enough to meet your needs, you probably shouldn’t be a customer.”

“Customers remain loyal to us because they believe, rightly, that RUC has customers’ best interests at heart.”

As its network and marketing efforts mature, RUC studiously avoids getting drawn into price wars. “Our competitors tend to do a lot of price promotions that are unbeatable, and we can’t match those,” remarks Rice. “We’ve kept prices competitive but consistent. Our marketing strength comes from RUC’s credibility. I get on the phone sometimes with people who call in for customer service or who have a complaint. As I resolve their issues, I ask them, ‘Who would you be talking to right now if you had this problem with another company?’ Customers remain loyal to us because they believe, rightly, that RUC has customers’ best interests at heart and they can’t get that level of caring from companies whose customer service people are based in another country.”

RUC used relationships with its vendors, including Calix, to strengthen its customer-centric marketing hand. “Calix helped us to choose the correct electronics to deploy that were appropriate for our area and our customers’ specific needs, and this increases our quality of service,” says Rice. “We were invited to form quite a few relationships with other Calix customers to generate and share ideas. We obtained information and resources regarding successful FTTH projects and best practices.”

Marketing based on company credibility is clearly paying dividends. RUC is experiencing a 60 percent customer take rate, which is extraordinary, particularly given that it faces such fierce competition from companies many times its size. The utility has 2,600 customers in total, including 220 of the 450 businesses in the community.

NO MORE MR. NICE AND FLUFFY

When it comes to marketing, “You can’t be a nice, fluffy businessperson,” says Michael Johnston, vice president of IT and broadband for Jackson Energy Authority (JEA) in Tennessee. As he

learned through rough experience, “You need to do a gut check. Are you ready to do the things to take a community network operation where it needs to be?”

Like Reedsburg, Jackson (population 76,000) began its drive for community broadband amid controversy that arose when incumbents objected to the network and sued JEA. Publicity during this controversy helped the public utility build local political support as well as word-of-mouth stakeholder support for the network, so it was able to begin selling services in 2004, the same year it starting building the network.

JEA launched its network with all marketing guns blazing. Johnston recalls, “We were doing everything: paper, radio, novelties, billboards. We retained a local marketing firm to help. In the beginning, our message and the strategy was all about ‘Come here, come here!’ Our marketing message was focused on customer acquisition, hitting heavily on the theme of price, the convenience of one bill and the fact we had an unbelievable fiber-to-the-home network.”

Although JEA enjoys the benefit of being the hometown broadband team, Jackson is a fairly large market that eventually required JEA to add more depth to its marketing strategy. Johnston continues, “When people in local government say ‘marketing,’ they often think only of the pretty stuff – ads, billboards, flyers. Most Chambers of Commerce are all about marketing the community, but this isn’t the kind of marketing that makes a triple-play [voice, video, Internet data] service successful.”

The kind of marketing that drives a telecom company to success entails not only marketing communications but also the creation of a product mix that appeals to prospects while generating a profit. JEA has reworked its entire service lineup over the past few years. It continues to change the marketing mix frequently,

Marketing can be too successful. If too many new customers sign up too quickly, network operations can implode under the weight of unbudgeted customer care requirements, including installation and support.

offering more speeds, more HD channels and even some channels for free.

Customer service, as always, is a major component of the marketing effort. Leveraging the fact that it is not a for-profit entity trying to return as much as possible to the investors, JEA can give customers a greater level of support and much higher quality of service than its competitors do. For example, JEA offers same-day repair service with a four-hour window for arrival and next-day service with a two-hour window.

Marketing also entails business development through building partnerships with various private, public and nonprofit organizations. When it explored the possibility of pursuing broadband stimulus money to expand its network, JEA decided that partnerships with several communities would be vital not only for winning a grant but also for successfully marketing the expanded network if it won the grant. Closing such deals requires crafting a consistent marketing message about the value of the partnerships themselves.

“To make something like this work across a region, you may have to deal with nine or 10 different utility companies and several town councils one at a time,” says Johnston. “Your pitch to get them on board is going to come down to presenting quite a few intangible benefits, such as better quality of life and more efficient government services. But when we met with potential partners, we emphasized the part of our plan with the greatest tangible benefit – using broadband in health care and education.”

THE COST OF SUCCESS

As JEA's broadband business grew, it had to face the fact that its marketing was too successful. This seems so counterintuitive that few organizations may even

consider the possibility. However, if marketing generates too many new customers too quickly, network operations can implode under the weight of unbudgeted customer care requirements.

Success literally has a cost in terms of the installation, customer service and technical support that must take place before customers begin paying monthly fees. JEA discovered quickly that, in Johnston's words, “We screwed this up.” The number of incoming subscribers was so far above sales projections that JEA had to cut back drastically on future growth. The company has recovered from this setback and continues to do well in the face of a constant marketing barrage from competitors.

Johnston believes there are so many marketing tasks to master, and competition is so intense, that community broadband networks must be tough, creative and agile in their marketing execution. Because community broadband is still such a young movement, there are only two practical ways to accomplish this, Johnson believes. “You need to either ‘buy’ telecom marketing expertise by hiring someone who used to work for a Comcast or a Verizon, or acquire it through brute force learning, trial and error.”

TIPS FOR MARKETING BROADBAND SERVICES

Reedsburg, Jackson and other communities offer several good lessons to broadband marketing teams.

- Execute a good survey during the needs assessment. That will generate the market knowledge needed to create an effective marketing strategy. In fact, if you ask all stakeholder groups (businesses, schools, medi-

cal facilities, and so forth) the right questions, they will tell you just how to market to them.

- Begin building market awareness from the moment you decide to explore a broadband network. Even if your network project is delayed, you'll have a good feel for the potential depth of support when you eventually move forward.
- Do not let critics define your broadband marketing messages. Know how broadband's capabilities can impact various stakeholder groups before you start, and craft your central message around these outcomes. You can change how you say it, but keep the core message the same so you maximize every marketing dollar spent.
- As much as possible, segment marketing messages, promotions and offers to motivate specific audiences effectively. “We market a general package to consumers, businesses get specialized offers such as for Web hosting and static IP addresses, and our large population of elderly who are snowbirds are billed only for their time here at home,” states Rice.
- Be prepared to continuously repel marketing assaults from competitors without fighting a price war. Use your organization's smaller size to your marketing advantage. Be creative and nimble, know your marketing strength (it isn't always what you think it is) and play to that strength.
- When partnering for marketing advantage, fully understand your partners' marketing and other business needs. Without sacrificing your primary objectives for your network, continually try to contribute to their marketing success.
- Remember that political support is crucial to generating subscribers. It gives you the marketing strength to launch the project effectively and marketing momentum that increases sales. Involve elected officials early in developing your marketing messages, and continuously update them on your successes. Their comments reinforce the messages and amplify the positive word-of-mouth that happens within the community. **BBP**

Forging Successful Public-Private Partnerships

Clear definitions of roles and responsibilities, along with open lines of communication, are critical to making partnerships work.

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

Google's announcement in March that it was building a gigabit network in Kansas City, Kan., considerably changed the way municipalities think about public-private partnerships (PPPs). Obviously, Google is not your average broadband partner.

For the time being, however, most PPPs will continue to be partnerships between cities or counties and local or regional telecom carriers that combine municipally owned broadband infrastructure with service delivery by private companies.

In another model of PPP that is receiving increased attention, a community may form an independent cooperative or nonprofit to build a network. Such a cooperative, which may comprise local government organizations and various constituent groups, including local businesses, may in turn partner with local telcos, ISPs or utilities to offer services over its network or to operate the network.

MONTICELLO AND HBC

Monticello, Minn., is a recent addition to the growing list of community broadband success stories. City officials attribute much of their current success to the city's decision early on to form a PPP with Hiawatha Broadband Communications (HBC), a nonprofit-owned provider that operates competitive cable and FTTH networks in a number of Minnesota cities.

Monticello analyzed business models during its feasibility study for the network. "Early on, we debated about whether we should hire a general manager and have that person run every-

Like any organization that considers a business partnership, a municipality must ask two major questions: First, is forming a partnership a good idea, and second, is this potential partner the right one for the deal?

thing or look for a partner," recalls Jeff O'Neill, Monticello's city administrator. "The size of our community [under 13,000] and the fact we had no experience running a network made it a no-brainer ... to find an organization to provide the backbone infrastructure as well as the expertise to get the job done."

Monticello considered partnering with several service providers capable of knowledge-sharing and running network operations and customer service during evening and weekend hours. In the end, HBC's proximity – its headquarters are a two-hour drive from Monticello – allowed it to provide Monticello with the support it needed at an affordable cost. City officials decided to use bond financing to construct the network and then contract with HBC to operate it.

TWO BIG QUESTIONS

Like any organization that considers a business partnership, a municipality must ask two major questions: First, is forming a partnership a good idea, and second, is this potential partner the right one for the deal? O'Neill believes that communities need to determine whether they can develop the expertise and manpower to tackle all aspects of providing service.

Many communities have conducted this self-examination and determined that they were up to the challenge. In most cases, they have been proven correct. For example, Reedsburg, Wisc., and Jackson, Tenn., were profiled in the last issue of this magazine for their marketing prowess. Chattanooga, Tenn., has become a national poster child for municipal broadband because of its can-

About the Author

Craig Settles is an industry analyst, a broadband strategy consultant delivering on-site training to private- and public-sector organizations and a cofounder of Communities United for Broadband. Follow him on Twitter (@cjsettles) and his blog, Fighting the Next Good Fight.

do spirit and masterful execution of its broadband network.

However, a number of other communities have concluded, like Monticello, that operating a broadband network is not a core municipal function and that a public-private partnership offers a better mix of local control and professional expertise.

To determine its potential partner's strength and appropriateness, a community must thoroughly investigate the management team's ability to provide adequate support and direction to both organizations. Someone in the partner organization must be responsible for running both the daily operations of the local government staff assigned to the network and the company's own operations. "This person must have the capacity to manage personnel issues down to a granular level without micromanaging, and do so within two organizations that operate distinctly differently from each other," says O'Neill.

He adds, "The company also has to understand how to effectively apply and manage the technology necessary to meet the community's needs. This includes competency in customer installations, marketing, accounting, customer service and billing, establishing contracts with content providers and keeping up to date with the telecom regulatory and legal environment."

A community must address early on whether it and its potential provider are driven by the same or similar philosophy, an intangible factor that is hard to quantify. Is the company committed just to making money, or is its goal to make money while also ensuring the community's success?

If shareholders' short-term interests come first, a provider may take actions such as limiting upload speeds in order to limit bandwidth expense. By contrast, a provider that shares a community-first goal of wanting to boost economic development will invest more in providing services than what is needed to maximize short-term returns, because it believes that in the long term it actually will make more money from those services.

O'Neill observes that some providers lure subscribers with great pricing and

Is the private-sector partner committed just to making money, or is it also committed to ensuring the community's success?

promises of fast speed, then milk them for as long as they can "until competition comes in or customers abandon the service." He comments, "These kinds of providers won't change. We went with Hiawatha because they believe in being successful while promoting the success of others."

SINGING FROM THE SAME CHOIR BOOK

To ensure that everyone is on the same page from the outset, O'Neill believes a partnership agreement should clearly define each partner's work responsibilities. Many communities are new to the broadband business and not versed on how the execution of certain tasks facilitates or hinders achieving the goals they set. Ensuring that all parties are clear about their responsibilities makes it easier for communities, in particular, to stay on track.

Under Monticello's agreement, HBC is responsible for managing network operations, training the city staff members assigned to the project and providing 24/7 customer support. City staffers provide customer support during regular business hours and also perform customer installations. HBC provides and pays contract installers by the hour if they are needed for overload work. HBC establishes contracts with content providers, and the city owns the relationships with those providers.

Financial arrangements also demand consensus early on. According to Robert Bell, cofounder of the Intelligent Community Forum, "It is important for the private and public sides of a partnership to enter the deal with their eyes wide open. Private companies want to gain access to markets; governments want to gain access to expertise and the assets of the provider. Where a partnership creates shared assets, things get more

complicated, and you need to work out a wide range of issues well in advance."

"The partnership agreement needs to define compensation," says O'Neill. "Will the community receive a flat fee from the partner for Internet access services provided constituents? Will there be added compensation based on total number of subscriptions or on reaching specific benchmarks? Which operations support [services] provided to a city or county are compensated based on flat fees, and which are billed at hourly rates? For example, HBC provides services such as content development, regulatory and legal compliance and billing for a flat fee. Marketing, technical support and troubleshooting services are billed at hourly rates."

Another layer of complexity in the fee compensation structure is added when partners make their physical network infrastructure available to other providers that deliver services directly to consumers. Communities such as Ontario County, N.Y., have implemented some variation of this arrangement.

Michael Johnston, vice president of IT and broadband for Jackson Energy Authority in Tennessee, points out one potential flaw in the open-access model. "The plan may calculate that if a provider adds 100 customers per month, the total amount of fees from the provider to the PPP for those 100 subscribers pays off the city's monthly bond debt and the private partner's fees. But what if the provider doesn't add that many customers? The PPP is at a disadvantage because providers want the least number of customers to ensure the most profit. Acquiring more customers costs money [for marketing, installation, ongoing support and so forth] that cuts into profits, so the provider might do better to close just 90 subs."

If the city or its partner insists on getting the fee for 100 customers anyway,

the provider could leave. Obviously, raising fees could be counterproductive and could incur legal costs. The PPP must therefore pay careful attention to how it structures fees for providers, to the fluid financial conditions providers face, to the community's own strategy in cases where providers fail their obligations, and to how each party in the PPP is compensated. In small markets, this calculation becomes even trickier.

DEFINING ROLES AND RESPONSIBILITIES

Gary Evans, president and CEO of Hiawatha Broadband Communications, adds some suggestions to fortify the working relationships between partners.

"Besides a clear definition of work responsibilities, partnership agreements need a clear definition of authorities

upon growth expectations. In the article Community Fiber Networks Succeed Through Marketing in the March/April issue of this magazine, I pointed out that some networks can be too successful, generating more subscribers than their operations teams can handle. Controlling growth may be one of the harder guidelines for partners to enforce, given the great political and financial pressure to drive up subscription rates.

The drive to meet constituent and political objectives can divert attention from more pressing operational needs and reduce the efficiency of network operations. One partner or the other must have the will power to step in, should the need arise.

In this regard, Evans says, "Include agreed-upon key indicators by which you will measure the project's progress.

DOS AND DON'TS

O'Neill and Evans offer the following practical guidelines for keeping PPPs on track and successful for everyone involved:

- Establish from the start the basis for open communication between partners. Nip problems in the bud by dealing with them early and forcefully to avoid any major issues downstream.
- Conduct periodic high-level meetings to discuss the project and any need for course corrections. Define problems clearly and fairly, and preempt problems when you can.
- Don't be afraid to negotiate if a problem or an opportunity falls in a gray area. Many such situations will arise.
- Your business plan is your primary guide for measuring progress. Use it. Refer to it often.
- The project manager of the private-sector partner must understand that he or she also reports to the community, even though that person manages private-sector employees. If this person is also responsible for managing public-sector staff, be sure he or she gets in-depth training on city or county employee policies.
- Municipal accounting is very different from business accounting. It's helpful for private partners to understand the basics of municipal accounting and for public partners to have a working knowledge of business monthly financials.
- Make sure you know your potential partner's financial history, and put controls and auditing systems in place to ensure that the community gets accurate data on revenue and expenses.
- Understand in detail the state tax laws relevant to public-private partnerships.
- Never think of a trusted supplier as a vendor. Vendors are essential, but partners are irreplaceable. Partnerships such as the one Monticello has with equipment supplier Calix breed success. For communities as well as private providers, this is how business should be done.

"Include agreed-upon key indicators by which you will measure the project's progress. I believe if we're clear in these areas, the network will become a sustainable business."

that each side will have," says Evans. "It is very easy for a municipality to usurp a partner's authority, because it will likely hear every little complaint from constituents as the network is built out and become overly concerned. Partners need to be clear on how to deal with these issues.

"Each partner needs to provide a strong definition of what those within the respective organizations expect of themselves. Any consultant can come in and design a great plan, but the partners have to get inside all of that and ask, 'What do we clearly believe we can accomplish?'" When community broadband projects encounter challenges, it is hard for either party to believe in its partner if that partner's people doubt their own organization's capabilities.

Reflecting on Johnston's comment, Evans also notes that partnership agreements need to include mutually agreed-

I believe if we're clear in these areas, the network will become a sustainable business."

Take rates, homes passed, average revenue per user, ratio of business to residential subscribers, number of institutional customers, cost per customer support call and response time to customer calls are all good indicators of financial and operational success.

The community may be the best partner to take the lead in this exercise. "What I have seen is that a government-initiated project has a much better chance of success than a totally private venture because of the amount of discussion that goes into a broadband effort before it starts," says Evans. "There is an ownership factor that builds as the project is discussed, debated and ultimately decided upon. This gives the project team a step up on the success ladder."

As mentioned at the beginning of this article, the structures of PPPs and the types of participants involved are changing as new challenges and opportunities arise and as new deals are struck. For example, the city of Powell, Wyo., structured its PPP using a strategy that leveraged the operational strength of its private-sector partner to strengthen the community's financial and political position.

Observing that other municipalities faced resistance generated by claims that their networks put taxpayers' dollars at risk, Powell attacked the challenge from two directions. First, the city spent considerable time building a financial model based on issuing bonds that were not taxpayer-backed. Typically, a municipality can incur debt as long as revenue from the funded project, rather than tax revenue, pays off the debt. By complying with the complex rules governing municipal bonds, the Northwest Joint Powers Board (the local agency au-

Powell, Wyo., leveraged the operational strength of its private-sector partner, TCT West, to strengthen its financial and political position.

thorized to issue debt for telecommunications systems) put the city into a risk-free financial position and also allowed it to buy back its own debt. The breakeven point for the financing came just 18 months after the network launched.

Powell also conducted extensive market, financial and engineering analysis; performed cost analyses based on data from Verizon and other major telcos' business practices, and sourced network components to find favorable pricing for these components. These efforts allowed the city to convince its private partner that it could deliver a profitable service in this city of fewer than 6,000 people. Powell tapped independent telco

TCT West to be its anchor service provider and to carry a significant portion of the debt.

Thanks to the many consultants and lawyers who helped Powell make sure every t was crossed and every i dotted, the project survived opponents' scrutiny and attacks without facing a single lawsuit. As community interest in broadband skyrockets, and as pressures from incumbents increase significantly, PPPs will require even more creative and careful planning.

In the next issue of **BROADBAND COMMUNITIES**, I will explore some new forms of PPPs and new approaches used to bring more partners to the table. ❖

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- Hiawatha Broadband
- TCT West
- US MetroNets



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

About the Author

Craig Settles is an industry analyst, a broadband strategy consultant delivering on-site training to private- and public-sector organizations and a cofounder of Communities United for Broadband. Follow him on Twitter (@cjsettles) and his blog, Fighting the Next Good Fight.

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 Luebke. "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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Legal Planning For Public-Private Partnerships

The laws governing public-private partnerships for telecom networks are complex and variable. Before entering into a partnership, the parties should develop a legal plan as well as a business plan.

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

Public-private partnerships (PPPs) are becoming popular vehicles for moving broadband projects forward in this economically difficult period. However, the business and political hurdles that PPPs face necessitate a thorough grasp of legal issues and effective planning to address these issues.

Some legal hurdles are obvious and have clear paths to resolution, and others are obscure offspring of decades-old laws long since forgotten. "Right from the get-go, you have to step back and think about the full scope of your project," says Jim Baller, president of the Baller Herbst Law Group, a national law firm based in Washington, D.C., and Minneapolis, Minn.

Forming PPPs was relatively easy when a single entity was dealing with a community to implement a reasonably well-defined project. "You'd have 60 to 80 deal points, make a spreadsheet of issues and going-in positions of the parties, negotiate them, resolve the difficult points, add boilerplate and the deal was done," continues Baller.

Now many communities are looking at more complex partnerships. Google's gigabit network project, for example, brings together two cities in two states (Kansas City, Kan., and Kansas City, Mo.), a network builder, possibly one or more ISPs, a public and a private utility, numerous community anchor institutions and various other major system users. The WiredWest consortium in western Massachusetts will have at least one ISP and more than 44 separate gov-

ernment entities as the collective public partner.

CREATING A LEGAL PLAN

Even projects less complex than Google's may encounter a multilayered, multi-jurisdictional patchwork of overlapping and conflicting laws, rules, regulations and procedures. Project teams must develop mechanisms early on for ensuring that their plans address that patchwork. Bad decisions or improper procedures in early project stages can create expensive legal knots down the road.

Baller advises, "Do extensive due diligence to create a legal plan that integrates with your business and technology plans. Remain flexible. It's something like a football play – you come out of the huddle with a vision and a plan for how the play will unfold, who goes where and how others contribute to success of the play. But once you come

out of the huddle, as you look over the defense, you may need to make adjustments and communicate them. Then, as the play unfolds, you have to adapt and perform according to what actually happens. Finally, you see where you are, huddle again and plan the next play. If your overall game plan was a good one, each individual play will advance it, and you won't have to make wholesale changes as the game proceeds."

An effective legal plan reflects a clear understanding of state and local requirements for both public and private partners. If the public entity will provision broadband services only, what are the federal, state and local ramifications? If the partnership provides voice services, what are the legal consequences in terms of reporting? Communities that only make dark fiber available to businesses have minimal requirements, but those that provide a full package of

A legal strategy is like a football play – the plan developed in the huddle must be adjusted in response to what happens on the field.

About the Author

Craig Settles is an industry analyst, a broadband strategy consultant delivering on-site training to private- and public-sector organizations and a cofounder of Communities United for Broadband. Follow him on Twitter (@cjsettles) and his blog, Fighting the Next Good Fight.

services are subject to more regulations and to financial obligations such as USF contributions.

A clear timeline of action is a must in any legal plan. In a state that has laws governing community involvement in telecommunications, some action items need to be completed before anything else can be done. For example, a town may have to hold a referendum before entering into a partnership. Other items, such as certain regulatory compliance reports, may need to be filed throughout the life of the project, in some cases by all the main partners. Many of these tasks may be interdependent.

Even if each partner is responsible for its own legal work, someone within the partnership should take responsibility to collect and include all this information in the project's legal plan. In addition, all project partners need to know the legal options open to them if the project's progress goes off track.

Although a city's attorney may have the necessary expertise to address many issues, local governments usually need to retain specialized counsel with extensive experience in certain tasks. "If bond financing is part of the plan, communities need to have a reputable bond attorney render an opinion that this is a sound project," says Milda Hedblom, a consultant, lawyer and policy expert who worked extensively with the PPP of Monticello, Minn., and Hiawatha Broadband Communications. "Without this opinion, it's hard to sell bonds."

THREE PHASES OF PLANNING

David Shaw, who heads the government and utilities practice at the law firm of Kirton & McConkie, has advised Powell, Wyo.; WiredWest in Massachusetts; UTOPIA in Utah and several other municipal entities on broadband projects. He likens PPPs to traditional relationships: Flirting is followed by dating and then marriage. Each phase presents specific legal issues.

When a local government begins flirting with the idea of partnering with a potential company, the first question to ask is whether any procurement obligations apply to the PPP – in other words, whether there are rules to follow before having an initial conversation. "States

In some locations, communities have the legal authority to form public-private partnerships but do not have the authority to finance them.

might not have regulations governing meetings, but it's possible local governments could require a formal request for information (RFI)," cautions Shaw. "Even if an RFI isn't required, issuing one is advisable because it minimizes the likelihood of future challenges, particularly from incumbents, on the basis that you did not go through the proper processes."

The second question is whether potential partners want discussions to be confidential. Some open-records laws expressly prohibit government staff from signing nondisclosure agreements. However, they may be able to keep information confidential in other ways. In Utah, for example, government officials can classify a document or a conversation as a "protected record" to avoid revealing its contents.

Failure to follow the classification process to the letter may end up exposing the contents. Furthermore, what's considered acceptable procedure may change with every project.

Do not confuse process rules with rules governing legal authority, which can also vary from one project or locality to another. "Process" refers to the way an action must be taken, and "legal authority" determines who is allowed to take or is prevented from taking an action. For example, any entity that intends to operate a telecom service may be required to file a specified set of documents (process). However, a county ordinance may not grant city governments *the right* to run a telecom service (legal authority).

WE LIKE EACH OTHER. NOW WHAT?

After partners decide they want to execute a partnership agreement, "dating" begins in earnest. In this phase, due diligence, planning, and anticipating legal processes, hurdles and challenges by incumbents increase in importance.

Everyone involved with the PPP must pay attention to subtle legal distinctions.

In some locations, communities may have the legal authority to form PPPs but not have the legal authority to finance them. In 2006 and 2007, telecom providers aggressively lobbied state legislators to limit communities' rights to run municipal networks, but in the past year, they have shifted to attacking municipalities' ability to issue bonds or otherwise raise money for building and operating networks.

North Carolina's recently enacted Level Playing Field/Local Government Competition Act severely restricts all avenues for municipal network financing, adds special taxes, fixes the prices cities can charge for services and prevents PPPs. In Minnesota, Colorado, Idaho and other states, bond measures to fund networks must be passed by referendum, with voting procedures structured to put municipalities at maximum disadvantage and make them unattractive partners. Even in states friendly to PPPs, communities must conduct due diligence to ensure they aren't blindsided by tricky financing laws.

"I don't think the difference between legal authority and legal structure is appreciated enough in many places," adds Shaw. Even communities that have the legal authority to form PPPs may have to create new political structures to operate them.

For example, Massachusetts does not have laws banning municipal networks. However, WiredWest decided to structure itself legally as a "cooperative of municipal light plants," a designation created by a 100-year-old law that enabled towns to distribute their own electricity. Adopting the "light plant" designation allows towns to own telecom services within existing legislative guidelines and use municipal bonds to fund their networks. Besides establish-

Municipal Broadband

ing its legal structure, WiredWest also has to herd towns through a complex procedural hurdle: Each town must pass two separate referenda approving membership in WiredWest.

MAKING IT LEGAL

When partners decide to formalize and consummate the partnership, the local government should issue a public notice alerting other potential suitors that it has settled on a partner. This reduces the PPP's vulnerability to future legal challenges. "You create defensibility in the event of future litigation," says Shaw. "It's equivalent to 'Speak now or forever hold your peace' but before rather than during the wedding."

Service providers Qwest and Bresnan Communications both threatened to sue Powell if it entered into a PPP until the city's legal team reminded them that Powell had served public notice, including in its notice a statement that the agreement was a done deal if no one came in with a better offer.

As the maneuverings between potential partners reach the final stages, the legal dance steps start to resemble those for typical business deals. Putting enough legal oversight in place to prevent a community from being taken for a ride by contractors is critical. If a builder puts in more conduit than called for in the engineering design, for example, does the city have to pay the contractor? There may be court rulings to guide aspects of contract agreements, but addressing procurement processes in the legal plan as well is advisable.

As broadband stimulus projects got underway, some PPPs and private companies ran into problems because they overlooked ramifications of the Davis-Bacon Act, which establishes minimum wage rates for companies that work on federally funded projects. Although the law is intended to set these rates based on local prevailing wages, in practice rates are sometimes set higher, leading to cost overruns and litigation. After PPPs have been legally formed and received federal or state grant money, middle managers retaining a small army of subcontractors can easily but inadvertently make errors because they don't know federal, state

and even local labor laws. Due diligence is an ongoing exercise.

CHANGES TO THE PARTNERSHIP

Legal issues don't come to an end after a network is built. New partners may be added to the mix at any time. For example, after a network is up and running, a private ISP may request to lease portions of the network, such as dark fiber, from the public partner. Do standard landlord-tenant laws apply in this case? "As the lessor, I want a standard lease, because if the ISP doesn't pay its bills, I want to be able to kick it off the network," says Shaw.

Conversely, a public partner may decide to switch roles and lease a connection to a middle-mile network. As the lessee, it would want an Indefeasible Right of Use, a stronger form of property rights that could enable it to stay on the network even after falling behind in lease payments.

Finally, although no one enjoys bringing up the topic, PPPs must also

address the possibility of divorce. "You have to accept that this deal is not forever," says Hedblom. "Cities that don't understand this are not thinking correctly. You have to talk about severability. Under what conditions and on what terms? What kind of notice must the partners give? Who owns the assets? You want to make sure none of the parties are unduly hurt." Usually contracts allow for a transfer of interest in case the private partner is acquired. Subsequently, the city may be able to avoid having to continue the relationship with the new buyer.

For the security of its investment and the peace of mind of everyone involved, each community should have a legal "dream team" – perhaps including the city or county attorney as team leader – and a well-written legal plan. Broadband deployments face numerous complex legal issues, and every project will need to resolve unanticipated legal bumps on the road to success. Communities should be prepared and remain vigilant. ♦

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