Worst Practices In Community Broadband – Part Two

If a community broadband network is to succeed and benefit the community, board members and managers must be prepared to run it like a business.

By Andrew M. Cohill / *Design Nine*

The notion of "worst practice" in community broadband projects started as a kind of joke. In my work with communities that wanted to invest in broadband infrastructure, I was asked very frequently, "What is best practice from other communities?" I would often respond, "No, no, you should be asking me what 'worst practice' is."

In the three years since my first "worst practice" article (published in the March-April 2011 issue of this magazine), I have had the opportunity to observe and learn from many other community-based projects in the U.S. Not all of them involve direct government ownership, so the lessons learned apply equally to municipal efforts and public-private partnerships.

I continue to see three types of problems. Business and management issues crop up in cities where there is a mistaken belief that a community-based broadband effort is some kind of charitable enterprise or that, like a sidewalk, it can be forgotten about once it is installed. Whether a community makes very modest investments in passive infrastructure, such as conduit and dark fiber, or adds network equipment and sells circuits, the enterprise has to be run as a business.

The second problem area has to do with managing growth. Many community efforts very appropriately start small, which reduces financial risk. However, I see some projects lose energy and attention once that phase one infrastructure is built.

The last area is marketing. There is no natural monopoly for broadband infrastructure as there is for other types of infrastructure, such as water or sewer systems. Community-based projects need ongoing marketing and public awareness efforts to meet take-rate targets and to keep projects on a path to financial stability.

BUSINESS ISSUES

Not running the network as a business. Telecom infrastructure has to generate revenue both to repay local government for any capital funds provided to build the network and to meet ongoing operating expenses. I see projects led by boards with little or no business experience and senior staff who also lack a solid record of success in the private sector. Any board of directors should have at least two members with substantial business experience; experience with startups is especially important.

Thinking it is a monopoly. There is an argument to be made that basic broadband infrastructure is a natural monopoly at some level. However, the philosophical argument for why communities should invest in broadband infrastructure shouldn't be muddled up with the operational approach to the enterprise. In the late 1800s, New York City had 18 private water companies. In some parts of the city, residents could pick from three different water

providers. In other neighborhoods, they still had to get water in a bucket from a communal well. The same arguments used to create a publicly owned water infrastructure (everyone has better access, overall expenses are lower, the investment promotes economic development and growth) apply to broadband. However, community broadband systems, unlike community water systems, don't necessarily replace the private systems. Thus, there is going to be some competitive tension between incumbent providers and any community-owned enterprise. Community broadband projects have to start with and maintain a business mindset.

Failing to budget. Some community projects do not manage their budgets well. Some do not even use formal budgets to help direct their enterprises. A bookkeeper or an accounting firm may provide periodic reports on revenue and expenses, but as in any startup business, those monthly or quarterly figures need to be plugged into a multiyear budget. That budget must show current and past financial data and must set targets for take rates and expansion so the board can determine whether the effort is stagnating or making progress.

GROWTH ISSUES

Not planning for expansion. Most community-funded efforts start small. This minimizes financial risk and gives the board and senior leadership the opportunity to learn on the job. However, some projects stall after the first year instead of expanding to a sustainable size. The underlying problem is twofold: First, even small networks have fixed operational costs, and the network needs enough revenue to pay those expenses and make principal and interest payments on any loans. The second problem is that network infrastructure wears out and needs routine maintenance. Lack of funding to keep the network in good condition will degrade service over time. The solution is to have an expansion plan (even a modest one) that contributes to revenue growth over time.

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Not budgeting for drops. Adding new customers requires placing drops from the distribution fiber to the customer premises. Because of the high cost of customer drops, careful budgeting and adequate funding are necessary. The worst thing possible is for a business or resident to request connection to a network that lacks the funds to make that "last 100 feet" connection. Some networks bill customers (or try to get the service provider to pass that expense through to customers) for the cost of the drop. Some businesses are willing to pay for the drop because of the money they will save, but other businesses and many residential property owners continue to resist paying for construction. I believe that over time, as the benefits of fiber become more compelling, more customers will be willing to pay for their connections. However, in its first year or two of operation, a community-owned network needs funds to pay for new customer connections and thereby meet take-rate targets.

Poor costing of drops. The ongoing challenge of getting new customers connected is often aggravated by inflated costs for installing fiber drop cables. Some fiber construction contractors, used to working for deep-pocketed incumbents, specify construction techniques for drops that make them too expensive.

For example, a drop cable to a single business customer may not need to be installed in conduit buried 36 inches deep. Once it leaves the public right-of-way, it could be direct buried just 12 to 18 inches deep or installed in a very shallow slot. Getting good prices from contractors is not difficult, but it usually involves sitting down with them, discussing the kinds of construction methods they can provide and negotiating prices for various construction techniques in advance. As an example, in one community where I was asked to help, the contractor doing drops wanted to use horizontal drilling for all drops even where direct bury with a much less expensive machine would have saved thousands of dollars. I recommended a change to a contractor who had a wider variety of equipment and was comfortable with simpler and less expensive installation techniques.

MARKETING

Not offering incentives for service providers. In multiservice, multiprovider networks (often called open access), I have found offering price incentives to providers is necessary to get them to sell their own services more consistently. These can take the form of short-term incentives (such as waiving the connection fee for all new customers in the next 60 days) or volume and term discounts for increasing the number of customers they have on the network. Without incentives, some providers tend to slack off on new customer attraction after making an initial flurry of sales efforts when the network opens for business.

Confusing marketing with sales. Board members and senior managers without enough business experience think that in a multiprovider network, the private sector providers will do all the marketing and sales. However, for

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an open-access project, the community enterprise must have an ongoing marketing and public awareness effort. This effort may be modest, but if the network is to meet take-rate targets, businesses and residents have to know there is an alternative to the incumbent providers.

I have heard board members and managers say, "It is not our job to make sales for the providers." I agree, but closing a sale and getting a signed contract for service is not the same as a general marketing effort to raise awareness of the new network.

Failing to market as an economic development incentive. Many communities initiate a community broadband enterprise to help attract and retain businesses. However, some communities get a network up and running and then fail to promote the availability of high-performance, affordable fiber. The community economic development website may not even mention the fiber network.

Chattanooga's fiber effort succeeded in part because of brilliant marketing. Community leaders understood that hanging fiber on poles and installing smart electric meters would not, by itself, stimulate economic growth and job creation. They developed a comprehensive and sustained marketing campaign that promoted Chattanooga as a technology leader – and it worked.

The good news about community broadband efforts is that, after two decades of experimentation, we now know what works. Best practice in management, in operations and in marketing is well understood, and that means communities that do their homework can succeed. V

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