 # 108 — June 2005

Municipal Broadband: Optimistic Plan, Disappointing Reality

A Study of the BVU OptiNet and Lafayette Utilities System Plan

This paper compares the financial performance of a municipal fiber-to-the-home system in Bristol, Virginia with projections made by the same consultant for a proposed fiber-to-the-home system in Lafayette, Louisiana. The author finds the Bristol system is losing money because its operating budget is growing at an unexpected rate. He also finds that the proposed Lafayette system fails to reflect these higher real-world expenses, and consequently budgets too little.

1. Few municipalities offer fiber-to-the-premises networks.

The American Power Association reports 480 municipal utilities or public utility districts offer some form of broadband service. Only a small subset have chosen a fiber-to-the-premises (FTTP) platform. Reports from the Fiber-to-the-Home Council, local newspapers, and an interactive map on the CNET News Web site suggest a total of 48 municipal FTTP systems have been proposed. Of that total, just 16 are operational—the others are stalled, terminated, in development, or still in the proposal stage.

2. Broadband is not a public utility in the traditional model of electricity and water supply.

A common argument for the municipalization of broadband is that it is the twenty-first century equivalent of critical infrastructure-based services that municipalities have provided in the past, particularly power, water, sewer, and single-line narrowband telephone. This notion that municipal broadband is like other public utilities is wrong for several reasons.

Municipal water and electricity are generally provided in a monopoly environment. Municipal broadband, by contrast, is generally a competitive alternative that requires extensive promotion and advertising to maintain and grow revenues and market share.

Public utilities require high investment up front, but low investment thereafter combined with lengthy amortization of infrastructure. Broadband requires not only high investment upfront, but continued high investment thereafter. Technology cycles are short, and frequent upgrades and change-outs are necessary.

The fiscal problems of municipal broadband systems have been documented since the late 1990s. Most have failed to achieve their revenue goals and have required additional financing. Others have been sold or closed. Still others remain stalled as their backers look for financing.

3. BVU OptiNet, touted as a model, in fact reflects the problems faced by other municipal broadband networks.

Bristol, Virginia is a town of approximately 17,400 people and 8,000 households. Its public utility, Bristol Virginia Utilities, launched OptiNet—cable TV, Internet, and phone service—in 2002.

OptiNet's costs stem from its need to compete in the broadband market. The chief contributors to OptiNet's deficit are the cost of promotion and marketing, the cost of programming, and the cost of borrowing.

As of its fiscal year ended June 30, 2004, BVU OptiNet had a net operating loss of $3.3 million. The loss came despite a sizable increase in revenues—from $754,000 in 2003 to $4.7 million in 2004.

But OptiNet's operating expenses also grew dramatically, from $3.9 million in 2003 to $6.5 million in 2004. Non-operating costs, principally interest expenses, were $1.5 million in 2004.

The chief contributors to OptiNet's deficit are the cost of promotion and marketing, the cost of programming, and the cost of borrowing.

Promotion and marketing: In Bristol, the municipal broadband system is being sold against at least four other companies that already provide phone, Internet, and cable TV in their respective areas. In 2004, BVU OptiNet spent more than $220,000 on advertising, promotional material, and event sponsorships designed to build brand awareness or enroll customers.

Programming: Programming acquisition is the most volatile cost in the cable industry today. For all cable providers, the cost of programming is increasing 6 to 12 percent per year. The cost of programming is often cited as the reason for rate increases by municipal broadband systems. OptiNet increased rates in July 2004 to offset increases in programming costs.

Interest on Debt: OptiNet's interest expenses have grown from $251,253 in 2002 to $1.4 million in 2003 to $1.6 million in 2004. OptiNet's interest expense is almost twice that of the BVU electric operation. OptiNet's interest expenses account for 81 percent of BVU's total net interest expense. As of June 30, 2004, OptiNet's long-term liability stood at $27.49 million, compared to $23.86 million for all other BVU operations combined.

4. The Lafayette, Louisiana proposal is based on the OptiNet model but ignores the OptiNet realities.

CCG Consulting Inc., the same consultant that developed the proposal for BVU OptiNet, has created a feasibility plan for a proposed FTTP system serving Lafayette, Louisiana. That feasibility plan, however, is based on the OptiNet *model* rather than its reality after two full years of operation.

CCG Consulting Inc., the same consultant that developed the proposal for BVU OptiNet, has created a feasibility plan for a proposed FTTP system serving Lafayette, Louisiana. That plan is based on the OptiNet *model* rather than its reality.

The success of the Lafayette Utilities System (LUS) plan is tied to extremely fast growth of revenues—faster and more aggressive than OptiNet has seen in its market. CCG sees nearly $2.2 million in total revenues by the end of Year 2 (the first full year of residential service). That compares to $754,000 for BVU OptiNet, weighted for the respective number of households in each community.

While appearing to overstate likely revenues, the LUS plan at the same time underestimates the costs of marketing and programming. In five years, the LUS plan calls for one cent to be spent on marketing for every revenue dollar. And LUS assumes programming costs will increase just 4 percent per year. Both figures are too low.

Between its third and fifth year of operation, LUS expects to triple revenues and reach 50 percent cable TV penetration against BellSouth, Cox, DirecTV and Dish Network—while at the same time cutting its marketing costs by 30 percent. LUS has not explained how it expects to manage these two goals at the same time. CCG has pegged the third year of operation as the point where LUS will be cash-flow positive. But OptiNet was still losing money by the third year.

5. Cable TV, not Internet Access, Generates Revenue

The CCG revenue plan is heavily dependent on LUS being successful in cable TV. The system's primary revenue source will be cable TV—even though LUS tends to emphasize the importance of a high-speed broadband Internet connection for its citizens and the local economy. LUS revenue projections show cable revenues going from 36 percent to 43 percent of total sales from the third to fifth year of operation. Data service, by comparison, stays flat at 15 to 16.5 percent.

As LUS grows, low-paying Internet-only customers—the very demographic group LUS is ostensibly being taxpayer-funded to serve—will likely get short-shrift.

As LUS grows, low-paying Internet-only customers—the very demographic group LUS is ostensibly being taxpayer-funded to serve—will likely get short-shrift. Internet-only customers will be contributing only 15 cents to each revenue dollar, while cable customers will account for three times that. To have a chance at attaining its revenue projections, LUS will have to set a marketing and customer service agenda that will allow it to compete head-to-head with commercial phone and cable companies.

OptiNet faced that problem, and addressed it by requiring all of its customers to spend at least $44.95 a month on services. So while OptiNet offers 1 Mb/s Internet access at an attractive $26.36 a month, Bristol residents cannot buy that service alone.

OptiNet justified its taxpayer-backed entry into broadband and cable based on the idea that only a municipal entity could deliver universal broadband access at prices below market. Once OptiNet implemented a minimum purchase requirement, universal broadband service took a backseat to "average revenue per user"—the same measure commercial providers use for their decisions about network and service planning and rollout.

Based on *Heartland Policy Study* #108, "Municipal Broadband: Optimistic Plan, Disappoint Reality," by Steven Titch. Copies are available from The Heartland Institute for $10 each. The report is also available online at www.heartland.org.