

Davidson and Santorelli Report Makes Numerous Mistakes and Incorrect Conclusions

Many comments opposing municipal networks point to the Charles M. Davidson and Michael J. Santorelli report. This report is biased in support of arguments commonly made by cable and telephone incumbents. The authors make a number of simple errors but also clearly demonstrate an intent to discredit municipal networks.

As an example consider the following statement about BVU Authority in Virginia:

Despite BVU Authority and BVU OptiNet's financial viability, the GON has struggled financially. Year-over year revenue growth remains modest, but the GON has managed to be self-sustaining based on current rates and charges. In the most recent financial year, BVU reported that OptiNet had generated \$2 million in profit.¹

It seems odd to characterize a network that is “self-sustaining” and generating a \$2 million in profit in one year as having “struggled financially.”

The very fact that the authors chose to use the term “Government Owned Network” and acronym GON is telling. Though nearly everyone not associated with the incumbent telephone and cable companies calls the kind of networks in question “municipal networks,” “muni networks,” “community broadband,” “publicly owned networks” or some variant thereof, industry advocates prefer the term GON.

The authors do not inspire confidence when they discuss the number of municipal networks across the country. They ignore the 70 or so municipal cable networks and understate the number of municipal networks serving only some areas of town. Though they cite ILSR’s community broadband map with regard to the number of citywide municipal fiber networks, they claim only 38 municipal networks serve businesses.² Though they cite ILSR work for some of their claims, they chose to ignore our count of partial networks in favor of a lower figure.

The authors make a number of curious claims in the case studies on Chattanooga and Lafayette, saying EPB’s fiber was “under-utilized”³ and of Lafayette: “Much of this fiber remained 'dark' for years, and thousands of miles remain unlit.”⁴ As we explained in *Broadband at the Speed of Light*, adding extra fiber strands to a fiber build only modestly increase the costs of a project but provide an important resource that can be used in the future. Adding strands to an existing network in the future will almost cost an order of magnitude higher than simply including them in the beginning. Thus, it is standard practice to build a fiber network with many extra fibers that may later be used for unanticipated purposes

¹ See Davidson and Santorelli, Page 58

² See Davidson and Santorelli, Page 48

³ See Davidson and Santorelli, Page 51

⁴ See Davidson and Santorelli, Page 60

or leased to other entities. But Davidson and Santorelli try to use this standard industry practice as evidence that EPB and Lafayette were somehow failing to use their investment efficiently. This odd claim suggests the authors either have an anti-municipal network agenda or are unfamiliar with common practices in deploying telecommunications networks. Both are possible.

They claim that the “vast majority of GONs have been deployed in areas already served by multiple wireline and wireless broadband ISPs”⁵ Their methodology to show this claim is to compare the ILSR map of Community Broadband Networks with the National Broadband Map. This approach ignores the fact that many of the smaller, more rural municipal networks were the first to deploy broadband to their communities. Cable and telephone companies only later offered broadband, which is a reminder that municipal networks do not deter investment.

Chattanooga Case Study

The paper includes a case study of Chattanooga’s EPB network that highlights the authors’ bias due to their attempt to position the utility in the worst possible light. A recurring theme in all the case studies is that the authors try to peculiarize any municipal network successes while generalizing challenges. This means that any time a municipal network succeeds, they attempt claim the situation is unique. Any challenge is claimed to be something every local government will face and should fear.

They start by noting the “GON was greatly bolstered by the economic responses to the Great Recession.”⁶ Others have made similar claims, suggesting that without the Department of Energy (DOE) Grant, Chattanooga might not have its incredible fiber network. This is either inaccurate or suggests that EPB leaders are able to accurately predict the future. EPB bonded for its network in early 2008, before economic downturn, long before anyone knew there would be a DOE smart grid stimulus grant in coming years. Chattanooga was committed to building its network and was prepared to fund it without any taxpayer subsidies until DOE saw an opportunity to expand the network more quickly in order to examine how a smart grid impacts the electrical system. This is a good lesson for other communities to follow – plan for self-reliance but be prepared to take advantage of changing circumstances.

The authors go on to repeatedly note that EPB’s credit rating was reduced after it began building the fiber network. At the time, Harold DePriest said he wasn’t very surprised as he acknowledged that EPB had taken on more risk than creditors typically see from a municipal electric utility.⁷ What the authors failed to acknowledge is that EPB’s credit rating was later restored.

⁵ See Davidson and Santorelli, page 50

⁶ See Davidson and Santorelli, page 54

⁷ See Attachment 7, *Broadband At the Speed of Light*, Christopher Mitchell, Institute for Local Self-Reliance, April 2012, page 40

What is particularly odd about the bond rating discussion is that the authors say “While EPB itself is relatively stable, its bond rating was downgraded by Fitch (from AA+ to AA) as a result of the credit risk created by its cross-funding scheme.”⁸ However, the footnote includes this text along with a link to a local new story: “reporting that Standards and Poor’s had raised EPB’s credit rating.” In fact, the linked article included this praise for the network:

*Several positive factors have emerged since the most recent S&P bond rating of ‘AA’. With nearly 45,000 homes and businesses connected, the EPB Fiber Optics business continues to build market share and is providing the electric system significant financial benefit.*⁹

Frankly, it is hard to understand this contradiction. An unbiased researcher would have clearly stated that EPB’s bond rating had gone down and been restored. A totally dishonest researcher would not have included the accurate information in the footnote. Perhaps it was just sloppiness, but these are the kinds of mistakes that cast doubt on the report’s integrity and intent.

The report repeatedly uses numbers out of context, likely in an effort to scare readers. We noted above that the report suggests that Chattanooga and Lafayette spent more than the norm in building their networks. This is to be expected as they are among the largest cities to invest in FTTH the networks. The authors routinely fail to place relevant numbers in context. For instance,

*Since EPB – like most local utilities, is a monopoly, the has the effect of exposing the entire city – FTTH subscribers and non-subscribers alike – to the substantial debts incurred in building the network.*¹⁰

A useful question to answer would be how a ratepayer would be impacted by the failure of that debt, something we noted in our case study on EPB in *Broadband at the Speed of Light*. EPB CEO Harold DePriest noted that in a worst-case scenario, where they squandered all the borrowed money and failed to generate even a dollar of revenue and had no equipment even to sell afterward, a ratepayer would see their bill go up \$2-\$3 per month.¹¹ Though other communities do face more serious consequences in their worst-case scenario, these authors refuse to contextualize the pros and cons of municipal networks.

The authors are unpersuaded that EPB Fiber has attracted jobs to the region, saying that jobs are often attributable to other factors like tax breaks. Tax breaks do indeed have an impact, but it is hard to imagine entrepreneurs flocking to Chattanooga to build their apps using the same basic services from Comcast cable and AT&T DSL available in nearly every metro region. Though they commented on Chattanooga having a net loss of jobs over one period, they failed to mention other evidence suggesting that Chattanooga was seeing a surge of economic development. In a recession, losing fewer jobs than everywhere else is still a success. As we wrote

⁸ See Davidson and Santorelli, page 53

⁹ <http://www.chattanoogan.com/2012/10/19/236771/EPB-Gets-Bond-Rating-Upgrade.aspx>

¹⁰ See Davidson and Santorelli, Page 55

¹¹ See *Broadband at the Speed of Light*, page 35

in *Broadband at the Speed of Light*, the Chattanooga Chamber of Commerce reported that interest from potential employers was higher than it had been in 29 years. *Business Facilities Magazine* ranked Chattanooga as the top U.S. metro area for economic growth potential.¹²

The conclusion to the section on EPB ends with a suggestion that Chattanooga would have been better off investing hundreds of millions into bridges or other infrastructure. The authors fail to appreciate that investment in municipal networks are not zero sum games. EPB would not have been able to raise \$400 million to spend on bridge repair. However, given the impact of EPB Fiber on the community and local economy, the resulting economic activity will likely result in more public funds being available to address the other infrastructure concerns.

Wilson Case Study

The Wilson case study has the same types of imbalances noted in that of EPB. Rather than rehashing, we want to focus on a claim that demonstrates the authors' ignorance regarding why municipalities invest in fiber networks. This observation relates to an undercurrent within the case study that the community of Wilson may not need an advanced network because it has not demonstrated sufficient demand. They write:

Perhaps more important is that this GON was built in an area with low consumer demand for and use of broadband. Deploying a broadband network in such an area not only jeopardizes the ability of the system to become profitable and self-sustaining, it also serves as another example of the seemingly myopic focus on supply side issues in the broadband space.¹³

To the authors, building a globally competitive FTTH network in Wilson, a community with a historically agriculture and manufacturing focus is foolish according to their academic graphs of supply and demand. For the purposes of this argument, we will ignore the fact that Wilson's Greenlight has become self-sustaining despite the authors concern that such an accomplishment would be difficult (the term profitable is odd in dealing with a non-profit model).

It is important to note that the authors may have been confused by yet another basic error in their work – they claim “Wilson’s leading employers tend to be manufacturing firms, which typically do not require gigabit broadband to operate.¹⁴” First, Wilson's Greenlight offers a variety of services and just about every employer today needs a reliable Internet connection. An hour of downtime results in unacceptable losses in productivity. Our case study on Wilson, *Carolina's Connected Community: Wilson Gives Greenlight to Fast Internet*,¹⁵ notes that one of

¹² See *Broadband at the Speed of Light*, page 47

¹³ See Davidson and Santorelli, page 90-91

¹⁴ See Davidson and Santorelli Page 90

¹⁵ See Attachment 8, *Carolina's Connected Community: Wilson Gives the Greenlight to Fast Internet*, Todd O'Boyle and Christopher Mitchell, Institute for Local Self-Reliance and Common Cause, December 2012

the reasons Wilson built Greenlight is that Time Warner Cable's network was perceived to be unreliable.

However, a bigger problem with the authors' claim is that it is not true based once again, on their own source. They cite two charts from Wilson that list the top employers and four of the top five employers are not manufacturing related.¹⁶ They include banking, health care, and education. And though Wilson does not list its clients, we understand the biggest employers in the region use it, including manufacturers.

But the important question from Wilson's experience is this: If you are the mayor of Wilson and want to diversify the local economy with high tech jobs, how can you do that without building a fiber network? Many of the firms that have moved to Wilson since Greenlight was launched would not have moved there without the network.¹⁷

In short, the problem is classic chicken and egg; without a "supply" of broadband, it is hard to create "demand." It is far from clear how well the standard concepts of supply and demand fit a general purpose technology¹⁸ like Internet access. However, it is quite clear that the authors fail to understand even the basic context and motivation behind municipal networks despite attempting to explain it to readers in this report.

Conclusion - Davidson and Santorelli Are Confused at Best, But Likely Biased Against Municipal Networks

The numerous mistakes and apparently deliberate mischaracterizing of basic facts relating to community networks suggests that this paper was deliberately crafted to reinforce the arguments of incumbent cable and telephone companies.

We have detailed disturbing biases, omissions, and errors in this paper. In fact, there are many we did not address for the purposes of keeping these comments to reasonable length. Others include that the authors are apparently unaware that the Monticello, Minnesota, network was actually a partnership with a local private company that delivered the services. As such, it isn't even clear that it qualified as a GON per their definition. They characterize Muni Wi-Fi approaches as entirely public despite the contracts between Earthlink and Philadelphia having a closer similarity to the Google arrangements with cities like Kansas City.

The FCC would do well to disregard any lessons this report claims to offer.

¹⁶ http://www.wilsonedc.com/wp-content/uploads/2011/04/Wilson_NC_Data_Standards_Table_3.pdf

¹⁷ For more information about businesses moving to Wilson, see <http://www.muninetworks.org/content/being-gig-city-incubating-small-businesses> and <http://www.muninetworks.org/content/being-gig-city-its-all-about-upload>.

¹⁸ http://en.wikipedia.org/wiki/General_purpose_technology