

Insight

Why More Government Owned Broadband Networks Aren't Being Built

WILL RINEHART | APRIL 13, 2017

With Congress taking a fresh look at infrastructure, government owned broadband networks have come back into the limelight. Yet, policymakers at all levels of government should be wary of just how much can be achieved with these models. While both ardent supporters and detractors have become entrenched, less attention has been paid to the real costs and headwinds of deployment. Localities face complex tradeoffs created by bond issuance, taxation, and regulation that in turn affect their own revenue streams. Developing municipal fiber is no easy task, as this brief will explain.

Putting broadband services under the umbrella of a local government doesn't wave the very real problem of cost. Next generation networks are expensive and will likely remain expensive since the labor portion contributes a majority share of the total cost. Since the entire network must be built, and only then can revenues be collected, new networks owned by municipalities face the same kind of financing problems as any other entrant. If the example set by Google Fiber tells us anything, it is a difficult industry to crack into for a variety of reasons.

Government supported networks typically find their footing via three kinds of financing options. The public utility model, which comes directly from the electric industry, gets the most attention. This model relies on funding a network buildout via loans, bond issuance, and equity financing by the municipal directly. The locality then competes directly with private companies for consumers. Public private partnerships are a second broad type of financing and are increasingly found in the United States. Typically, the local government will build and own the pipes, and then contract with private entities to operate it and provide maintenance. The details matter in public private partnerships since broadband providers are on the hook with their customers if the infrastructure fails to be repaired in a

timely manner. Also, companies often forgo infrastructure depreciation on their books when they engage in this kind of leasing, so there is a clear financial reason why this model isn't widely adopted. Lastly, federal funding, like the stimulus programs, can provide the needed seed funding to begin a network.

In practice, municipalities will typically cobble together a number of different sources to develop out a network. Yet, the relative lack of municipal broadband projects shouldn't be surprising. Undertaking these kinds of projects entails significant risk. Utilities aren't eager to raise electric rates in order to pay for new broadband infrastructure or tackling on more debt which could put it into a funding bind. Contrary to what some idealists imagine the world to look like, municipalities still need to make regular payments on their debt and equity, and face all of the similar challenges as a private network provider.

The municipal bond market tends not to be addressed in policy discussions either, but changes are occurring. In the second half of 2016, tax collections fell in a majority of states, so revenues seem to be plateauing. At least in the near term, bond analysts project that localities aren't likely to endeavor into new projects that strain their ability to cover their debt. Until revenues begin to spike again, there will be little appetite for new broadband networks. In the long term, these projects could continue to increase in number since banks and insurance companies have been increasing their holdings of municipal debt. Yet with interest rates ticking up, fewer projects will be able to pass muster.

As the number of these networks have grown, states have outlined rules that define deployment. They are often cited as being onerous, thus deterring the free development of locally owned networks. Indeed, the Federal Communications Commission brought the states to court on exactly this issue. But the broad brush that these laws are painted with serves to hide reality. Yet, only a few states have outright bans. On the other hand, many of the state laws make sense when put into proper context.

For example, Florida has been chided for their law, since it "requires a plan to ensure the network breaks even within four years" and other financial accounting hurdles. Laying out the details of the investment isn't just a standard practice for bond issuance, it is a legal requirement policed by the Securities and Exchange Commission. Similarly, if a utility wants to develop a new power source or upgrade their infrastructure, a feasibility study of this sort is needed. Otherwise, it won't get funded. Defining the time horizon for these projects to breakeven isn't an outrageous requirement, especially since many wireless projects in the early 2000s didn't have these kinds of plans and failed en masse.

Examples abound of successful muni projects under these minimal standards. US SONET in Southern Illinois was profitable after four years, while FiberNet in West Virginia became

cash flow positive after two and a half years. However, as competition tightens in the coming years, the chance to become cash flow positive over a four year term will increasingly become more difficult.

Saying that the Florida law, like those in Alabama, Louisiana, North Carolina, contains "broadband restrictions" is akin to saying that banks shouldn't worry about business plans when giving out business loans.

Some states require municipal projects to estimate and then add back in taxes. Indeed, telecommunication taxation is one area where sensible reform could go a long way in enhancing deployment. Cities and states rely on taxes from a wide range of sources including telecommunication providers to balance the books. As cities move from tax paying private providers to non-tax paying municipally owned utilities, the tax base is likely to decline over time. The anchor institution model which ties colleges, universities, and medical centers into a government owned network development might seem to be good for all parties involved, but it has the effect of reducing a variety of tax revenues since nonprofits are often exempt. Maintaining those revenue streams are important for cities, but also for states that rely on massive contributions from private network providers in various forms including property taxes.

Naturally, you can see the rub. If you are a city and you create your own fiber project, then you could lose out on tax revenues, fees, and other perks from those businesses. A complex tradeoff between revenues and broadband development takes place, and it is one that doesn't make headlines.

Take franchise fees, for example. These are the fees that nearly every city collects to allow for cable operators to begin service. Typically cities take the most that they are legally able to, which amounts to 5 percent of revenue. While these fees are supposed to maintain public, educational, and government access television channels (PEG channels) as well as other public communication infrastructure, more commonly the fees are dumped into a city's general fund and aren't singled out for their intended use. Over time, the revenue adds up. A couple of years back, an audit of Los Angeles found 35 million in cable franchise fees sitting in a bank doing nothing. Again, Alabama has been singled out as having restrictions on broadband, yet the law requires cities to add back in these franchise fee costs.

Indeed, it is an open and dirty secret that many large cities treat cable and telephone service as a cash cow. The impetus for the 5 percent federal ceiling on franchise fees came from countless experiences with exorbitant rates, like one Wisconsin municipality that charged a 25 percent fee on cable. Why did it take so long for Google Fiber to come to San

Francisco? Well, when San Francisco worked with Google to provide wireless service in 2006, the city wanted a share of the revenue and free computers, although the city wasn't building the infrastructure and the service was going to be free. Many large cities also conditioned their franchise agreements on the installation of fiber networks to connect municipal institutions. Moving towards a city-owned broadband providers means that the perks would come to an end.

Many cities aren't tackling broadband projects for understandable reasons. Financing is difficult and the bond market isn't changing for the better. Creating a consumer-facing service is a risky business with significant pitfalls. And to top it off, communication taxes are an important source of revenue, which no one in government wants to neuter. State laws have become a locus of conversation, but their importance in this discussion is overrated. Far more important are market fundamentals. Local governments face tough decisions when making a new network a reality.