

Financing Just Got Extra Complicated. BROADBAND COMMUNITIES Has Your Back!

In the last issue, I concentrated on the regulatory and technical issues embedded in the evolving rules for handing out \$42.5 billion in new federal broadband infrastructure funds. Before that, I talked about labor and materials shortages. In this issue, I discuss the financial planning issues for prospective deployers.

By Steven S. Ross / *Broadband Communities*

This past winter, a blizzard of new issues affected the economics and timing of new broadband deployments. Aside from rising interest rates and evolving rules for actually handing out federal money, supply chain and labor issues deepened, and inflation worsened. In this column, I discuss how broadband carriers might adjust their financial modeling of deployment feasibility, cash flow timing, and even choice of deployment partners.

THE ISSUES

Though it's common knowledge that interest rates will rise all year, that labor and materials shortages will likely deepen, and that broadband demand will continue to increase even as the pandemic wanes, the implications are becoming more daunting in the following areas:

Money. As this issue is being prepared, the Federal Reserve Bank raised the interest rate it charges banks for short-term deposits by 1/4 percent to 2 percent total. Less widely reported, the Fed signaled as many as six more rate rises this year. In February, it had talked about a total of four. By year end, that takes the expected federal funds "discount rate" to almost 4 percent rather than 3 percent. Just as significantly, the money supply tightened beyond what had been going on since mid-2021. Thus, deployers will likely be looking at 6 or 7 percent interest and greater security demands over the next few years, no matter what happens regarding Ukraine.

The rising cost and falling supply also affect the evolving regulations under which NTIA and state broadband offices will disburse funds. Think of it this way: \$42.5 billion is available. If it were to be spent as grants for 100 percent of a deployment's cost, the money would pay for hooking up about 8 million premises with fiber at an average of about \$5,000 each – some very remote at very high costs, some multiple-dwelling-unit buildings or new subdevelopments at a far lower price.

Just a few months ago, I was modeling a very different idea – that most federally funded awards (grants or cut-rate loans) could cover 20 to 30 percent of costs. That would be enough to bring overall costs to deployers within the range of existing fiber deployments, decrease risk for private lenders, and pass most of the last 30 million premises that lack good broadband. That math may no longer work.

Inflation and availability. There are two significant issues with money – its cost (interest and fees) and outright availability. When the Federal Reserve raises its rates, banks have to pay more to "borrow" from the Fed to meet (usually short-term) reserve requirements – the "cushion" between the money it has loaned and money on deposit. Money borrowed is an asset to borrowers. But it is counted close to twice because the promise to be repaid (via a mortgage or another lien or bond) is also an asset! Thus, when less borrowing happens, the money supply shrinks. In addition,

price inflation decreases the money's worth, the same effect as shrinking the adequate pool.

Politicians tend to focus on government borrowing, but overall, lending in the U.S. – public and private – totals more than \$70 trillion. The federal deficit is only about a third of that. The U.S. added close to \$10 trillion to the national debt during the pandemic, but personal and corporate debt declined. Now everyone is rushing to buy and build, causing the money supply to tighten.

Cost of delay. For deployers, this all means the interest rates they pay will generally go up faster than the 2 percent increase (to about 4 percent) the Federal Reserve Bank already signaled. Next year, deployers could be paying the equivalent of 7 or 8 percent interest and fees – or more. Thus, a six-month delay could add 4 percent to borrowing costs for deployment. That's back to the norm of around 2010.

In addition, more delays are expected, thanks to war and sanctions. This, in turn, makes “low-cost” financing more valuable, and the most significant source is that \$42.5 billion in the infrastructure bill that has yet to be distributed. The scramble is intensifying. In the past, national carriers often benefitted from federal funds supposedly aimed more at small deployers. Congress hoped to change that. Congressional staffers hear that AT&T plans to double its fiber footprint over the next five years, adding 25 million premises. Is it expecting some of the cost to be subsidized? Why wouldn't it?

About \$15 billion is earmarked for subsidizing low-income families' access to broadband – especially for schoolwork and remote work. The highest cost to families would be \$30 a month, payable to the carriers. That lowers the risk for lenders, and it helps families. But how good does the broadband have to be? That has yet to be decided. Could it vary from state to state?

MODELING TRICKS

All this means prospective deployers must model for contingencies.

Adjusting the models to various scenarios thus becomes a critical part of any deployment strategy. Those applying for funds may not have to submit multiple model scenarios, but they may be asked to do so before the money is handed over.

How to do it? My models have many modification points (available free at www.bbcmag.com/tools-and-resources/ftth-financial-analyzers) and are often used (also free) by consultants.

Delays? In the models, the default number of homes passed in any year is calculated as half the homes passed as ready customers. The other half is counted in the following year. The models multiply that number by the expected take rate to get the expected number of paying customers. That's already a bit pessimistic today, especially if a deployer is not offering linear video. If the deployer is serving plain broadband, the network can start earning revenue as soon as each small neighborhood is passed. But deployers may want to do a model run in which as many as all planned passings are delayed into the following year as a result of labor or equipment shortages.

Expect to pay more next year for new money? My models can accept funds as net of fees. But there's also a separate one-time “commission” cell. Deployers may have to extend that across the entire multiyear line. The multi-neighborhood model can accept different financial arrangements, different deployment technologies, and even different start and finish dates. But it's confusing to combine all scenarios in multiple pages of a single model. Better to create separate model runs.

I have consistently noted that regionalization makes sense for small deployers. This does not usually mean a corporate merger. It means joint operating arrangements and coordinated routing. Many in the past decade have been public-private partnerships. These are easy to explore in my multi-neighborhood model. Typical regional operational savings are on the order of 20 percent. Shortages of fiber and network electronics are already serious and getting worse. Major carriers always step to the front of the line. The bigger a carrier's “regional” buy, the closer it will move to the front as well, even if it does not partner with a major carrier.

The capital-cost models can all accept revenue from leasing a network – add them in the same area where fees for various services to end-user customers are added. However, the two cash flow models would need a new revenue line below the existing lines to pick up revenue from leases and other special arrangements, perhaps from cellular carriers for backhaul. This is because the cash flow models allow for short-term promotional customer pricing.

Remember, the first goal should be to avoid economic disaster. The second is to use this once-in-a-generation funding opportunity to serve customers with better broadband. ♦

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REACH OUT

Need help using the **BROADBAND COMMUNITIES** models? Just email me. Most people need less than an hour of my time, and it's free – a service for our readers. I'll be spending much of my time doing the same thing at the **BROADBAND COMMUNITIES** Summit in Houston. Email me (steve@bbcmag.com) to set up an appointment.