Google’s announcement in early February that it is looking for municipal partners to build some “trial” 1 Gbps fiber-to-the-home open-access networks serving 50,000 to 500,000 households shook up the industry. It also caught the notice of the Federal Communications Commission, which is on track to miss (by at least a month) its February 17 deadline for release of a national broadband plan.

The idea benefits Google – and, at least in the short term, consumers lucky enough to get the service. It also gets more of the network-building industry back to work. As a bandwidth hawk, I applaud it. There’s no question Google can afford it. At $700 a dwelling unit passed (Google says it can do it for less), 50 percent take rate (the FTTH average) and $300 to wire a customer’s home, a 500,000-household build would cost $425 million for the network itself. At $400 a year per customer gross profit, that’s $100 million a year – more than enough to cover overhead and cost of capital and make a good profit. And, of course, Google has the head and cost of capital and make a good year – more than enough to cover over-tomer gross profit, that’s $100 million a year.

Some key points:

- Google has clearly been shopping for technology. Calix, Occam and others have been shipping optical network terminals (ONTs) with 1 Gbps capacity in both directions simply because the added cost is so low that telcos and other ISPs have been willing to pay it. Occam alone says it has shipped 100,000 1 Gbps ports. PacketFront announced end-to-end 1 Gbps in January. Hauwei is supplying Singapore with a Gbps network that is well along to meeting its 2013 completion deadline.
- Google’s online application form (at www.google.com/appserve/fiberrfr) looks similar enough to the Round 1 stimulus application that many unsuccessful entrants in the stimulus lottery will find it easy to port their projects to Google’s requirements.
- Qwest, whose stock has been falling for months, is toast. Here’s a competitor that could build out all Qwest’s broadband-starved urban areas in the next few years. Neither AT&T nor Verizon is willing or able to buy Qwest as is, so Google emerges as one of the few thin hopes people in the Qwest service area have for decent broadband.
- Verizon can match Google’s network speeds with FiOS, which has enough backhaul capacity to deliver 1 Gbps, although it will have to swap out many of its older ONTs. Many smaller telcos can match Google as well, as long as they face hurdles in getting started. Yes, Google itself is riding Verizon’s rails and has colocated in Verizon central offices along with mutual partner Akamai. But in the United States, pure open access has not worked well at all. The incumbents control so much video content that new open-access nets have had to create their own in-house video services to compete.
- Our forecast: Many of the big incumbents will try hard to sabotage this project at the state level – the federal government is too smart to fall whole-hog for the incumbents’ short-term agenda. And they will succeed in many cases. They spread a great deal of money around the dung heaps that politicians have to wallow in to collect funds for elections. And thanks to the Supreme Court’s utter “brilliance” in allowing corporations to marshal unlimited funds to pull the political line, they can now appeal directly to a gullible public.

But five years down the road? All the incumbents will be paying to ride Google’s open-access nets. And Google could have far more than 500,000 households hooked up. BBP