

# Salvaging Google Fiber's Achievements

Google Fiber may have hit the “pause” button on its fiber-to-the-home rollout, but it still has an opportunity to help communities obtain better broadband.

By Benoît Felten / *Diffraction Analysis*

**I**n the wake of Google Access CEO Craig Barratt’s “Goodbye Access” post on the Google Fiber blog, papers left, right and center are predicting the end of Google Fiber. Barratt tries to sound upbeat, but in essence he’s announcing that Google Fiber won’t expand further (pending a strategic reevaluation), that people will be laid off and that he will leave. I don’t know Craig and can’t really comment on his tenure as Access CEO, but that doesn’t exactly sound like good news.

For analysts like me, this is a complicated topic for a very simple reason: For anyone other than Google, an infrastructure venture on the scale of Google Fiber would have had to disclose numbers by now. Wall Street would have asked for take rates, average revenue per user (ARPU) and all kinds of other metrics to evaluate the validity of the investment. Before the Alphabet restructuring, however, Fiber was just another Google project. Now that Access is its own company, we might have expected these numbers to come out. The problem is, Access isn’t talking.

So we’re left to speculate. I’ve been thinking about this for a couple of years at least, and I want to share these thoughts now that Google Fiber seems to be at a turning point. Just to be clear: I’m not sharing information but analyzing and speculating on the basis of what little we know and trying to think how what’s been achieved might be salvaged and expanded upon.

## A SCHIZOPHRENIC PROJECT

My impression has always been that Google Fiber was a schizophrenic project. At the very beginning, those Google decision-makers who were more interested in achieving important policy goals seemed to want Google Fiber to be a catalyst – something that would shift the market with a bang and then be a shared experience for others (public or private) to take over. The idea of a blueprint was floated in the early days.

But there were also those who seemed to think Google Fiber could become a new business for the company, something not just aimed at shifting market perceptions and shaking the complacency of telco and cable incumbents but a profitable business line in its own right. That has always seemed to me an unlikely proposition. I confront on a daily basis the paradox of short term–focused telecom operators considering long-term fiber investment efforts, but the operators’ short term is longer than the short term of Google’s core business by an order of magnitude. Unless there was a long game plan to view Google Fiber as the “pension fund” arm of Google’s finances, it didn’t really make sense to me.

To be honest, I didn’t much care about that second proposition, anyway. The U.S. market is already plagued by a lack of competition in fixed broadband. Replacing one closed monopoly with another (no matter how much sexier) didn’t



Though Google Fiber hasn't revolutionized fiber deployment, communities can still learn from its experience.

seem to me a particularly desirable goal. So although I fully wanted to believe in the potential for Google Fiber's kicking the telecom anthill, I wasn't convinced by the relevance and likelihood of its becoming a fiber business like every other.

Now that there appears to be some serious soul-searching around the second proposition, it's time to consider whether the first has worked and how things could go from there.

#### **COST: A FUNDAMENTAL FLAW**

My take is that there was one fundamental flaw: Google believed it could revolutionize the laying of fiber by deploying it much cheaper and much faster than anybody else had ever done. That's fully in line with the Google mindset, but unfortunately it ignores the fact that hundreds of companies had been deploying wireline access infrastructure for years by the time Google Fiber decided to give it a go.

I'd suggest that we're now seeing the windfall from that misguided assumption. Google is finally admitting, in a roundabout way, that despite all the clever people it has on

hand, it hasn't revolutionized fiber deployment. To plan properly, to work with local authorities effectively, to do the outside plant layout efficiently still takes time.

Did Google manage to do these things more cheaply than others did? Probably but not by a wide margin. And as it decided to scale beyond Kansas City, it realized that a lot of the efficiencies it found there depended on local specifics and relationships. In other words, the cost side of the equation is roughly on par with industry norms (again, my speculation).

#### **REVENUE: IS A COOL PRODUCT ENOUGH?**

On the revenue side, the two key metrics are take rate and ARPU. The first is much more important than the second. Google Fiber understood that and went with a frankly very cool product at a very affordable price point. (I've never been really convinced of the need to have a linear TV play, but that's beside the point.) That's not always enough, though. Incumbents respond by lowering their prices locally, and migration is a painful process for customers – there are many reasons for inertia in customer acquisition even

with a good product, a fantastic brand and a collaborative local community.

My bet is that Google Fiber's takeup is not that great in the markets it's started commercializing. It may be very good by industry norms, but Google expected to blow away industry norms from the get-go. If I had to guess a number, I'd say Google Fiber is in the 30–40 percent takeup range in areas that have been open for service for three years. Industry average was about 7 percent per year the last time I looked into it, so that's very good, but it's probably not enough by Google standards.

Keep in mind also that the pre-sales in Kansas City were astounding. When that data was still publicly available, Diffraction Analysis scraped the website and analyzed it. Some areas had more than 100 percent pre-subscription, and, as I recall, the average pre-subscription rate was already in that 30–40 percent bracket even before Google started deploying.

The problem is that pre-subscribers want to be connected now, and it's going to take months, if not years, to get to them. By the time a deployer actually gets there, they may have moved out, they may have finally had a

good offer from their cable operator or they may just be angry about the wait.

And that, in my opinion, is what's happening at Google Fiber right now: Costs are higher than planned (even though lower than industry norms would suggest) and takeup is lower than expected (even though higher than industry norms would suggest). Because Google Fiber isn't really looking at this as an infrastructure player would, it's time to reconsider.

## THE WIRELESS FACTOR

Wireless is starting to look like a potential solution to some of the problems. Don't believe the hype about a wireless access solution substituting for residential fixed service anytime soon, at least not in most urban geographies. There are promising technologies ahead, but they're far from mature yet.

Google's acquisition of Webpass, however, is interesting. Webpass uses wireless solutions for urban aggregation, not for access. In other words, it doesn't connect homes wirelessly; it connects multitenant buildings wirelessly and uses existing in-building wiring to connect the homes from the rooftop antenna.

This clever approach solves two fundamental deployment issues:

- It eliminates the need to pull fiber along street poles or bury ducts in the pavement to pull fiber along the streets, which is both costly and time-consuming.
- Reusing existing wiring eliminates the need to deploy fiber inside homes, which is also expensive and time-consuming.

However, I see several potential issues with the approach:

- Making the economics work requires targeting multitenant buildings. I suspect (again, not knowing the exact costs) that the equipment necessary to install this solution for single-family homes would make the price point too high. Furthermore, it requires line of sight between rooftops, which is comparatively easy when people live in high downtown

MDUs and not so easy when they live in detached homes.

- It requires access to the existing cabling in the building. My bet is that a competitor can't always bank on being able to reuse the cabling, especially if it's been deployed by an incumbent telco or a cable operator.

Webpass may still open up opportunities. I don't think the service would be as good and stable as FTTH service, but it might be good enough for most customers' needs. Would it be good enough to compete with AT&T's FTTC? Most likely. Good enough to compete with cable's DOCSIS 3.1 as that gets deployed? Less likely.

## WHAT SHOULD GOOGLE FIBER DO?

Assuming I'm right, what should Google Fiber do? Here are several non-mutually exclusive scenarios that I think would benefit the United States and U.S. customers as well as Google Fiber. Keep in mind that I see a lot more value in the "catalyst for change" goal than in the "Google Fiber as another broadband operator" goal.

On the deployment side, the equation has changed. Because Google Fiber made very targeted deployments and phased them over time, AT&T and cable operators could easily respond with a combination of price lowering and infrastructure deployments (or at least announcements) in the markets that Google Fiber publicly targets. The only way around that would be for Google Fiber to announce and undertake deployment in, say, 30 markets at the same time – which, as is now quite clear, the company doesn't have the stomach for.

Assuming it still wants to play a long game, however, it could destabilize the incumbents by announcing a broad, Webpass-type deployment scenario: Target and quickly deploy a Webpass-like solution in 30 markets with the promise that, if the demand is there, fiber may be installed down the line. This positions the wireless broadband solution as a quick-to-market acquisition tool. It also forces AT&T to respond everywhere at the

same time, something I suspect it cannot do and is unwilling to do. This could be part of the catalyst, forcing AT&T and/or cable companies to up their infrastructure game or, failing that, to look at structural solutions to respond. (Assuming the Time Warner/AT&T merger goes forward, the scenario of AT&T spinning off telecom infrastructure altogether is maybe not so unlikely anymore.)

## OPEN UP THE EXPERIMENT

Beyond that, I think the best bet to achieve the original goal of changing the market by pushing existing players to deliver significantly better service is to open up the Google Fiber experiment. Instead of keeping everything close to the vest, go public. Tell everyone, "This is how we've done it; these are the challenges we faced; this is how we overcame them." In other words, "Here is the blueprint."

Google Fiber could facilitate an open discussion by organizing and sponsoring workshops to enable companies and municipalities looking to deploy decent infrastructure to share experiences. It could even build a consulting team to help get these projects in shape.

I think this would have two major impacts on the market:

- It would unleash private and municipal initiatives. Many cities are on the fence about building broadband, and many private players are struggling with funding. They all want to do something about the state of broadband in their communities, but they're afraid of doing it wrong, of biting off more than they can chew. Having a clear set of instructions, a clearer understanding of the ecosystem of deployment (Google could build and maintain a registry of subcontractors, for example) and a well-documented list of do's and don'ts would be hugely beneficial.
- It would reassure potential investors simply because of the association with the Google name. Remember that I assume here that Google Fiber didn't underperform by industry norms but just fell short of its own

ambitions. As far as infrastructure investors go, I suspect Google Fiber's performance would be seen as more than acceptable. Therefore following the Google Fiber recipe would be a massive help for projects in attracting capital.

This may not be enough to generate the catalyst Google Fiber should be looking for. It would have worked had the company started doing this in 2011, but the situation has changed. The incumbents and cable operators have upped their game, and the early-mover advantage no longer applies.

However, there are two more things Google Fiber could do that I think would clearly make a difference.

First, Google Fiber could start an infrastructure fund and look for worthy fiber-to-the-home (or gigabit broadband, to be slightly more technology neutral) projects to back. Again, simply because of the Google name's being attached

to a project, this would make capital raising incredibly easier for fiber projects. It would also allow Google Fiber to target markets where it genuinely thinks a difference can be made. Finally, it would position Google as a company that invests in access infrastructure when telcos are often hammering at it for being "free riders" of the access network. A win-win-win.

Second, Google Fiber could build a set of rules that would allow ISPs to operate with a "Google Inside" label. The idea would be for these ISPs, assuming they follow a set of standards established by Google Fiber (and maybe accept being transparently measured on performance) to use the Google Fiber label.

Why would this be important? Because many customers, sadly, prefer lousy service from a brand they know and see on TV to the potentially better service from a brand they've never heard of that can't afford TV ads. Associating

Google's brand with these competing gigabit broadband ISPs would go a long way toward compensating for that lack of recognition and reassuring potential customers. The risk to Google Fiber would be minimal because as soon as an ISP stopped meeting the requirements, it would be dropped from the scheme.

These are just some of the ideas that have been floating around my head for the last few years about Google Fiber. I think it was a great idea and a massively ambitious project, and though it has (in my view) partly lost its way, I still think it can make a difference going forward. ❖

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*This analysis was first published on the Diffraction Analysis website, [www.diffractionanalysis.com](http://www.diffractionanalysis.com). Contact Benoît at [benoit@diffractionanalysis.com](mailto:benoit@diffractionanalysis.com).*

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