



Fiber Optimism

An intrepid group of techies hopes to bring a revolutionary Google service to Baltimore.

By Jess Blumberg

It all started with a Facebook message. On February 10, media tech podcaster Patrick Roanhouse sent a message imploring some of the finest technological minds in Baltimore to “Tweet the mayor. Call the governor. We need this in Baltimore.”

Roanhouse was referring to Google Fiber, an ultra-high-speed broadband network to be tested out in one or more American communities. The network—built at no charge—would deliver Internet speeds up to 100 times faster than what most users have access to.

“This service could bring about technology we haven’t even imagined yet,” says tech entrepreneur Dave Troy, a recipient of the Facebook message. “And Baltimore would be a perfect fit.”

Google asked interested communities to respond to their RFI (request for information) by March 26—a mere six weeks after the announcement was made. From there, Google would determine which communities warranted the network. The City of Baltimore certainly had a good case—with its impressive anchor institutions, high concentration of IT workers, and central geographic location.

So Troy got to work right away by contacting leaders in the technology and economic development fields. They started a campaign called Bmore Fiber to get the word out. One of the people Troy reached out to was Tom Loveland, CEO of Mind Over Machines, an IT strategy and application design firm.

“Google Fiber was an idea so great that you didn’t have to do much pushing,” Loveland says. “There were a lot of people who just ‘got it’ and wanted it so passionately.”

The two of them recruited a team of grant-writers, website designers, social media experts, and businesses to back their campaign. Soon, they had the support of institutions like the University of Maryland, Johns Hopkins, the Space Telescope Science Institute, Constellation Energy, and more.

They decided to focus their proposal. “We realized we needed to switch our energy a little bit to case studies,” Loveland says. “Let’s show Google what this technology could *really* do for the city.”

THE TECHNOLOGY ITSELF IS A LITTLE CUMBERSOME. Basically, if Baltimore gets picked, Google would potentially install fiberoptic cable into our conduit system, the piping underneath our city. The network would be open-access, meaning that anyone could subscribe.

Tom Loveland, left, and Dave Troy hope to bring Baltimore faster Internet speed.

“The basic idea is that it adds another competitor to the playing field,” Troy says. “Now people have the choice of Comcast or nothing. This would create another option.”

Beyond that, Google is hoping that this high-speed access would showcase the kinds of things that would be possible if America had faster broadband networks—things like streaming 3-D medical images, downloading full-length movies in minutes, or having live international video conferences.

“The United States invented the Internet, but when it comes to broadband speed and penetration, we lag behind many countries,” says Google project manager Minnie Ingersoll, a key developer of Google Fiber. “So we decided to build an experimental network of our own.”

Ingersoll explains that Google is looking for two basic things in communities: a need for open-access Internet and a tremendous amount of data with which to experiment.

“Baltimore is an interesting creature because we have all this science and technology, and then we have a huge disparity” between those who have Internet access and those who don’t, says Roanhouse. “This network could not only rapidly change how business is done, but also how education is carried out.”

Loveland agrees that Baltimore has a pretty good chance. One advantage is that the City owns its own conduit systems, whereas most city’s conduits are owned by telecom companies. In addition, the Baltimore/D.C. metro area has the highest density of IT workers in the country.

“By the time Google [asked for proposals], we had connections and infrastructure in place,” Troy says. “Other cities were amazed at what we’re able to accomplish.”

On March 11, Bmore Fiber’s campaign was kicked up a notch when Mayor Stephanie Rawlings-Blake named Loveland to be the city’s “Google Czar.” This signified the City’s full backing of the campaign, an important step in the application process.

“This infrastructure investment would help close the digital divide,” Rawlings-Blake says. “It would bring the Internet to more people and help our city grow.”

Around that same time, our city got another very important endorsement. Financier

and philanthropist George Soros, who founded the Open Society Institute, sent a personal letter to Google CEO Eric Schmidt urging him to select Baltimore.

In a statement, Soros said that Google should consider the city “for the same reasons I selected Baltimore for my philanthropic investment . . . Baltimore has strong community institutions but still many people who suffer from being disconnected from important resources.”

As the March 26 deadline approached, Troy and Loveland remember spending many sleepless nights with their team perfecting Baltimore’s RFI. A huge asset was experienced grant-writer P.J. Glennon, who has worked in the nonprofit sector for 20 years.

“We highlighted every single thing: community with active technology interest, a residential need, and large anchor institutions,” Glennon says. “It wasn’t exactly exciting information, but if they wanted a number, we gave them a number.”

All told, 1,100 communities in America applied for Google Fiber. Some used gimmicks (Topeka, Kansas, officially changed its name to Google), but Bmore Fiber was confident in its straightforward response.

“Earlier we thought about what we can do for flash and pizzazz, but Baltimore is a serious city with serious assets,” says Loveland. “Some communities were concentrating on how many fans they had on Facebook. Meanwhile, we’re partnering with whizzes at Johns Hopkins.”

Google plans to install the broadband network to be tested out on at least 50,000 to 500,000 customers in communities that fit into specific criteria.

“We’ll use responses to the RFI to assess local factors that will impact the efficiency and speed of our deployment,” Ingersoll says, “such as the level of community support, local resources, approved construction methods, and local regulatory issues.”

SUBMITTING BALTIMORE’S RESPONSE TO THE RFI was a huge relief for Troy and Loveland, but they admit that it was only the beginning. Google will be doing site visits to specific communities and will choose one or more “by the end of the year.”

All the more reason why they have to make sure that Baltimoreans are on board

with the proposal.

“A question we’ve gotten [from citizens] is, ‘What’s it matter? So you can download *Lost* quicker. Big deal,’” Loveland says. “But the implications are much bigger.”

He continues by reciting examples of how this network could change the landscape. “Imagine you could have meaningful doctor’s visits right from your own home. You could have truly immense, holographic instruction in classrooms. Instead of sending 12 Under Armour executives to China to look at product samples, they could take care of it in their office. The possibilities are endless.”

The proposed technology would also turn Baltimore into a giant magnet, organizers say, attracting countless out-of-towners to hone in on the revolutionary fiber network.

“There was a comment on some tech blog from somebody out-of-state who said, ‘Wow, I would move to Baltimore for this,’” Loveland says. “People would come to be part of a cool community. It would bring

an influx of talent and energy, and press around the world would flock here to watch and wonder about Baltimore.”

But, of course, there’s the giant elephant in the room: What if Google says no to Baltimore? Given the long odds, it’s a likely possibility. But the organizers behind Bmore Fiber say that wouldn’t stop the fight.

“We’ve talked a lot about that possibility,” Troy says. “But now we know there’s a demand for this, and a vision we’ve articulated. Before we had no context to ask everyone in town, but now we know the answer. We could figure out a way to get high-speed fiber ourselves with some level of municipal investment.”

Perhaps even more interesting than the end result of Bmore Fiber, whatever the outcome, was the path to get there. In just six short weeks, Troy and Loveland’s team rallied the support of the largest political players, academic institutions, influential businesses, and scientific minds in town.

“I’ve never seen anything like this,” Glennon says. “This was so unifying in such a glorious way. There was no for or against. It was all for. Everyone wanted to know how they could help or what they could do.”

Loveland admits that promoting Internet that’s 100 times faster than average is a pretty easy sell. “What we’re talking about here is puppies and rainbows,” he says. “All people were doing is saying that they’d want this amazing technology here.”

Still, it’s an impressive feat for a team of two-dozen to pool these kinds of resources and garner the endorsements they did. And all for something that, really, is still very abstract—and doesn’t even exist yet.

“When you go back 10 years, things like YouTube were pretty much impossible,” Troy says. “So, if you think about [the applications] of this kind of technology, it’s beyond what we can even comprehend.” **B**

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