Biden's push for fiber revives a Google dream

Margaret Harding McGill 3 hours ago - Technology

President Biden's plan to boost broadband across the country could also be a boon to Google's internet ambitions.

Why it matters: Biden wants to invest billions in building "future-proof" networks to connect all Americans, using a technology that Google previously struggled to deploy widely.

What's happening: Biden's plan emphasizes building fiber and steering funding to community-owned networks to ensure widespread connectivity and increase competition. That generally aligns with Google Fiber's new approach of partnering with cities willing to do the bulk of the infrastructure work.

The big picture: Fiber-optic lines deliver broadband to residential homes at gigabit speeds — much higher than the current federal definition of broadband, 25 Mbps download/ 3 Mbps upload.

 Fiber installed directly to homes could close the digital divide in a more lasting way than technologies that aren't capable of the same speeds, but building fiber networks through rural terrain and sparsely populated areas is very expensive.

Catch up quick: In 2010, Google announced plans to build a 1-gigabit-persecond fiber network in trial locations, but in 2016 "paused" expansion to new cities.

What went wrong: Google quickly learned that building a fiber network can be a long and costly process.

 A big issue for the company was the bureaucratic slog of attaching their equipment to poles, which in some cases involved working with competitors to gain access.

What they're saying: "One of the things we've learned is building infrastructure is long, slow, extraordinarily expensive, and fundamentally different than writing code for a new Google product," John Burchett, Google Fiber head of policy, comms, and community affairs, told Axios. "We may have started this process with a little bit of naïveté about how quickly we could impact the world."

The pivot: Google Fiber, which is available in 16 cities, said in July that West Des Moines, Iowa, would be the first new city it enters.

- The city is building an open-access conduit network for use by multiple internet service providers, and Google Fiber will be the first tenant on the network.
- "This is all part of us looking for ways to move faster in an economically sustainable model," Burchett told Axios. "And hopefully show the industry that there is a way for new entrants in this market to compete."

By the numbers: A 2017 study from Paul de Sa, then the chief of the FCC's Office of Strategic Planning and Policy Analysis, found that it would cost \$80 billion to subsidize a fiber network that would reach the 22 million locations that lacked high-speed internet access using 2015 data.

Cities that want to build their own networks could see funding from the Biden administration's infrastructure proposal.

- The White House points to studies that argue that community-run networks offer <u>lower prices</u> to consumers and that some of the <u>fastest</u> <u>networks</u> in the country are municipal-run or in cities partnering with providers to offer internet service.
- Google Fiber sees the administration's interest in city-run networks as a
 way for it to expand the West Des Moines model to other cities with
 Google or another provider as a partner.
- "I think it's an opportunity for Google Fiber, but more importantly it's an opportunity for communities to figure out how best to meet their broadband needs, because we all can agree what we've got now isn't working," Burchett said.

Yes, but: Republicans on the Hill are opposed to city-run networks, which they argue can be poorly managed, and they worry the focus on fiber could lead to upgrading existing service rather than connecting Americans who lack any options.

Ting Internet, a fiber provider in 13 cities, said it works with cities that need broadband, but often builds and operates the networks itself.

 "There's not one model that will work for every place," Ting senior vice president Jill Szuchmacher, a Google Fiber alum, told Axios. "Some of our builds, we've built the network ourselves and operated it. Others, we've partnered with cities where they've they owned the network, or they build a network. It really will take creativity."