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TECH

# Google's High-Speed Web Plans Hit Snags

After initial rollouts prove costly, Google Fiber rethinks how to deliver connections in metro areas



Google Fiber reached just six metro areas in four years. Above, Google Fiber workers in northwest Kansas City, Kan., in 2013. PHOTO: KEITH MYERS/TNS/ZUMA PRESS

By **JACK NICAS**

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Google's high-speed-internet business is slowing down.

Alphabet Inc.'s Google Fiber unit is rethinking how to deliver internet connections in about a dozen metro areas, including Los Angeles, Chicago and Dallas, after its initial rollouts proved more time-consuming and expensive than anticipated, according to people familiar with the company's plans. In San Jose, Calif., and Portland, Ore., Alphabet has suspended projects while investigating alternate technologies.

In most cases, Google Fiber is hoping to use wireless technology to connect homes rather than underground fiber-optic cables, according to a person familiar with the matter. Elsewhere, Google is leasing existing fiber or asking cities or power companies to build the networks.

The strategy shift comes after Google Fiber reached just six metro areas in four years, illustrating the difficulty and expense of digging up streets and laying thousands of miles of cables.

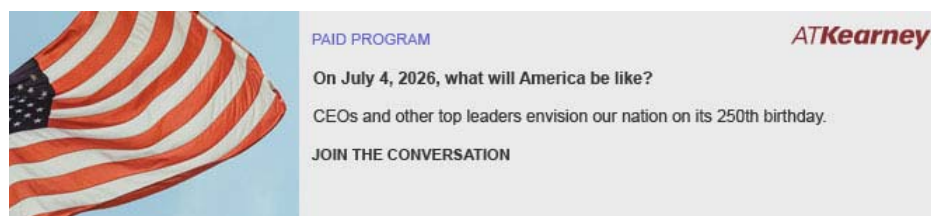
"If you're in the telecommunications industry for 150 years, there are no surprises here," said Jonathan Reichenal, chief technology officer of Palo Alto, Calif. "But if you're a software company getting into the business for the first

time, this is a completely new world.” Mr. Reichental said Google Fiber executives recently told him that plans to bring the service to Palo Alto and nearby cities are on hold for at least six months.

Google Fiber launched in Kansas City in 2012, offering speeds of up to a gigabit a second, roughly 30 times as fast as the average U.S. internet connection. Google hoped to boost the speed of U.S. internet connections and increase demand for its other services, such as search.

Fiber costs \$70 a month for the fastest internet connection and an additional \$60 a month for TV. Analysts estimate a one-time cost for Alphabet of more than \$500 for each home the network passes, not all of which subscribe.

Alphabet declined to disclose its number of subscribers. Based on numbers reported to the U.S. Copyright Office, research firm MoffettNathanson said in March the TV service had 53,000 subscribers total as of December. There likely are many more subscribers for the internet service, the firm said, but “one can’t help but feel that all of this has the flavor of a junior science fair.”

An advertisement banner for AT&Kearney. On the left is a partial image of the American flag. To the right, the text reads: "PAID PROGRAM" in blue, "AT&Kearney" in red, "On July 4, 2026, what will America be like?" in black, "CEOs and other top leaders envision our nation on its 250th birthday." in black, and "JOIN THE CONVERSATION" in blue.

In a statement, Alphabet said, “We’re continuing to work with city leaders to explore the possibility of bringing Google Fiber to many cities. This means deploying the latest technologies in alignment with our product roadmap, while understanding local considerations and challenges, which takes time.”

Google Fiber has begun construction in five new metro areas and announced plans to reach another dozen cities in the next few years. Now, those dozen cities will be the test bed for a push into wireless technology.

Google Fiber last month bought Webpass Inc., which beams internet service from a fiber-connected antenna to another antenna mounted on an apartment building. The company serves just 820 buildings in five cities. Webpass Chief Executive Charles Barr said wireless offers an opportunity to overcome the challenging economics of building fiber networks from scratch. “Everyone who has done fiber to the home has given up because it costs way too much money and takes way too much time,” he said.

In Kansas City, Alphabet also is testing a wireless technology that delivers connections from antennas on street lamps. And the company recently applied to the Federal Communications Commission to test “experimental transmitters” for wireless connections in 24 U.S. locations over the next two years.

Google Fiber is planning a system that would use fiber for the central network and antennas to connect each home wirelessly to that network, according to a person familiar. Alphabet Chairman Eric Schmidt said at the company’s shareholder meeting in June that wireless connections can be “cheaper than digging up your garden” to lay fiber.

AT&T Inc. and Verizon Communications Inc. have also discussed using wireless technology for the “last-mile” connection to homes, but neither has deployed it widely.

Google Fiber has tried several other ways to cut costs and accelerate expansion. In San Francisco and parts of Atlanta, the company is leasing existing underused fiber and connecting apartment buildings rather than single-family homes. It chose Huntsville, Ala., in part because the city agreed to build a fiber network for Google. In Tampa, Google Fiber is in talks with a power company to build the fiber network. It is working with real-estate firm Irvine Co. to preinstall fiber in new properties near Irvine, Calif.

The new strategies are in response to the headaches of building a fiber network. In Kansas City, homeowners complained about destroyed lawns and ruptured gas lines. In Nashville, Tenn., and Louisville, Ky., competing telecom firms are blocking the company from stringing fiber on their utility poles.

Some analysts have long suspected that Alphabet's primary goal was to prod other broadband firms into increasing their speeds. AT&T, Comcast Corp. and Time Warner Cable, which was recently acquired by Charter Communications Inc., have done so in some competing markets.

But Alphabet insists Google Fiber is a real business. "We continue to see Fiber as a huge market opportunity," Chief Financial Officer Ruth Porat told investors last month. "We're being thoughtful and deliberate in our execution path."

—Shalini Ramachandran contributed to this article.

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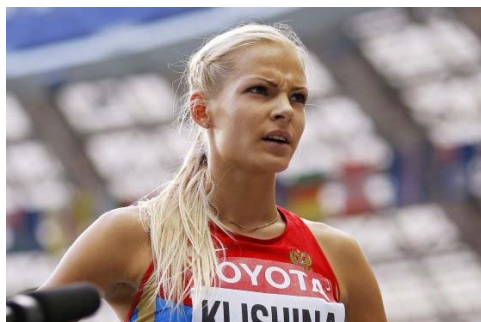
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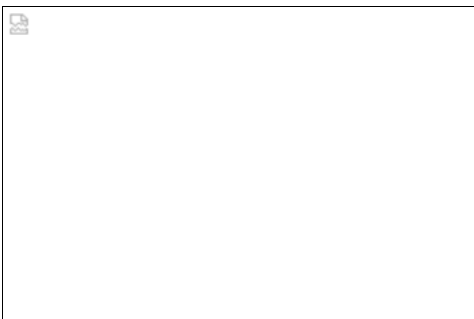
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