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TECH

How Fast Internet Affects Home Prices

More buyers are choosing where they live based on access to broadband



Tom Cairns and real estate agent Carla Ness tour a home in western Massachusetts. Mr. Cairns has been looking for a home and one requirement is it have high speed Internet access. *PHOTO: MICHELLE MCLOUGHLIN FOR THE WALL STREET JOURNAL*

By **RYAN KNUTSON**

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In May, Kara Burke and Tom Cairns thought they had found their ideal house: a nicely updated older three-bedroom home in Worthington, Mass.

But they didn't make an offer because it didn't have high speed Internet.

"We wouldn't choose a house that didn't have electricity," Ms. Burke, 26 years old, said as she explained why. "It's right on par with those things."

As the Internet becomes central to the way Americans work and live, the digital divide is taking on greater economic significance. Students without Internet access at home may struggle to keep up with school assignments. Towns with less access find themselves falling behind economically, researchers say. Now, the availability of speedy Internet service is starting to affect Americans' biggest purchase: their homes.

Real-estate agents across the country say more buyers like Ms. Burke and Mr. Cairns are turning their noses up at homes without fast Web access. Some studies suggest those buyers are having a keen effect on home prices. A nationwide study released on Monday by researchers at the University of Colorado and Carnegie Mellon University finds fiber-optic connections, the fastest type of high speed Internet available, can add \$5,437 to the price of a \$175,000 home—about as much as a fireplace, or half the value of a bathroom.

David Mans, a real-estate agent outside Boulder, Colo., said after he started noting in his online listings whether properties had Internet availability, he got fewer calls about

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properties that didn't have it. "I have situations where people won't even look at it if it doesn't have broadband," Mr. Mans said.

What people want in a home can vary a lot, and values can depend heavily on

broader market forces. But real estate professionals say there are certain features that can be a deciding factor—like an extra bathroom or pool. And broadband is starting to figure into that same calculus.

Telecom companies by law are required to make telephone service available to every residence in their service areas, but the same isn't true for all high speed Internet providers. Phone lines can deliver DSL service, typically slower than 10 megabits a second. Satellite service is usually even slower. Fiber and some cable can deliver speeds of up to 1,000 megabits a second.

University of Colorado researchers compared more than 520,000 home sales between 2011 and 2013 against government data on the type of Internet access available. It built on a 2013 study by the same researchers that found a similar effect on home prices in New York state. The researchers expanded their study with funding from The Fiber to the Home Council Americas, a group made up of municipalities, small telecom companies, and others like Google Inc. that support the expansion of fiber networks.

The results mirrored the findings of a 2014 study by the University of Wisconsin at Whitewater that found access to the Internet could add \$11,815 to the value of a \$439,000 vacation house in Door County, Wis.

The impact is most acute in rural areas, where Internet speeds tend to drop dramatically. As of 2013, 92% of urban areas had high speed Internet, compared with 47% of rural areas, according to the most recent data from the Federal Communications Commission. The FCC defines high speed as 25 megabits per second or more.

John Wilczak was getting wireless high speed Internet via Verizon's cell towers at his home in Santa Ynez, Calif., a town of about 4,400 near Santa Barbara. Cable and phone companies sell high speed Internet downtown, but they hadn't built along his street. Mr. Wilczak's Verizon service worked like a cellphone plan. Once when friends brought their children for a week-long visit, the children blew past his 50 gigabyte monthly cap and he was hit with a more than \$900 bill.

Mr. Wilczak recently moved to a new house and dropped Verizon in favor of a local wireless Internet company without data caps. He said at least half of the 40 people who considered buying his old house weren't interested in part because it lacked reliable Internet

Unreliable Internet almost derailed Adam Frost's online business selling wooden toys made in European workshops. Mr. Frost tried using satellite Internet when he first moved to New Salem, Mass., about seven years ago from a New York City suburb, where he was paying about \$60 a month for high speed Internet.

"We were told there was adequate Internet access when we got up here, and then discovered there really isn't," Mr. Frost said. The satellite service would go down during bad weather, and he consistently went over his monthly data limit.

Mr. Frost decided to pay Verizon \$600 a month to install a dedicated copper wire to his

‘We’re already feeling the negative impacts of not having adequate broadband.’

—Monica Webb, WiredWest cooperative

house for more reliable service. But it still isn’t fast enough, especially as online services grow more data intensive. Last year it took him 24 hours to download a software update for his computer, and just as the download was nearly finished, his connection crashed and he had to start all over.

In Western Massachusetts, where Mr. Frost lives, local officials are trying to solve the problem by building their own high speed networks. To accomplish that they’re borrowing a tactic developed a century ago when the region was struggling to gain access to electricity. More than 40 towns have formed a cooperative of Municipal Lighting Plants, a type of public utility first invented to build electricity infrastructure, and are raising funds to build out fiber connections.

Monica Webb is the chairwoman of the cooperative, called WiredWest. So far this year, 19 of those towns have passed bond measures to fund construction. More than 40% of residents in 14 of those towns have already paid a deposit for service.

“Some might call us a coalition of the desperate,” Ms. Webb said. “We’re already feeling the negative impacts of not having adequate broadband.”

Ms. Burke and Mr. Cairns, who passed on the yellow three-bedroom house in May, decided not to make any offers until they see which towns commit to the project.

“After we looked at I think maybe 10 houses we were like, ‘It doesn’t really matter. We can’t pick a house because we don’t know which towns are doing this,’” Ms. Burke said. “The towns that don’t pass it we absolutely will rule out. It’s not a question.”

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