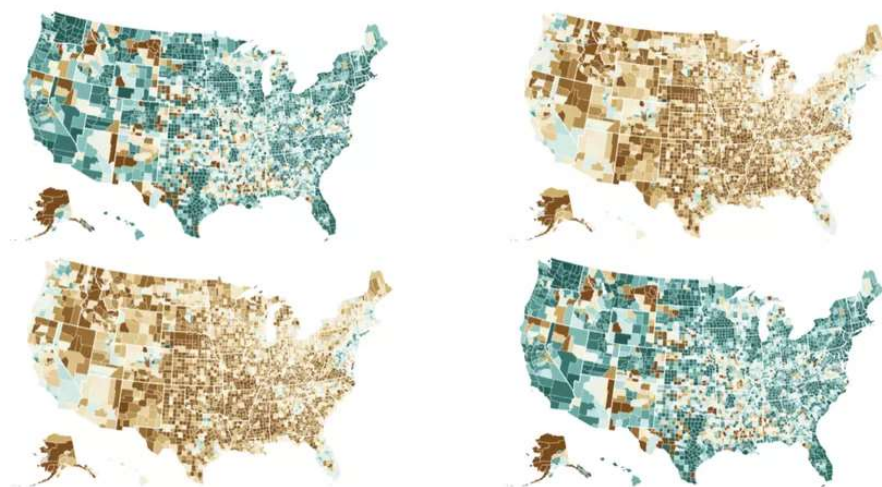


The government is using the wrong data to make crucial decisions about the internet

Bad maps mean federal money isn't being spent where it should be to build out broadband connectivity.

By [Rani Molla](#) | [@ranimolla](#) | Feb 8, 2019, 9:35am EST



Rani Molla/Recode

High-speed internet is not really available where the government says it is. And that misinformation means that a lot of Americans, especially those in poor and rural areas, can't get access to broadband — a service that is becoming more and more integral to daily life in the US.

The Federal Communications Commission, the government body charged with overseeing internet connectivity, among other things, uses data that is self-reported by the internet service providers. Even if we assume that these ISPs are reporting accurately, what they're required to report isn't very helpful. And bad data means

that federal money isn't being spent where it should be to build out broadband access.

ISPs have to report whether a census block — an imprecise geographic area that ranges from a tenth of a mile to 8,500 miles and can contain anywhere from zero to 600 people — has access to “advertised” broadband download speeds of at least 25 megabits per second, the minimum requirement to be considered broadband.

In essence, the government data is measuring areas in which an internet connection *could* exist rather than where it *is*

A whole census block is considered “served” if broadband service is available anywhere within it. So even if it's impossible to get internet in your home or business, your area could be marked off as having 100 percent availability because someone hundreds of miles away is connected. Even broadband wiring that passes next to your home is no guarantee there can be internet in your home.

“It's like having a faucet that doesn't work,” said Adie Tomer, a fellow at the Brookings Institution who has written extensively on US broadband issues.

It's important to note that access is not the same as use.

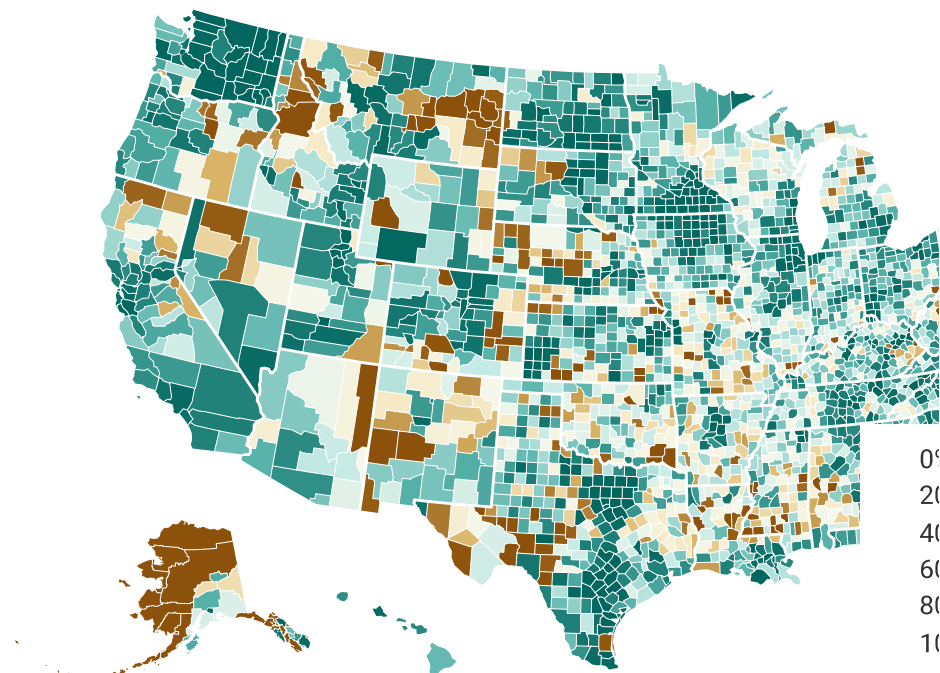
Even if you can get broadband in your home, the speeds you're receiving might not be as fast as advertised. If you're subscribed to a plan advertised as 25 Mbps, there's a good chance that it's actually slower, and you're not even technically using broadband. Additionally, internet plans can be prohibitively expensive — even in rural areas — effectively preventing many poorer Americans from using it.

“Currently in the US, the focus is upon physical infrastructure, not upon people choosing to subscribe or being able to subscribe,” said Angela Siefer, executive director of the National Digital Inclusion Alliance, a nonprofit advocating for national broadband access.

In essence, the government data is measuring areas in which an internet connection *could exist* rather than where it *is*.

As you can see from the map below, FCC data shows that most counties have high rates of broadband availability:

roadband internet "availability"

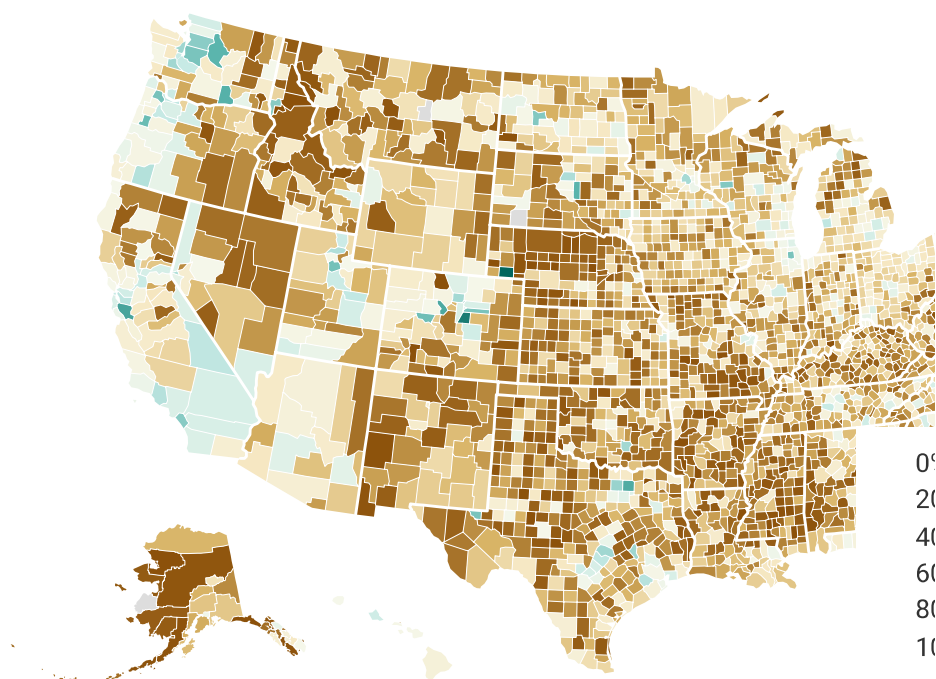


Source: Federal Communications Commission, via Microsoft

recode

But having availability does not mean that people are actually getting to use it. Broadband usage [data from Microsoft](#) — which was released late last year and is based on anonymous data the company collected on how fast its products were actually being used and updated — paints a much bleaker picture. It shows that most counties in America are without high levels of broadband usage:

roadband internet "usage"



source: Microsoft

Microsoft's data says 163 million people *don't use* high-speed internet in the US, while the FCC estimates that it's *not available to* 25 million Americans. That's a difference of 138 million people — more than a third of the US population.

What's most troubling is that the FCC uses this data to help make internet policy decisions and to help allocate \$4.6 billion in subsidies and funding each year to correct the country's rural connectivity gaps.

"There's a lot of money tied to this data," said Kathryn de Wit, manager of the broadband research initiative for Pew Charitable Trusts. "If a community is considered served, in many cases they're no longer eligible to receive funding. If you have an inaccurate picture of what connectivity looks like at the block level, you may be passing over communities that really do need connectivity."

Recently, Pew hosted a talk with broadband industry leaders and policymakers to discuss better metrics for assessing broadband in the future.

At the event, FCC Commissioner Jessica Rosenworcel summed up the issue succinctly: "We cannot manage what we do not measure."

And broadband has become increasingly important: People now depend on it for everything from making a living to obtaining Medicaid coverage. Schoolchildren and small businesses alike need high-speed internet to complete their tasks and to compete in the wider world. Those without proper internet access are already missing vital information about the world around them.

Additionally, insufficient broadband access is much more common in poor and rural areas — ones already suffering from a host of other inequities that make people in those areas prime candidates for automation and, by extension, increased future inequality. Already, there is a digital divide in America between those who can and can't access the tools that will govern our future success. Broadband stands to exacerbate that divide.

Why would the FCC use flawed availability data to make decisions in the first place?

“This is a data program that is woefully underfunded,” Tomer said. “That’s why we see a structure that relies on self-reported data from the very companies that have incentive to suggest they’re covering as many households as possible.” A better program would cost more to administer.

The FCC uses this data to help make internet policy decisions and to help allocate \$4.6 billion in subsidies and funding each year to correct the country’s connectivity gaps

Additionally, ISPs think providing more granular data would be an undue and impossible burden on them. In a recent letter to the FCC, USTelecom, an industry group representing major telecoms like AT&T, Verizon, and CenturyLink, wrote that requiring ISPs to file more detailed subcensus data is “not technically feasible,” “would result in inaccurate data,” and “will not provide the Commission with the insight the Commission is seeking to obtain.”

ISPs currently fill out a document twice a year called Form 477, which provides the basis for the government’s broadband maps.

“We’ve known Form 477 sucked for the better part of a couple years now,” said Christopher Ali, an assistant professor of media studies at the University of Virginia and a research fellow at the Benton Foundation. “But this is the tension between industry and regulation, and industry is winning, to the detriment of rural America.”

The FCC is currently reviewing the way it measures broadband, but it’s unclear when and if it will make any changes. The FCC didn’t respond to a request for comment.

Rural areas have especially bad broadband connections. That’s because it’s expensive to physically install cables, especially to distant areas, and the small populations in those areas don’t provide much of a revenue incentive. That makes government support more critical in those areas. But those regions can’t get that support if the government is looking at the wrong map.

“While rural communities are home to just 15 percent of the nation’s total population, they accounted for 57 percent of the nation’s residents in neighborhoods where broadband has yet to be deployed,” according to a 2017 Brookings report that has mapped out subscription data for the 100 biggest metro areas.

Microsoft’s Airband initiative is a partnership with telecom companies meant to bring broadband to 3 million people in rural America by 2022. The plan is to use white space between TV channels — what some call super wifi — to broadcast wireless internet farther than mobile hotspots. The method is much less expensive than installing hard lines to people’s homes.

Microsoft itself has some skin in the game. The company wants its customers to have faster service and updates for its products, including Office, cloud services, and Bing. Microsoft also stands to gain money from the billions in grants and subsidies the government gives out each year to improve rural broadband. A majority of that money now goes to the telecom companies. Microsoft is partnering with ISPs to help rural broadband access but says it’s not interested in becoming an internet service provider itself.

Despite the problems with the FCC’s maps, overall broadband speeds have gotten faster. The problem is, broadband is nowhere near matching the ubiquity of other

essential infrastructure systems.

While we wait at the national level, a number of nonprofits and states are taking the issue into their own hands by gathering their own data to layer over the FCC's, and expanding their own broadband reach. But such piecemeal efforts are unlikely to fill in all the holes in America's broadband connectivity.

"The real positive work now is local — that's who's solving problems right now," according to the National Digital Inclusion Alliance's Siefer. "But plenty of places are not solving broadband problems, and they're stuck with no recourse. We need the FCC to holistically solve this."

See how your county is measured here:

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