Kathryn de Wit, broadband research initiative, The Pew Charitable Trusts: Connections don’t just fly through the air. Given how we operate and how we are so frequently connected to the internet, those of us who live in communities that have strong connections, we sort of take that for granted. You don’t have to think about the time of day that you’re getting online or whether or not you need to kick someone else off in order to finish your homework. For communities that either have slow connections or no connections, that’s a normal part of life.

Dan LeDuc, host: That’s Kathryn de Wit, who manages Pew’s broadband research initiative. Broadband is one of the main ways that Americans access the internet and sometimes maybe take for granted.

Welcome to “After the Fact.” For The Pew Charitable Trusts, I’m Dan LeDuc, and we hope you’re well.

During these days at home due to the coronavirus pandemic, many of us can read the news, maybe join a virtual exercise class, watch an endless number of movies—all because we’re connected to the internet. We may not always think about how essential that connection is.

[Dial-up connection beeping]

But millions of Americans without reliable connections think about it all the time. And that brings us to our data point for this episode: 21 million. There are 21 million Americans who don’t have access to broadband internet, according to the Federal Communications Commission. And depending on your definition of connectivity, that number could be even higher. I spoke to Kathryn de Wit about the challenges for those on the wrong side of the digital gap.

Dan LeDuc: Kathryn, welcome. We should say we’re speaking to each other over broadband internet right now, and that you study broadband connectivity gaps and how
we can expand access for communities around the country. The 21 million that’s our data point could be on the low side, right?

**Kathryn de Wit:** The Federal Communications Commission estimates that at least 21 million Americans don't have access to the internet across the country. But other estimates, including those from Microsoft, put that number as high as 162 million.

**Dan LeDuc:** Let’s define what broadband means for people. A lot of people access the internet only through their phones. So could you sort of lay out what sort of broadband at its best is supposed to look like and do for people?

**Kathryn de Wit:** The Federal Communications Commission defines broadband as high-speed, reliable internet at speeds of 25 megabits per second download and 3 megabits per second upload. You can get those connections via fiber, wireless, satellite, DSL, or cable. OK, that’s a lot of technocrat speak, but what you do need to know about your connection is that that number that we talk about, that number that we talk about, matters. And it matters as it relates to public funding for broadband and, of course, how we measure someone’s connection.

The FCC says that, for one user on one device, you can make do with just about anything, including streaming videos from services with that speed that’s up to 25 megabits per second. But as soon as you start adding other users or have multiple users on multiple devices trying to send email while someone else is surfing the internet while someone else is trying to watch an instructional video, your needs for speed drastically increase.

**Dan LeDuc:** What do we know, geographically, where these pockets of people are who don’t have service? I mean, first assumption might be somewhere where population is dispersed. Is it generally that, or is it all over?

**Kathryn de Wit:** Based on the FCC's data of 21 million unconnected Americans, that overwhelmingly affects rural populations. But what we know both through our research and through anecdotal evidence, this problem affects communities of all types, of all locations all across the country. And that means urban communities, it means suburban communities, it means rural and remote communities. Some of those communities of those types that I just listed have excellent connections. And there are many urban communities that have very high speed. But there are communities that either have slow internet, or they have no internet connection at all.
Dan LeDuc: So when we say that people don't have access and try to come up with these numbers, is that because the fiber or the cable doesn't run to their residence? Or does it also include maybe folks who just can't afford it? Because it’s not cheap each month.

Kathryn de Wit: Connections don't just sort of fly through the air, which, given how we operate and how we are so frequently connected to the internet, those of us who live in communities that have strong connections, we sort of take that for granted. But for those communities who don't have the connections right now, that can be for several reasons. It's complicated not just because we're talking about the geographic diversity of where connectivity is lacking, but we're talking about multiple policy areas that deal with multiple levels of government. But perhaps more importantly, we're talking about infrastructure. And the internet is a very physical network.

It may be that it's just too expensive to connect to some of these rural communities that have low population density. It just doesn't make for a good business case for for-profit companies. In other cases, it is because folks can't afford the connection. It's too expensive. It's outside of their monthly budget.

But I think what's interesting about this current situation is how we are really seeing that relevance piece play out, because our community centers are closed, our schools, our libraries, our places where people can access the services that they need every day. Well, now they can't go to those places.

Dan LeDuc: People used to rely on public libraries or fast food restaurants down the street from their homes for their internet access. With those spots not available, what are the temporary solutions that are coming forth?

Kathryn de Wit: We're seeing things like Wi-Fi on buses, and those buses being parked in school and library parking lots so folks can drive up and get online if they need to. We're seeing libraries and schools also rent out hot spots and laptops.

We're also seeing the federal government respond. Typically schools and libraries that have received FCC funding are not allowed to have those wireless networks on outside of operating hours. But the Federal Communications Commission in late March adjusted their restrictions for when those networks are accessible.

The state of Washington right now is thinking of setting up—they're calling them Dri-Fis. So you drive up to a mobile hot spot, and you hang out in your car for as long as you need to be there, and then you keep on going and the next person uses it.
They're Band-Aids. They're needed Band-Aids. They're necessary for the situation that we're in right now. And it speaks to the need for a solution—that way folks don't have to rely on these backup options at their libraries or schools or community centers in order to get online. And for kids, you know, in order to simply do their homework.

**Dan LeDuc:** A lot of what we're talking about has come to light because of the predicament we are all in, but this subject and this issue of increasing broadband access has been with us ever since there's been broadband, pretty much. What's been happening in states and other localities around the country that are starting to show signs of progress that were going on even before all of this?

**Kathryn de Wit:** We found progress in states across the country, and it's important to note that every state is different. And that's something that we all joke about, because states really do like to remind us how they're different. They have different policy environments, they have different political environments, different resource allocations available. They also have different provider landscapes. They have different geographies that either limit or facilitate opportunities for connections.

**Dan LeDuc:** You had mentioned several states that are trying to do some new things, promising things. Could you take us to one or two of those places and explain why what they're doing shows some promise?

**Kathryn de Wit:** North Carolina launched a statewide planning initiative in 2015. They interviewed more than 3,500 stakeholders across the state, ranging from business leaders and government leaders to internet service providers and citizens. What they found is that not only were people anxious to bridge the digital divide, they knew that they needed public resources in the form of a grant program in order to help do that. But they also identified that there was a homework gap in their state, so a pretty big difference between kids who had access to the internet at home and those who didn’t.

And so in 2016, they launched a statewide initiative to start bridging the homework gap. And because of that effort that has been going on for almost four years now, they've been able to build a significant amount of momentum around this idea of getting kids online. They've been able to build partnerships both within state government and at the local level in order to make sure that they are understanding what those challenges look like. So is it a challenge of connectivity, or is it a challenge of lack of access to devices? Is it both? And as a result, they're able to better use state resources and federal resources through the form of grants in order to address that challenge. Broadband can be confusing and overwhelming, particularly for local leaders who may not have the capacity to just take on something else. So the broadband office in North Carolina hired several
regional technical assistance experts. And those folks go out within their regions to work with communities and private sector partners in order to position communities for investment and help them apply for federal funding.

**Dan LeDuc:** That's fascinating because, when you think about it, so many of our elected and local officials, this is a complicated subject that they have to master. And knowing there's some experts they can turn to is going to be incredibly helpful.

Are there other places, too, that offer different examples?

**Kathryn de Wit:** One state that we studied in depth was West Virginia. And what's noteworthy about West Virginia is that they're one of the only states that doesn't have a grant program of the states that we studied. And they have been really successful at leveraging federal funds.

They're providing education to local leaders in order to help them identify what the connectivity gap is in their communities, identify existing assets, be they telephone poles or buildings or dark fiber that isn't being used, to facilitate last-mile connections. And then they're helping those communities apply for federal funding. And the state's been very successful at that, including in winning several large USDA reconnect grants that were announced earlier this year.

**Dan LeDuc:** I'm just wondering if this whole experience is going to open our eyes even more about the potential for the internet. I know that seems like a crazy thing to say, given that its potential seems exponential. Do you think we'll learn something new about the ubiquity of this thing?

**Kathryn de Wit:** I hope so. I think the interesting thing about living in a well-connected community is that we sort of take it for granted. You don't have to think about the time of day that you're getting online or whether or not you need to kick someone else off the internet because you need to download the lecture that you need in order to finish your homework. But for communities that either have slow connections or no connections, that's a normal part of life. They can't access health care remotely. Maybe they have to drive three hours to a hospital. They don't have the luxury of ordering food and supplies online. If you're running a business in rural America, it's really difficult to engage in the digital economy if you don't have a robust connection. The immediate impact of having a connection is that it offers up opportunities that just didn't exist before.

**Dan LeDuc:** Kathryn, I just want to say thank you, stay safe, and I look forward to seeing you back in the office one of these days.
Kathryn de Wit: Fingers crossed, Dan. See you soon. Thank you.

[Music transition]

Dan LeDuc: To learn more about Pew’s work examining efforts to close the connectivity gap and about creative solutions going on in states and communities around the nation, please visit pewtrusts.org/afterthefact.

For The Pew Charitable Trusts, I’m Dan LeDuc. Thanks for listening, and stay well.

Female voice: “After the Fact” is produced by The Pew Charitable Trusts.