Committee on Small Business:
Subcommittee on Underserved, Agricultural, and Rural Business Development

"Supporting Small Entities through Investments in the National Infrastructure: Broadband"
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<u>Introduction</u>

Chairman Golden, Ranking Member Hagedorn, and Members of the Subcommittee, thank you for this opportunity to appear before you today. My name is Matt Dunne and I am the founder and executive director of the Center on Rural Innovation (CORI), a nonprofit action tank that was started in 2017 to close the rural opportunity gap. Today, we are working with a network of small towns across the country to help them become strategic about economic development and entrepreneurship in the 21st century, and ensure they can participate in our growing innovation economy.

The rural-urban divide that's emerged since the Great Recession was driven by automation, globalization, and a decline in entrepreneurship. By the start of 2020, more than a decade later, less than half of all rural counties had returned to their pre-recession employment levels as rural businesses large and small struggled to regain solid footing. The COVID-19 shutdown exacerbated the problem for many rural small businesses, particularly those dependent on tourism.

How did this happen? Automation and globalization created many jobs in America and eliminated many jobs in America. The problem is that these forces almost exclusively created jobs in the technology sector in urban places and eliminated jobs in rural areas. This inequity

also led local small businesses dependent on strong local companies paying good wages to falter as populations declined, aged, and became poorer over that decade. Today, the high-paying, resilient, digital economy jobs that are resistant to automation — like computer programmers, cybersecurity analysts, IT specialists, and others — are not distributed equally across the country. Rural America represents 15% of our nation's workforce but only 5% of the digital economy jobs. In order to return to geographic equity, we need to even out the distribution of these jobs across our country. And in the age of the internet, there should be no limit to where digital economy jobs and start ups can take place.

But to realize this vision, we of course need to make sure there is equitable access to world-class broadband. Our organization offers boots-on-the-ground support for communities, policy-makers and others in rural America seeking to bring future-proof infrastructure to all corners of our nation. Broadband is indispensable for the rural small businesses of today, who rely on it to level the playing field when it comes to access to markets, and especially those of tomorrow, the scalable startups who need it to unlock the possibilities that come with innovation.

What COVID has reminded us

The pandemic has only reinforced what we knew before March 2020: Broadband is critical infrastructure. It is as vital to equity and prosperity in the 21st century as electricity and transportation. For businesses, it's nothing short of a lifeline. Yet, according to [one recent estimate](#), some 42 million Americans can't access high-speed internet. This means at least 42 million people also lack equal access to education, healthcare, and job opportunities — building blocks of successful, stable communities. While some businesses and workers could pivot to e-commerce or transition to remote work during the pandemic, unequal broadband access left the rest, so many of them in underserved rural areas, struggling to get by.

We saw this dynamic play out near our own headquarters. By June 2020, multiple mainstay pubs and restaurants in downtown Hanover, New Hampshire, [shuttered](#) their doors for good, unable to cover costs without full dining rooms. But in neighboring Norwich, Vermont, [King Arthur Baking Company](#) was able to pounce on surging demand despite pandemic limitations. The company offered virtual cooking classes — instructors were able to teach from their home kitchens — and expanded its online content to drive revenue.
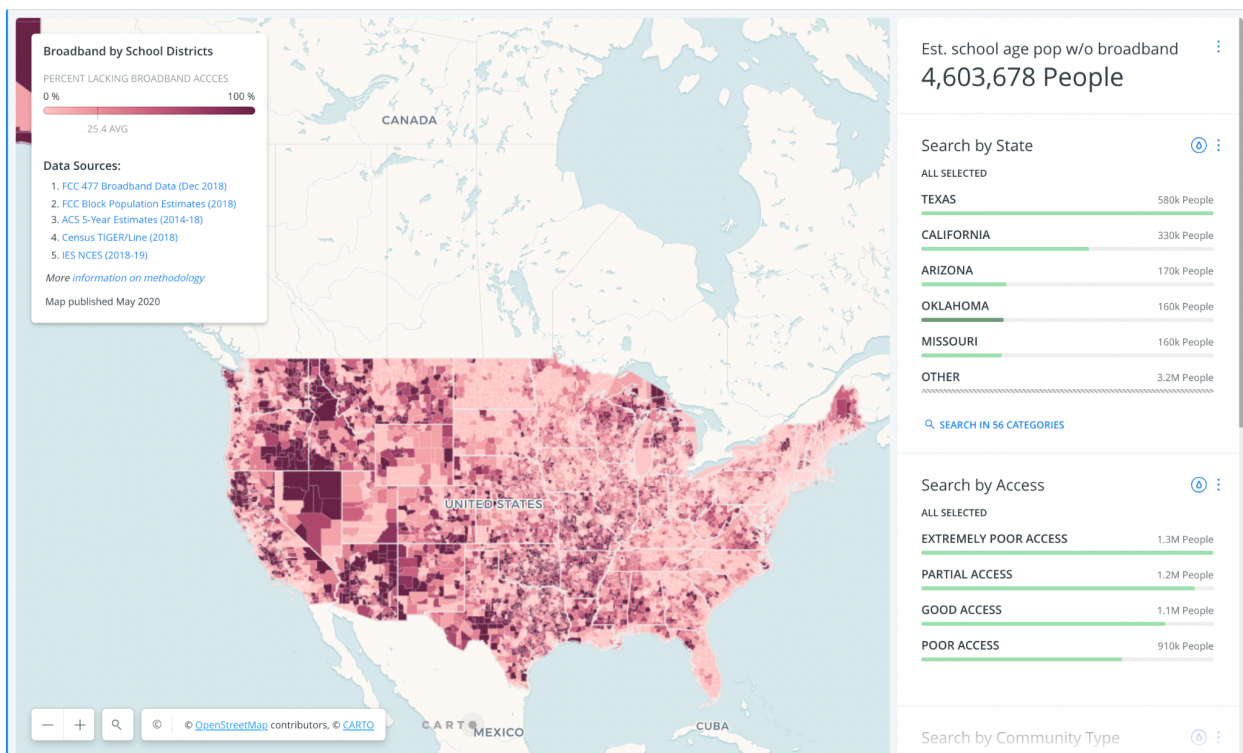
The Center on Rural Innovation's Rural Opportunity Map helps visualize how many school-age children lacked access to broadband, according to FCC data.

And what about the rural technology entrepreneurs who felt they needed to move away from the places that they love in order to access the broadband they need to collaborate and bring their idea to market? It's hard not to think about the countless business ideas unable to get off the ground in rural places, the innovators whose potential has been limited by where they are located in our nation's porous broadband infrastructure. The ripple effects are ones rural

Americans feel each day. Without those tech-enabled companies, the ones that proved most resilient during the pandemic, rural areas were left even more economically vulnerable.

But our awareness of these issues has created a moment in time that, in many ways, resembles one our nation encountered nearly a century ago, when leaders realized that unequal access to electricity prevented regions of the country from being able to thrive. The good news is that, like the rural electrification effort, there are models for bringing world-class broadband to rural places. In fact, at least 10 million rural Americans already live in census tracts with symmetrical, gigabit-speed broadband that offers blazing-fast upload and download speeds.

And it should come as little surprise to hear that these rural places have relied upon the traditional structures that got them electricity, as well as just plain small-town grit and ingenuity, to get this done. They didn't just build their networks to meet the federal government's minimum standards for broadband (25 Mbps download and 3 Mbps upload speeds) because they understood that level of service is already on its way to becoming obsolete. Instead, they're ready to participate in the digital economy of today and meet the demands of the future because they invested in the infrastructure that can accomplish both.

Where this leaves us

The question before you now is, are we going to create the conditions and provide the resources needed to generate broadband that can scale with the ever-evolving uses of the internet, and support the businesses of today and tomorrow?

The research shows that the upload and download speeds required to use common internet-based applications are rising substantially due to data needs and usage increasing [as much as 20-30%](#) in many places. Unfortunately, that trend makes the FCC's existing 25/3 benchmark inadequate where it's the norm, and, sadly, still aspirational for millions of unserved and underserved rural Americans who can't engage with streaming content, cloud-based services, and video conferencing applications because of inadequate connectivity. At the current

pace, with increasing data-heavy enhancements for all of these use cases, even the smallest business competing with large multinational corporations or massive internet marketplace companies cannot afford to be left behind again in basic connectivity.

This is why it is critical that the vast majority of future funding should go toward providing a minimum of 100mbps upload and download speeds, and networks capable of scaling to a gigabit or more. To do otherwise is only setting ourselves up for a rural-urban divide five years from now even after a massive infrastructure investment — something none of us want to see.

What this can can do for small businesses in rural America

Building to reach those future-proof goals will ensure a business environment that allows all Americans, regardless of location, to participate in a robust, innovative digital economy.

COVID has opened people's eyes to the possibility of working where they want to live rather than living where they need to work, including returning to small-town America. But without broadband available in all of our communities, that dream of a return to rural — and the influx of consumers and workers it would provide small businesses — may be short-lived. Rural areas need to be allowed to achieve the same internet speeds as their urban counterparts, and this is the chance to make equity a reality. We can enable entrepreneurs and small businesses in rural places to access markets anywhere in the world, and be resilient to events like the pandemic that forced so much activity online and sidelined those who couldn't. And providing fiber to the home would ensure that budding startups can make the most of the same infrastructure as larger, more established firms, which are often by default located in more urban areas. It would mean that our architects and engineers, our cybersecurity analysts and IT specialists, our software developers and creative designers could work in the rural settings they crave if given the opportunity.

We at CORI know plenty of small towns that are proving this is possible — towns such as Springfield, Vermont; Wilson, North Carolina; and Red Wing, Minnesota. These are places that invested in gigabit-speed fiber broadband and are now seeing successful small businesses emerge and grow because of it.

And other communities are following their example. Leaders in Millinocket, Maine, have launched a fiber broadband initiative to bring new economy jobs to their stunning but remote area. Earlier this month, they scored their biggest win yet: Nautilus Data Technologies announced its plans to bring a $300 million data center project to a former mill site in the town. With the necessary funding and regulatory support to enable universal high-speed broadband, this announcement could be the catalyst needed to attract other technologists to the area and build a future-focused technology ecosystem in a location that had been overly dependent upon forestry products for so long.
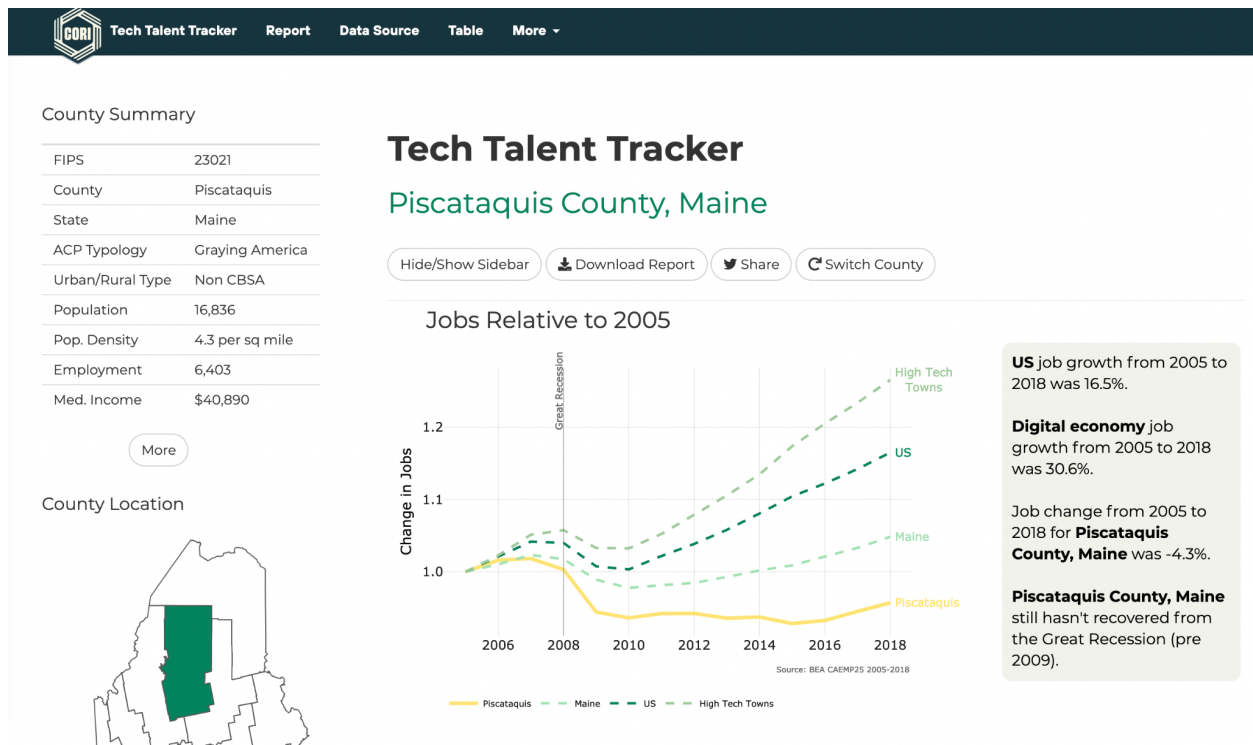
The Center on Rural Innovation's Tech Talent Tracker tool can visualize and compare counties' statistical attributes to those for its state, the nation, high-tech communities, and other specific counties. This screenshot of the report for Piscataquis County, Maine, where Millinocket is located, shows how it has failed to regain the same number of jobs it had before the Great Recession.

The examples are out there

The communities we work with are full of innovative, small business success stories of leveraging gigabit-speed internet in rural America.

In Taos, New Mexico, local partners used support from the LOR Foundation to create Business Alive, a program to help business owners build e-commerce websites at minimal cost. By February 2021, 10 local businesses had participated and some had seen revenue increase by 10% as a result.

After more than a decade working in auto repair shops, Marcus Aman channeled his years of experience with customers and his deep knowledge of the industry into Shyft Auto. Marcus partnered with a technologist to create an ambitious software platform that solves the inefficiencies he knows plague the service shops everywhere. They've secured venture capital investment and are growing rapidly in Wilson, North Carolina, the former tobacco hub that built the first community-owned, symmetrical gigabit, fiber-to-the-home network in the state.

Poultry Patrol, a robotics company aimed at helping the poultry industry, was able to get off the ground with its prototype thanks to the gigabit-broadband available in the Red Wing, Minnesota region. The upload and download speeds available there were crucial to testing their robots in action, allowing them to dial in their service and expand their offerings for farmers in the future.

Another AI-driven solutions startup, a company called Voi based in Springfield, Vermont, is the product of a Dartmouth College professor and a retired Marine Corps colonel trying to solve some of the most pressing behavioral health challenges of our time. They won a Small Business Innovation Research grant last year to help the Air Force, and are trying to help prevent suicide among the brave men and women serving our country with tools to help detect when someone might be at-risk and intervene before before it's too late.

<u>Conclusion</u>

This is a moment unlike any we've seen before in the internet age. The funding currently being considered to boost broadband deployment and expansion across the nation will let us truly solve the issue for the long term. This funding is vital to ensure every innovator and small business person can take part in the digital revolution, and reach their full potential — wherever they live.

Thank you all for your time and consideration of this important issue. I'm hopeful that with the momentum we all feel toward erasing the digital divide at last, you and your peers will make the responsible decisions needed to bring broadband — and opportunity — to all Americans. I am happy to answer any questions you may have.