Good morning Chairman Wicker, Ranking Member Cantwell, and Members of the Committee. It is good to see you all today—from a safe distance.

These are historic times. A public health emergency has strained our hospitals and crashed our economy. Protests have filled our streets in our largest cities and smallest towns in a nationwide reckoning over systemic racial injustice. We need connections now—physical and digital—that strengthen our mutual bonds. We need connections that remind us that our states are united, and our interdependence is powerful. That’s because networks that connect more people in more places lift us all.

To meet this moment, we need to extend communications opportunity broadly. Our efforts to date won’t cut it. The fact is they have left too many people in too many places behind. This is true in rural America, urban America, and everywhere in between. Our ongoing crises have revealed this hard truth. Now we need policies to fix these problems so that no community in this country is consigned to the wrong side of the digital divide.

First, we need a clear plan for broadband for all.

In this pandemic so much of modern life has migrated online. As a result, it has become painfully clear there are too many people in the United States who lack access to broadband. It has become obvious that our nation’s digital divide is very real and very big.

If we are going to address this challenge responsibly, we need to start by understanding its scope. After all, we cannot manage problems that we do not measure. Yet it’s an open secret that the FCC does not know with certainty where broadband is and is not across the country. We don’t have accurate data. We don’t have reliable maps. That means in the United States we lack an honest picture of the communities that are consigned to the wrong side of the digital divide and the people and places most at risk of falling further behind.

This needs attention. A year ago the FCC acknowledged as much when it committed to updating its broadband data efforts to get correct maps in place. Then Congress built on this foundation when it passed the Broadband DATA Act—led by the thoughtful work of this Committee.

But so far, the FCC has little to show for it. Just a few weeks ago the agency released its annual broadband progress report. It was a glowing assessment that all is well and that broadband networks are reaching all Americans in a timely way. In fact, the agency reported only 18 million Americans do not have access to broadband nationwide. But this is just not
credible. It's based on the same problematic methodology you called for us to stop using in the Broadband DATA Act. These numbers are not a true measure of the lack of broadband in rural America and on Tribal lands. Other estimates put it at 42 million and even potentially as high as 162 million.

Yet despite having made no efforts to improve our nation’s dubious broadband data, the FCC is about to hand out billions in fixed broadband support with the new Rural Digital Opportunity Fund based on maps we know are wrong. It has proposed the same course with its wireless 5G Fund. We can and should do better.

We need to roll up our sleeves and get the data we do not have about where service is and is not in rural communities. While we’re at it we need to incorporate the experience of so many people across the country who can tell us what service looks like where they live and why our maps are wrong. After all, the best broadband map will not be built in Washington. It will be built by all of us. The sooner we get started on this, the better. Because without it we will never be sure that we are targeting our universal service support to the right places.

Next, if we are going to address the digital divide, we need to devote energies to broadband adoption as well as deployment. It’s not just a problem in rural America. By some estimates, there are three to four times as many households without internet access in urban and suburban areas across the country. This cruel pandemic has revealed this like nothing before. In too many cases, families are struggling without connections or metering out life in this crisis with capped data plans shared by a family on a prepaid mobile phone.

It’s time to update our thinking about broadband adoption from front-to-back. Unemployment is at historic levels and too many families are facing real income insecurity. We need to have an honest conversation about the barriers to broadband adoption. Regrettably, this was not included in the FCC’s recent broadband progress report. Going forward, it should be. It’s essential that we understand it if we truly want to close the digital divide.

**Second, we need a clear plan to fix the Homework Gap.**

This cruel pandemic has shuttered schools nationwide. More than 50 million students were sent home. They were told to head online for class. But students without internet access at home were locked out of the virtual classroom. We need to make it a priority to fix this Homework Gap and connect every student so they can have a fair shot at continuing their education when school starts again in the fall.

According to the Senate Joint Economic Committee, 12 million children fall into the Homework Gap. The Associated Press suggests that the homework gap affects nearly one-in-five students. During this school year they haven’t been able to join classes online, communicate with their teachers, or keep up with their peers. The usual places to get a connection—coffee shops, libraries, and fast food restaurants where they can do their schoolwork with a side of fries—were closed. So during this crisis parking-lot Wi-Fi became a thing. So many students sat in a car with a school-issued laptop propped on the dashboard, attending online class in parking lots where Wi-Fi signals were free. These kids have extraordinary grit. Just look at the
efforts they made to continue with their education. But no parent—in rural or urban America—would ever choose this for their child.

The good news is we can fix this. We can solve the Homework Gap. Even better, we have a sound basis to do so through the E-Rate program. In fact, the agency has even done this in the past on a trial basis! That means the FCC could use E-Rate right now to provide every school library with Wi-Fi hotspots and other connectivity devices to loan out to students who lack reliable internet access at home. We should get started immediately.

Alternatively, if you see fit to address this issue through legislation, I hope that we can move fast and faithfully to implement any directives you provide. I am optimistic that we can fix the Homework Gap. We can make sure no child is left offline.

**Third, we need a clear plan to keep all Americans connected.**

Everyone needs communications to have a fair shot at 21st century success. It was true before this crisis. But it’s even clearer now. That’s because staying connected means you have a fighting chance at maintaining some semblance of normal life. It’s increasingly essential for work, for school, for healthcare, and so much more.

It’s a good thing that hundreds of communications providers have committed to keep America connected, pledging to open their networks, lift fees, and promising not to discontinue service. They deserve credit for making these commitments.

But at the end of this month, many of these commitments are coming to an end. And what comes next is just as daunting, because this pandemic is still moving through so many communities and upending so many lives. We need new ideas now to keep Americans connected in the future.

To this end, the FCC should seek to have communications providers extend their commitments and work with this Committee to help them do so. But with unemployment levels approaching those of the Great Depression we need to do more. We also need to rethink the Lifeline program to meet this moment.

For nearly four decades, this program has helped low-income households get connected to modern communications. It got its start when President Reagan was in the White House and most communications involved a curly cord with a telephone connected to a jack in the wall. It was a long time ago. But what the FCC recognized then—that a connection was essential for school, for work, for healthcare, for reaching out in an emergency—is just as true today. But during the last several years the FCC has cut this program to the bone, despite the fact that so many people rely on it—including more than two million elderly and more than 1.3 million veterans. We need to change course and identify how it can help more Americans keep connected to the communications services that are essential to navigate the ongoing public health and economic crisis.
We can start by updating standards for what Lifeline supports so everyone can maintain some semblance of modern life. We need to revisit eligibility criteria. Then we should work with our partners at the federal, state, and local levels to make the most of this program through improved outreach.

While we’re at it, we need to have a broader conversation about data caps and overage fees. With Americans working from home, taking classes, videoconferencing, playing games, chatting with friends, and streaming news and entertainment we must rethink how we count bandwidth and data usage. While some companies have voluntarily waived these caps and fees, on this score the FCC’s work to keep Americans connected came up short. I think the FCC’s efforts should go further because during this time, no one should be punished for exceeding their usage allotments because they are juggling work, telehealth visits and the like all from home.

**Fourth, we need a clear plan for a secure 5G future.**

If we want to be a global leader, then it’s imperative that we secure our leadership in the next generation of wireless, known as 5G. This is the technology of the future.

If there is one thing this crisis is demonstrating, it’s the value of faster and more robust networks. But our progress to date has been limited. That’s because we lack a whole-of-government approach to 5G policy. This is especially true when it comes to freeing up spectrum, which is essential for our leadership in the next generation of wireless services. It also is apparent in our disagreement over how to secure supply chains and mixed record on deploying infrastructure. As a result, we are chasing other countries like China when it comes to 5G investment and 5G patents.

We can fix this. We need a national spectrum strategy that can unify all of government and commit to expanding next-generation technologies to all Americans. An Executive Order from October 2018 promised such a plan by April of 2019. But we’re still waiting. Its absence is leading to interagency disputes about airwaves in the 24 GHz band, the 37 GHz band, the L-band, the 5.9 GHz band, the 6 GHz band and more. But while we argue among ourselves about what to do with these spectrum resources, other nations are moving forward.

This is not good. When that plan is finally delivered we need a full government commitment to our leadership in 5G. To facilitate it we need to revisit the fundamentals of spectrum reallocation. We need to develop a valuation of federal spectrum and then build structural incentives facilitating repurposing of airwaves for modern use. We need a way our federal colleagues see gain and not just loss from reallocation.

We also need to secure our 5G supply chain by returning the United States to a leadership position in the market for secure 5G equipment. That’s not an easy task. Last year, the Defense Innovation Board—the United States military’s premier advisory board of academic researchers and private sector technologists—surveyed the state of 5G and issued a sober warning. They found that “the country that owns 5G will own innovations and set the standards for the rest of the world,” and “that country is currently not likely to be the United States.” The underlying
truth about next-generation networks in many parts of the world is that technology developed in China may be at the center.

One way to start changing this is to invest in virtualizing radio access networks—or open RAN. I offered this idea early last year and it has since garnered support from staff of the Department of Homeland Security, the Department of Commerce, the Department of State, and my colleagues at the FCC. The RAN is the most expensive and restrictive part of the network—it sits between your device and a carrier’s core network. Today all major components of a RAN have to come from the same vendor. There is no way to mix and match. But if we can unlock the RAN and diversify the equipment in this part of our networks, we can increase security and push the market for equipment to where the United States is the strongest—in software and semiconductors. This will also give carriers around the world that are locked into upgrade cycles with a single foreign vendor a way out. The FCC can help with this effort by incorporating open RAN testbeds in our ongoing efforts to authorize city-wide 5G innovation zones, which exist today in New York and Salt Lake City. Doing this now will help ensure that this technology develops here, on our shores.

We also need to plan now so that the growing internet of things is secure. With 5G we are moving to a world with billions of connected devices all around us. Every piece of machinery, pallet of equipment, thermostat, smoke detector, streetlight, garbage pail, parking meter—you name it—will be a connected device. This creates powerful opportunities that will make us more effective and more efficient, our cities smarter and our communities more connected. But these benefits come with big security challenges we need to address.

Here is what that could look like. Every device that emits radiofrequency at some point passes through the FCC. If you want proof, pull out your smartphone or take a look at the back of any computer or television. You’ll see an identification number from the FCC. It’s a stamp of approval. It means the device complies with FCC rules and policy objectives before it is marketed or imported into the United States. This routine authorization process takes place behind the scenes. But the FCC needs to revisit this process and explore how it can be used to encourage device manufacturers to build security into new products. To do this, we could build on the National Institutes of Standards and Technology draft set of security recommendations for devices in the internet of things. This effort specifies the cybersecurity features to include in network-capable devices, whether designed for the home, hospital, or factory floor. It covers everything from device identification, device configuration, data protection, access to interfaces, and critical software updates. In other words, it’s a great place to start—and we should do it now.

**Fifth, we need a clear plan to sustain local media and stand up for the First Amendment.**

Local news is vital. We need it to make decisions about our lives, our communities, and our country. But despite the increased demand for news right now, the economics that underlie the industry are changing. You see it in advertising revenues. You see it in lost jobs. You see it in business models that are under enormous pressure to evolve when real facts get casually derided as fake news, algorithms are ascendant, and what is viral is not often verifiable.
For decades, the FCC has had policies in place to support localism, diversity, and competition. But in the last few years, consolidation has made it less local and less diverse. Local journalists have been told to do more with less, as content gets beamed in from far-away places and fewer stories get told.

To meet these new challenges, I believe we should scour the FCC’s rules to identify how to support local media. It’s not a cure-all and it may not be especially trendy, but we need to do our part to try to support local journalism and jobs. We need to help bring the capacity for program origination back to the communities where stations serve. We also need to put back in place the tax certificate policies that history demonstrates were the single strongest tool we had for increasing the diversity of media ownership.

One thing that we shouldn’t do, however, is compromise when it comes to our values, including those embodied in the First Amendment. Nowhere is this clearer than the recent Executive Order concerning Section 230 of the Communications Decency Act. I know that social media can be frustrating. But an Executive Order that would turn the FCC into the President’s speech police is not the answer.

*Finally, we need a clear plan to learn from the crisis before us.*

The FCC should commit now to taking stock of the lessons learned when we are on the other side of this pandemic. For those households that are connected, so many are video calling, streaming, and uploading content at the same time. Our providers are seeing unprecedented new patterns in usage. We need to study these changes because they represent the future. What bandwidth is being used? At what speeds? Our national standard for broadband is 25 Megabits per second up and 3 Megabits per second down. Is that low for what we demand from our online experiences today? Is that keeping pace with the rest of the world? Plus, to what extent are today’s asymmetrical networks with higher download than upload capacities truly suited for a world with big changes in data processing and cloud storage that are altering how we work everywhere from the office to the farm?

Regrettably, there is still no official source for tracking America’s digital connectivity during this public health emergency. This is a mistake. We should require reporting about how our networks are holding up, like we do for other public emergencies like hurricanes, wildfires, and power outages. We also have given out millions for new telehealth initiatives pursuant to the CARES Act. We need to study how those funds were spent to understand what connected care works so our telemedicine initiatives can be more effective. The bottom line is we need to do a better job of learning from this crisis so we are better prepared in the future.

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Despite the uncertainty that we face with this pandemic, I have real optimism. When Americans see crisis, we mobilize. When we are challenged, we overcome with uncommon courage and extraordinary grace. I see it at the agency, too, in the deep commitment of the FCC staff to work during this pandemic to adjust our policies to extend the reach of communications. But now we need to do more than build on what was done in the past. Because what has come
before will not get us where we need to go. We need to recognize that the future belongs to the connected and we need to develop new policies that make digital opportunity available for all.

Thank you for having us here today and I look forward to answering any questions you may have.