

**STATEMENT OF GEOFFREY STARKS
COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION**

**BEFORE THE
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COMMITTEE ON ENERGY & COMMERCE
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**ACCOUNTABILITY AND OVERSIGHT OF THE
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Good morning, Chairman Doyle, Ranking Member Latta, Chairman Pallone, Ranking Member Walden, and Members of the Subcommittee. It's a privilege to appear before you today.

Since I began, and in the nearly seven months since I last appeared before you as an FCC Commissioner, I've repeatedly stressed the critical importance of reliable, affordable broadband service to communities throughout America and I've seen firsthand the impact it can have. That's why today I want to talk about how the persistent problem of the digital divide is hardening into a state of "Internet Inequality," and how the FCC needs to improve how it addresses this issue through its Universal Service Fund programs. I'll also discuss the critical importance of secure telecom networks, particularly with the election season starting early next year. Finally, I'll close with some thoughts about how the 5G revolution can help us with two of our most pressing issues – the future of work and the future of our environment.

The Urgent Problem of Internet Inequality

This August, as part of a visit to Tribal Lands in New Mexico, I accompanied Congressman Luján to the Pueblos of San Felipe and Santo Domingo, New Mexico. We heard from community leaders and members of the Middle Rio Grande Valley Tribal Consortium

about their quest to bring futureproof fiber connectivity to libraries in communities where many don't have home broadband service. Ms. Cynthia Aguilar, a librarian with the Santo Domingo Pueblo Library, compared the impact of broadband connectivity to the arrival of the railroad to the Pueblo a century ago.

I've heard similar stories in my travels around the country. During my visit with Congressman Butterfield to Duke University Hospital, I learned about the hospital's innovative telehealth program, which connects providers in Raleigh with rural North Carolina communities so they can use broadband to provide services ranging from stroke emergency care, to teledentistry, to mental health counseling.

I particularly want to single out the efforts by libraries to provide broadband access and education to their communities. Libraries from the city of Los Angeles to the town of Gallipolis, Ohio now lend wi-fi hotspots that are so popular that they have weeks-long waiting lists. In Boston's Roxbury neighborhood, I met Ms. Eleanor, who visits the library's Grove Hall branch from the adjoining senior center. Ms. Eleanor participated in the library's "Tech Goes Home" program, which trains residents to use the internet and helps them purchase affordable laptops and home broadband service. Ms. Eleanor flourished, and told me about her favorite new activity when she's at home with her first laptop: learning to line dance by watching online videos.

Stories like these illustrate the importance of high-quality, affordable broadband service to our country's citizens. But there are hard-working Americans that fall on the other side of that digital equality line, and remain un-connected. It has been about 25 years since the phrase "digital divide" was first introduced. The fact that we are still talking about the impact of the digital divide after a quarter century proves that we are not dealing with a temporary condition,

but a persistent problem that is only growing in urgency – a state that I call an “internet inequality.”

Low-income people, people of color, and people in rural areas either aren’t getting online or are making great sacrifices to do so. According to a Pew Research study, only 45% of adults with an income under \$30k have broadband at home. That means driving to the library to fill-out job applications and joining the waitlist for that Wi-Fi hotspot. We’ve got to do better.

The FCC’s Universal Service Programs Need Improvement

Increasingly, your ability to get online affects your quality of life. No broadband connection at home means less access to healthcare, education, and government services. That’s why the FCC’s Universal Service Fund programs are so important. We know that millions of Americans in the hardest to serve areas are getting left behind, so I’ve proposed a four-point plan to address rural broadband.

First, the FCC must fund rural broadband with fixed maps. Good policy requires good data. As this Subcommittee knows, the FCC recently proposed \$20.4 billion dollars for the 10-year Rural Digital Opportunity Fund, also known as RDOF. I fully support providing the resources needed to adequately address connectivity in rural communities. But I have serious concerns about how the FCC plans to administer this program.

For decades, the Commission has worked to address the digital divide. Yet throughout that period, we’ve based our funding decisions on flawed data and mapping that doesn’t fully reflect the reality of who has broadband service and who doesn’t. Members of both chambers of Congress have repeatedly admonished the Commission to fix its data, and the agency appears to be responding with its Digital Opportunity Data Collection proposals.

Instead of waiting to spend precious USF dollars until our maps are fixed, the Commission has proposed to spend \$16 billion dollars – over three-quarters of the USF support the FCC intends to deploy over the next 10 years – before it has fixed the data and maps that nearly every stakeholder agrees are badly flawed. As we say in Kansas, “measure twice, cut once.” While I understand the desire to get support where it’s most needed, the Commission should have chosen to proceed immediately with a smaller initial budget than \$16 billion and a shorter service term than 10 years while we fix our data and mapping to support those areas. Once we have improved data and maps, the Commission could then proceed with bulk of the additional support for longer terms. Unfortunately, the RDOF structure adopts a “ready, fire, aim” approach that favors speed of funding over results.

Second, to address rural connectivity we must incentivize providers to bring future-proof broadband to our communities. The Commission has a responsibility to ensure that its policies are working, and the USF program is an important example of where we must do better. A close review of the RDOF proposal finds that many communities that will be deemed eligible as currently “unserved” actually previously received federal dollars as recently as five years ago through our high cost program known as Connect America Phase I. That is shocking that we need to re-deploy USF funding to get better broadband to these communities, and crystallized for me that we must better understand how our rural telecom support programs have performed historically so that we can better future-proof the broadband we purchase through the RDOF over the next 10 years.

Sometimes you have to look back to move forward. That’s why I’ve called for the FCC to conduct a data-driven 10-year look-back on how our high cost programming has performed in bringing broadband to our hardest to reach areas. Where have we succeeded? Where did we

miss the mark? Which communities have had their connectivity needs met by the program in the way that we expected? Which haven't, and why? We must understand why. Here is the point: we must avoid waking up 10 years from now with another \$20 billion spent, and yet we still fail to understand with precision which communities remain unserved and how we can accurately finish the job.

Third, we must hold auction winners accountable. As of last month, the FCC plans to disburse nearly \$1.5 billion dollars in support over the next 10 years through its Connect America Fund II program. Checks are being issued to auction winners right now and the stakes are high for the communities that have lacked high-quality broadband. But I met with communities that are anxious about whether the service they've been promised under CAF-II will actually come to pass. Unfortunately, as we sit here, more than a dozen CAF-II auction winners have already defaulted on their bids to provide service to rural areas in states like Arkansas, Minnesota, Michigan, Nevada, Nebraska, Colorado, Missouri, Oklahoma, Kansas, Massachusetts, and Virginia. The high stakes are clear as communities receiving support under CAF-II will not be eligible to do so under the RDOF. Before we send an additional \$20 billion dollars out the door, we need to be absolutely sure that all carriers who receive USF funding are stable and designed to meet our buildout requirements to deliver connectivity to communities that are most in need.

Fourth, to address rural broadband we must advance a more affordable way for our poorest rural Americans to connect to the internet. Quite simply, the FCC should require USF auction winners to offer an affordable broadband service option. The average family in America spends \$2,700 per year on their internet, phone and cable. For many working families dealing with increasing expenses and nearly flat incomes, that's just too much. Currently, we know that

a number of ISPs, including Comcast, Cox, AT&T and Spectrum, among others, provide low-cost internet offerings around \$15 or less to families participating in federal school lunch and other programs – a good start for us to examine what an affordable offering may look like. With the increasingly essential nature of broadband service, all Americans should have access to affordable broadband that they buy.

Network Security Is National Security

While we're focused on connecting all Americans, we must also make sure that those connections are secure. Congress established the FCC to promote the safety of life and property and for the national defense. As I've said time and again, Network Security is National Security. With the growth of 5G wireless services, we are rapidly moving into a world where billions of IoT devices will operate our critical infrastructure, health care system, financial sector and transportation systems. Secure networks therefore are not only necessary to preserve the confidentiality and integrity of our communications, but also to protect our public safety.

Back in May, while many were focused on preventing untrustworthy Chinese equipment from coming into our networks, I brought attention to the fact that we were not solving the problem of untrustworthy equipment already in our communications networks today. I said we need to find this insecure equipment, fix the problem, and fund the remedial effort – Find it, Fix it, Fund it. I was proud to join my colleagues last month in voting not only to prohibit the use of universal service funds for the purchase of equipment from certain Chinese telecommunications companies, but also to address what to do about the equipment already in our networks.

Beyond untrustworthy Chinese equipment, there are additional security issues that we must wrestle with, and the stakes could not be higher. In a few months, Americans will begin the process of choosing their presidential nominees. Our intelligence agencies, however, predict

that foreign adversaries will once again seek to interfere with our elections in 2020. According to press accounts, some states – including states like Florida, Illinois, Michigan, Maryland, Rhode Island, Wisconsin and Washington D.C. – still use voting machines that can transmit their results over the same cellular networks that we use for our mobile phones.

Once a device is connected to a wireless network, it's subject to the same threats as other wireless communications. Voting results can be blocked or altered by adversary states using fake cell towers or by hacking untrustworthy or insecure routers. Because of these risks, I've reached out to the major wireless carriers to discuss how they're protecting their network security and working with election officials. The FCC has a statutory obligation to protect the national defense, and the security of our elections clearly qualifies. The ultimate goal is clear – make sure that every vote, wherever made, is counted accurately each and every time.

Ensuring That the 5G Revolution Benefits All Americans

Finally, we must make sure that all Americans share in the benefits of broadband. 5G technology has the opportunity to help drive solutions on issues that matter most in our world. Not just for today, but for our shared tomorrow.

One such issue is the future of work. 5G will allow massive IoT networks using automation and artificial intelligence to achieve unprecedented productivity and efficiency. But that transformation could also displace millions of workers. Recent research shows that the automation revolution will disproportionately impact communities of color and women. That's due to their overrepresentation in roles likely to be automated: truck drivers, machinists, food service workers, and office clerks.

But while 5G may disrupt to our current labor structure, it also has tremendous potential to help. Government and industry need to work together to encourage programs that use 5G and

other tools to prepare our young people and students for the jobs of the future. We also should provide training, up-skilling and support for Americans who will need to transition from jobs that will be made obsolete to the jobs of the future.

Finally, we must use every tool in the toolbox to confront the defining challenge of our generation – climate change. The extreme weather that we've experienced in the last few years here and around the world has made it clear that we must act now. Technology has a pivotal role to play, and 5G wireless will connect billions of devices that will allow us to maximize energy efficiency and minimize environmental impact on a national, local and individual level.

5G will take smart grid technology to the next level, allowing energy companies to smooth out spikes in usage before they happen, respond instantaneously to outages, and route power in the most efficient manner, reducing consumption and emissions. Smart factories, smart buildings and smart homes will adjust their lighting and heating to reduce energy consumption, while farmers will use data tools and precision agriculture to reduce pesticide usage, water consumption and harmful emissions while significantly increasing crop yields. Autonomous electric vehicles will connect with each other and the transportation infrastructure to plan the most efficient routes to our destinations and reduce emissions by over 80 percent compared to gasoline-powered autonomous vehicles. These are global opportunities ready to be seized.

We have done much, but there is much more to do. I look forward to working with my colleagues to address these challenges and many more. Thank you for having me here today. I look forward to answering your questions.