TESTIMONY OF BRENDAN CARR COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION

BEFORE THE SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY OF THE UNITED STATES HOUSE OF REPRESENTATIVES COMMITTEE ON ENERGY AND COMMERCE

"OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION" OCTOBER 25, 2017

Chairman Blackburn, Ranking Member Doyle, and distinguished Members of the Subcommittee, it is a privilege to appear before you today. This is a particular honor for me because this is my first opportunity to testify since I was sworn in as a Commissioner in August. For the eight months before that, I served as the General Counsel of the FCC after joining the agency as a staffer in 2012.

In my five years at the Commission, I have enjoyed the chance to work with you and your staffs on policies that promote the public interest. I want to commend you in particular for your efforts to enact bipartisan legislation, such as Kari's Law, the Improving Rural Call Quality and Reliability Act, and, most recently, the markup of an FCC reauthorization bill.

Having served in various roles in both the majority and minority at the FCC, these experiences have instilled in me an appreciation for the importance of bipartisan consensus and working towards common ground. I believe that focusing on our shared goals produces the best and lasting results for the public. I commend the Subcommittee for working in that spirit, and I commit to carrying that forward in my time on the Commission.

During my confirmation hearing this summer, I spoke about the opportunity we have in the technology and communications space to work together on policies that will create jobs, spur investment, and grow the economy for the benefit of all Americans. It is one of the reasons that I am focused on policies that will promote broadband deployment. Whether it is the workers that manufacture and deploy broadband infrastructure, the app economy that runs over high-speed networks, or the businesses that use these connections to reach customers around the world, broadband can harness the talents of all Americans, create good-paying jobs, and help drive our nation's economic growth.

I saw this first hand when I visited North Carolina during my first official trip as a Commissioner. I visited a plant in Claremont, North Carolina that manufactures fiber optic cables and other network infrastructure. I had the chance to tour the plant floor and meet some of the highly-skilled men and women that operate the machines that produce cables used for everything from data centers to wireless and wireline deployments. A few weeks later, I visited a manufacturing facility in Sunnyvale, California, where workers are assembling next-generation satellites.

Over the past two months, I also had the chance to visit with construction crews that were hard at work trenching conduit, pulling fiber, and maintaining the towers needed to deliver high-speed broadband. And I spent time with innovators and entrepreneurs in tech hubs on both coasts that are taking advantage of all this broadband infrastructure to launch new businesses.

These experiences only underscore the important role that broadband plays in creating jobs and opportunities for Americans across the country. So I want to focus my testimony this afternoon on some of the ways the FCC can incentivize even greater broadband deployment. This is particularly important as we make the transition to 5G—a shift that will require a massive investment in both wired and wireless infrastructure.

In fact, if we get the right policies in place, this transition could mean \$275 billion in network investment, three million new jobs, and a half a trillion dollars added to the GDP.

In my view, there are at least three keys to getting there—spectrum, infrastructure, and ensuring that we have the skilled workforce necessary to deploy and maintain next-generation networks.

First, we need to get more spectrum into the market. This means that the FCC must continue to pursue an all-of-the-above approach. We need a spectrum pipeline that can deliver a mix of low-, mid-, and high-band spectrum into the commercial marketplace. And we need to ensure that providers can choose from a mix of licensed, unlicensed, and shared spectrum bands to meet consumer demand, whether to connect people or the burgeoning Internet of Things. I am pleased that the FCC is pressing forward on this front. The agency now has a proceeding under way that looks at broad swaths of spectrum between 3 and 24 GHz. And the Chairman has announced that the agency will vote later this

year on opening up additional bands above 24 GHz. These are great steps towards maintaining the United States' leadership in the global race to 5G.

Second, we must modernize the federal, state, and local regimes that govern infrastructure deployment. 5G is going to involve a 10- to 100-fold increase in small cells in addition to millions of miles of new fiber and other high-speed connections. The current regulatory regime is not designed to support or process deployments on this type of scale. It costs too much and takes too long. So we need to drive the unnecessary regulatory costs out of the system, and we need to speed the timeline for obtaining regulatory approvals.

Doing so will deliver real results, including in rural and less densely populated parts of the country that might otherwise miss out on 5G and other advanced deployments. In fact, one study shows that through streamlining alone, the FCC could flip the business case for thousands of communities.

Regulatory reforms alone could make it economical for the private sector to deploy 5G to nearly 15 million more homes than under the existing regime. That's an additional \$24 billion in investment that could be incentivized simply by removing regulatory barriers to deployment.

Third, we need to ensure that we have the skilled workforce necessary to get the transition to next-generation networks across the finish line. Last month, I participated in a roundtable hosted by the Wireless Infrastructure Association outside of Baltimore, Maryland. It was eye opening, to the say the least. A broad range of stakeholders all agreed that there is a shortage of workers with the skills necessary to deploy and maintain the small cells, distributed antenna systems, and other network infrastructure for 5G deployments. And this skills gap is a topic that has come up repeatedly in my meetings with both wireless and wireline providers. While there is no direct regulatory role for the FCC, I think we need to focus some additional attention on this issue and potential solutions, including the role that apprenticeship and other job training programs can play.

Finally, while technology continues to evolve, one constant is the FCC's obligation to promote public safety. This has been highlighted in the most devastating of ways over the past two months when hurricanes overwhelmed communities across the country. The FCC and its staff have been working hard

since well before the first hurricane made landfall. And broadcasters and broadband providers alike have been deploying crews and working around the clock to restore communications—a task that has been complicated by the lack of commercial power in many of the hardest hit areas. The FCC has been supporting these restoration efforts, including by sending personnel to the impacted areas in coordination with FEMA, granting waivers, and providing special temporary authorizations.

Chairman Pai also formed a hurricane recovery task force that is coordinating the FCC's efforts in this area. The agency is laser focused on the emergency situations in Puerto Rico and the U.S. Virgin Islands, while at the same time continuing to assess and monitor restoration efforts in other parts of the country. I will see some of those efforts on Friday when I visit Houston to hold a roundtable with broadcasters, meet with broadband providers, and visit a 911 call center. This trip will allow me to continue to take stock of the progress being made and the ways the FCC can support those efforts.

* * *

Chairman Blackburn, Ranking Member Doyle, and Members of the Subcommittee, I want to thank you again for holding this hearing and for the opportunity to testify. I look forward to answering your questions.