

REMARKS OF FCC COMMISSIONER BRENDAN CARR
AT THE U.S. DEPARTMENT OF LABOR'S WORKSHOP
ON APPRENTICESHIPS AND WORKFORCE DEVELOPMENT
IN THE WIRELESS INDUSTRY

WASHINGTON, DC

NOVEMBER 28, 2017

Good morning. And thank you to the Department of Labor for hosting this morning's workshop on apprenticeships and workforce development in the wireless industry. Ensuring that we have the skilled workforce in place to deploy, maintain, and upgrade our nation's communications infrastructure is one of the keys to ensuring that all Americans have access to advanced broadband networks. And right now, we're confronting a shortage of those skilled workers. So I welcome the chance to participate in today's event and to highlight the work that DOL and its apprenticeship and workforce development programs are playing in closing this skills gap.

In addition to the officials from DOL, it's great to be joined this morning by representatives from veterans groups, telecom providers, the Telecommunications Industry Registered Apprenticeship Program (TIRAP), and the Wireless Infrastructure Association (WIA) to celebrate the creation of 1,500 registered apprenticeships in the wireless sector. I'd like to take a few minutes to explain why this milestone and the work that these organizations are doing is so important.

To start, we have a tremendous opportunity in the tech and telecom sector to create jobs, spur investment, and grow the economy for the benefit of all Americans. It's one of the reasons I'm focused in my role on the Federal Communications Commission on policies that will promote broadband deployment. Whether it's 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.

Incentivizing greater broadband deployment is especially important as we make the transition to the fifth generation of wireless technology, or 5G. This technology will be about more than just faster data speeds. It has the potential to increase competition and expand broadband access, including through new, fixed wireless offerings. It is also expected to connect billions of devices and support the Internet of Things. And the high reliability and low latency of 5G networks could transform entire industries—with use cases ranging from self-driving vehicles to remote medical services.

Importantly, the shift to 5G will require an enormous investment in both wired and wireless infrastructure. In fact, this transition could result in \$275 billion in network investment, three million new jobs, and half a trillion dollars added to the GDP.

But getting there—and ensuring that the United States leads the world in 5G—is going to require substantial and sustained infrastructure deployment. In fact, 5G is going to involve a 10- to 100-fold increase in small cells as well as millions of miles of new fiber and other network infrastructure. But the current regulatory regime—whether it's the federal, tribal, state, or local laws—are not tailored to support this type of massive, new deployment. It costs too much, and it takes too long. So, at the FCC, we're taking steps to reduce these costs and streamline the processes governing wireless infrastructure deployment. FCC Chairman Pai has asked me to take the lead on the FCC's wireless infrastructure proceeding, and the agency is already making progress. Earlier this month, we voted on an order that

streamlines the regulatory review process that applies when a provider seeks to swap out a utility pole for the purpose of adding wireless equipment. And next month, we'll be voting on a proposal that, if adopted, would exempt a category of towers known as "Twilight Towers" from routine historic preservation review. This action will open up potentially thousands of existing towers for the deployment of new wireless equipment.

But as the FCC adopts these policies to spur greater private sector investment in 5G and other advanced networks, another question comes to mind: Do we have the skilled workforce in place that can deploy the massive amounts of additional broadband infrastructure necessary to meet consumer demand? Answering that question is why events like this are so important. We need to make sure that industry has access to the skilled workforce needed to get this transition to next-generation networks across the finish line.

In my first few months on the FCC, I've heard from a broad range of stakeholders—from wireless carriers to independent infrastructure providers—about the shortage of skilled workers that can deploy the small cells, distributed antenna systems, and other network facilities necessary for 5G. According to WIA's Innovation and Technology Council, training a qualified workforce to support this type of deployment is imperative as new technologies, spectrum, and efficiencies are introduced into wireless networks.

While there is no direct regulatory role for the FCC to play here, I think we need to focus more attention on this issue and potential solutions, including the role of apprenticeship programs. In recent weeks, I've heard from representatives here at DOL, tech company executives, community college administrators, and from apprentices themselves about the benefits of these programs. They explain that the combination of classroom learning and on-the-job training can lead to good-paying jobs while meeting employers' growing demands for specific skill sets or credentials.

So I'm glad that DOL has brought stakeholders together to discuss this important topic and I thank them for holding this workshop. I also applaud WIA's leadership as the National Sponsor of TIRAP in bringing the apprenticeship model to the wireless sector. Its efforts to develop courses and instruction that will support apprenticeships, help train veterans, and bridge the skills gap on radio frequency issues and other topics are critically important to developing the wireless workforce of the future. And throughout this morning's event, I look forward to further exploring the role that apprenticeship, job training, and education programs can play in ensuring that the United States has the skilled workforce it needs to maintain its leadership in wireless.

Thank you.