

## REMARKS OF FCC COMMISSIONER BRENDAN CARR

### AT THE ABOVE GROUND LEVEL SUMMIT

PHILADELPHIA, PA

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Good morning. Thank you, Bryan, for that kind introduction and thank you to Above Ground Level for having me at your Philadelphia summit. I am happy to start out with some brief remarks and then open up the rest of this session for questions.

I took the train up from D.C. this morning where the city just celebrated the Washington Capitals' first Stanley Cup title with a parade down Constitution Avenue. It was Washington's first major sports title in over 25 years. Of course, it has not been that long for fans here in Philadelphia. And even though I root for the Redskins, I would be remiss if I did not recognize the reigning Super Bowl Champion Philadelphia Eagles.

But in terms of victory parades, it was interesting to see the contrast in styles between D.C. sports fans and those here in the City of Brotherly Love. As you may recall, local authorities in Philadelphia lathered up their utility poles with Crisco in an effort to prevent fans from climbing them. But true to their determined nature, Philly fans were not going to let the Crisco Cops win. They ultimately conquered the greased poles much like their beloved Eagles topped the New England Patriots.

And, of course, this utility pole reference will serve as my subtle transition to the topic of today's Above Ground Level conference. The group gathered here is all about wireless infrastructure—from the small cells that can be attached to those poles (hopefully no longer Criscoed) to macro sites on tall towers.

Speaking of towers, I have a newfound appreciation for the hard, often gritty work that goes into deploying the wireless infrastructure necessary to bring next-gen opportunity to communities across the country, which I will get to in a second. Part of this stems from the time I have been able to spend in this job outside of D.C. In the last few months, I've seen wireless deployments in the rural Shenandoah Valley of Virginia and in the heart of downtown Baltimore. From Beatty, Nevada—population 1,010—to the Motor City of Detroit.

Just two weeks ago, I did a swing through the Great Plains, with stops in Nebraska, Iowa, and South Dakota. I finished up my trip with a visit to Sioux Falls Tower & Communications, which just opened a new, state-of-the-art training facility in Sioux Falls. Senator Thune and Governor Daugaard hosted me for a ribbon-cutting at that facility. We spent time with the company's co-founder Craig Snyder, who I believe is here today. And I also got the chance to visit again with Todd Schlekeway of the National Association of Tower Erectors (NATE). I want to recognize and thank both Craig and Todd and their organizations for the important work they are doing to improve training and safety for tower climbers.

Outside of their new training center, Sioux Falls Tower has what they describe as a 50-foot practice pole. I had the chance to climb it with two of their experienced tower workers, Brandon and Leland. Looking back on the experience, I am now convinced that they left at least one zero off of that 50-foot height description. As Brandon moved quickly to the top, I tried to keep up while not letting my fear of heights get the best of me. When we reached the platform at the top, I was a little winded. And it did not help when Brandon and Leland started rocking the structure back and forth in an exercise, they

said, was designed to give me a sense of the conditions on a taller tower like the 2,000 foot one Brandon recently climbed. To add insult to injury, in the selfie we took at the top, Brandon flexed his biceps for the camera, I think to contrast with my bureaucrat's physique.

But in case that experience alone was not enough to drive home the point, I will readily admit that I am much more comfortable in the weeds of telecom law than on top of a communications tower. As proof of that, I want to take this moment to refer you back to what I am sure is now a collector's item: the October 2006 edition of *Above Ground Level* magazine. Or the famous "Volume 3, Number 6," as is often whispered in the halls of AGL events. In fact, I have a copy of it with me today. As you no doubt know, on page 22, there is an article titled "How Federal Preemption Helps Tower Owners," written by one Brendan Carr. The article boldly predicted that "Federal preemption may be the sword to cut the Gordian Knot of state and local tower regulations." That's the kind of legal poetry that only an over-confident first-year lawyer can write.

Fast forward a dozen years (and a receding hair line) later, and I would submit that finding ways to modernize and streamline wireless infrastructure deployment is as important as ever. You see, back in 2006, we were getting ready to transition from 3G to 4G technologies. And the U.S. won the race to 4G. Nearly 75% of all cellular connections in North America are now LTE, while that figure is only 42% in Western Europe. Our 4G leadership increased our country's GDP by \$100 billion per year and cemented American preeminence in the tech sector more broadly.

Now, we are in the midst of a global race to 5G. There is a lot at stake in winning this race. Being first to 5G could mean three million new jobs, half a trillion dollars added to the GDP, and \$275 billion of private sector investment—all without a penny of new taxes. We want that. But our friends and competitors in Europe and Asia want that too.

So how are we going to win this race?

The good news is that we don't need to invent a new strategy—we already know the winning playbook. Just as we did with 4G, we have to focus on two things: spectrum and infrastructure. And at the FCC, we are moving aggressively to execute on both fronts.

On the spectrum side, there's no doubt we're on the right track. In 2016, we became the first country in the world to allocate high-band spectrum for 5G, and we're now opening up even more 5G bands. In April, we voted to move forward with the auction of 24 GHz and 28 GHz spectrum. In May, we voted to consider opening up spectrum in the 2.5 GHz band for greater and more efficient uses. And just last week, we finalized rules for the 28 GHz, 37 GHz, and 39 GHz bands, while also seeking comment on additional opportunities in the 42 GHz and 26 GHz bands.

At the FCC, we have already assigned more high-band spectrum for 5G than any other country in the world—we're more than four gigahertz ahead of second-place China. And we won't stop there. We are looking to free up more low-, mid-, and high-band spectrum.

But our aggressive push to free up spectrum—while necessary to our 5G leadership—is not enough on its own. The second part of the equation is to move just as aggressively to modernize and update our infrastructure deployment rules—to ensure they are what I call "5G Ready."

To that end, I appreciate that Chairman Pai asked me to lead the FCC's efforts in our wireless infrastructure proceeding. In Philadelphia, the sports teams here have embraced the phrase "Trust the Process." And in terms of the process at the FCC, we've been engaged in a comprehensive review to modernize and update our approach to wireless infrastructure so that we can win the race to 5G.

Last November, we streamlined the process for swapping out utility poles. In December, we adopted a proposal that would exempt so-called “Twilight Towers” from routine historic preservation review, opening up potentially thousands of existing towers for new wireless deployments, including for FirstNet.

And in March, the FCC took another major step forward in the process. As you know, 5G networks will look very different from today’s 4G deployments. 5G will involve the addition of hundreds of thousands of new, small-scale facilities with antennas no larger than a small backpack. Upwards of 80% of all new deployments will be small cells. They can go on the sides of existing buildings, on light poles, and blend in with the surrounding environment. These deployments will look nothing like the hundred-foot towers that many people associate with prior generations of wireless service. In fact, when I was in Iowa a couple of weeks ago, I toured a manufacturing factory that not only presses and welds large iron sheets into tall towers, but increasingly builds stealth enclosures for small cells. Some are incorporated into streetlights, and others look just like city trash cans.

A major problem hindering the transition to 5G is that many of our country’s infrastructure deployment rules have not been updated—they still assume that every new deployment is a hundred-foot tall tower. The result? The deployment costs are too high and the regulatory approval processes too long. Indeed, 30% of the total cost of deploying a small cell had been going to federal reviews designed for larger towers. Left unchecked, this outdated approach would have threatened our leadership in wireless. Our message was: for next-gen networks, we need next-gen regulations.

So here’s what we did. Our March order exempted small cells from certain federal historic and environmental reviews and streamlined some of the processes that apply to larger towers. It was heartening to see the broad base of support that spoke in favor of this important decision.

This one order is expected to save nearly \$1.6 billion, create 17,000 jobs, and lead to the deployment of 57,000 new small cells.

Those are big numbers. And cutting regulatory red tape is a big deal because it can flip the business case for thousands of communities. Communities that might have been uneconomical for the private sector to serve, will now get their shot at next-gen networks. Winning the race to 5G is not about getting next-gen networks deployed in New York and San Francisco. Those places will get 5G almost regardless of what we do at the FCC. Success is ensuring that all communities get a fair shot at next-gen connectivity.

Looking back at our decisions to date, the Commission is making good progress in freeing up spectrum for 5G and modernizing our physical infrastructure rules. But there still is much work to do. The process continues.

That’s why the FCC has been looking at the important role that state and local reviews play in facilitating the deployment of next-gen wireless infrastructure. My staff and I are still working through these issues, but I can share what I have already said on this topic—in other words, no need to wake up for this last part of the speech.

First, there is no question that states and localities expect and deserve to be compensated for the reasonable costs they incur in managing rights-of-way and access to public infrastructure. And there are real costs there. But that does not mean that government should view each deployment as a revenue

generating opportunity. The economic benefits for communities arise once we get our neighborhoods connected to next-gen networks. Our policies should be aimed at promoting those types of deployments.

Second, we should ensure that our shot clocks on local reviews continue to serve their intended purposes. We adopted the existing timeframes before the spike in smaller scale facilities we're seeing today. So we need to make sure that we have the right review periods in place. Obtaining timely decisions is key to the timely deployment of new networks.

Third, the FCC should provide even more certainty about access to rights-of-way and our views on state and local moratoria. As we do so, we should promote greater parity between the treatment of wireless infrastructure and other uses of rights-of-way.

There are other important and commonsense guideposts that merit consideration when we discuss state and local approval processes, and I look forward to sharing more specific thoughts as we complete our review. In the meantime, I continue to welcome the chance to partner with local governments, citizens' groups, wireless providers, and those of you who do the hard work of building and upgrading infrastructure to modernize our siting rules.

For now, I think it is safe to say that we are all committed to seeing the U.S. win the race to 5G. We know the challenge. We know the opportunity. And we have a plan that will help extend the United States' leadership as next-gen networks come online.

Thank you, and I look forward to taking your questions.