

**REMARKS OF FCC COMMISSIONER BRENDAN CARR
AT CCA's 25TH ANNUAL CONVENTION**

FORT WORTH, TEXAS

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Good morning. Thank you, Steve, for that kind introduction. And congratulations to the Competitive Carriers Association on celebrating your 25th annual convention. Back in 1992, I believe, Steve, you were serving as a chief counsel in the United States Senate, having already spent over a dozen years in senior leadership positions in government, including at the State Department. For my part, I was in 8th grade, having spent about a dozen years working my way up to that position.

But in all seriousness, it is great to join you in Fort Worth. Texas has a rich history of firsts, so I could not think of a better venue to give my first speech as an FCC Commissioner. For instance, the world's first frozen margarita machine was invented in a restaurant not far from here. But in a more sober and perhaps more relevant first, the microchip was invented in Texas, and the Lone Star State is now a hub for 5G research and development. So whether you call it the Silicon Prairie or the Telecom Corridor, much of this state has played—and continues to play—an important role in the telecom and high-tech industries.

In preparing to speak at CCA's silver anniversary, I did some reflecting on how far the wireless industry has come over the past 25 years.

Just think, at the end of 1992, there were 11 million cellular customers in the United States. Today, that figure is nearly 400 million, and more than half of U.S. households are now wireless-only.

In 1992, cellular penetration was less than 5%. Today, it is over 120%.

In 1992, customers used 13.5 billion voice minutes. Sounds like a lot. But last year, the wireless industry totaled 2.75 trillion minutes of use. For those without a calculator handy, that means we're now using in just two days the same number of minutes the industry totaled in all of 1992—not to mention the introduction and now explosion of data.

In addition, in 1992, Boyz II Men had just released a new album and were on tour. Today, Boyz II Men just released a new album and are on tour. So I guess some things don't change.

But enough reflecting on the past. Since this is my first official speech, I want to highlight a few of the issues I hope to focus on during my time on the Commission. I intend for this to be the beginning of a conversation. I welcome all stakeholders to reach out with ideas on where you think the FCC should be heading.

Before I was given the honor of serving on the Commission, I had a hunch that not every great idea emanates from the FCC's 8th floor. And now that I have been in the job for two months, I can say definitively that they do not. So I look forward to hearing your views and getting your feedback as we move forward.

When I think about the future, what stands out to me is the tremendous opportunity we have in the tech and telecom sector to 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 pursuing 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 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 have 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 have 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 remarks this morning 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.

So how do we get there? How do we ensure that the United States wins the global race to 5G? I want to talk this morning about three of the key pieces—(1) spectrum, (2) infrastructure, and (3) ensuring we have the skilled workforce in place to deploy these next-generation networks—before I talk more broadly about the need for regulatory reform.

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've got 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. It is estimated that by the end of 2022, the number of 5G subscriptions will exceed half a billion worldwide. So it is incumbent upon the FCC to get more spectrum into the commercial marketplace.

I am pleased to report that the FCC is pressing forward on this front. The agency is working hard to ensure that wireless providers, including many of CCA's members, get timely access to the spectrum they recently purchased through the incentive auction. Chairman Pai announced that the Commission will be voting to open up additional bands above 24 GHz before the year is out. And the FCC has a proceeding under way that is looking at broad swaths of spectrum between 3 and 24 GHz. These are all great steps in the right direction.

A second key to our 5G future is infrastructure reform. 5G is going to require a 10- to 100-fold increase in the number of cell sites in the country. The current regime is not tailored to support this type of massive, new deployment. It costs too much, and it 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.

Indeed, I have heard from many of you that far too often exorbitant fees and lengthy timelines are preventing providers from deploying next-generation networks. That's why I was disappointed to see, for example, that last week the Governor of California vetoed a small cell bill that garnered the support of the state's legislature. This only increases the necessity, I think, for the FCC to take action.

Reforming our infrastructure rules is going to be a top priority of mine. That is why I am glad that Chairman Pai has asked me to take the lead on the agency's wireless infrastructure proceeding. I understand how important infrastructure reform is going to be in terms of maintaining the United States' leadership in wireless and ensuring that we see the ubiquitous deployment of advanced wireless networks. So I welcome the chance to help lead on this issue.

I am happy to report that the agency is already making progress. The Chairman has authorized me to announce that the Commission will be voting next month on the first of a series of orders that will streamline the deployment of wireless infrastructure. Specifically, at our next open meeting, the FCC will consider an order that eliminates the need for historic preservation review in cases where providers swap out utility poles that can hold antennas or other wireless communications equipment. As a practical matter, this order could go a long way in speeding the regulatory review process as providers seek to update and densify their networks for 5G. The text of this proposed decision will be released publicly later today, so all stakeholders will have a chance to review it before we vote at the Commission.

I am confident that these and other reforms will make a real difference, including in rural America. In fact, one study shows that through streamlining alone the FCC can shift the business case for entire communities. It could make it economical for the private sector to deploy 5G to nearly 15 million more homes than under the existing and more burdensome regime. The lion's share of those would be in less densely populated areas.

This brings me to my third point. We need to make sure that broadband providers have access to the skilled workforce necessary to get this transition across the finish line. Last month, I participated in a roundtable outside of Baltimore, Maryland. It was certainly a wakeup call. A broad range of stakeholders—from wireless carriers to independent infrastructure providers—talked about the shortage of skilled workers that can deploy the small cells, distributed antenna systems, and other infrastructure necessary for 5G. While there is no direct regulatory role for the FCC here, I think we need to focus additional attention on this issue and potential solutions, including the role that apprenticeship and other job training programs can play. To that end, I will be participating at an event next month at the Department of Labor on workforce development.

Finally, I want to talk briefly about another one of my priorities—regulatory reform. We need to make sure that our regulatory framework promotes competition, innovation, and investment throughout the communications sector, rather than imposing heavy-handed and outdated regulations.

Back in D.C., there's a tendency to pile on just one more regulation, one additional fee, or merely a little more red tape. Far too often, these actions are taken with no consideration for the actual and cumulative burden that these regulations impose, especially on small businesses.

Over the years, the FCC has been no exception. This has been particularly true with respect to the agency's reporting and paperwork obligations. For instance, a coalition that represents small and rural broadband providers recently explained that our reporting obligations alone now consume 23 weeks of work per year—or five months of full-time labor. Many of the small wireless providers that I have spoken with, including CCA members, talk about having to take one of their few employees off a customer service job or marketing effort or even a broadband deployment project and train them to complete and submit FCC paperwork. These small businesses are not corporate behemoths. They do not

have, and simply cannot afford, an army of regulatory lawyers to wade through the more than 4,000 pages found in the FCC's section of the Code of Federal Regulations. It strikes them, as it does me, that a lot of this paperwork is unnecessary. If we can eliminate these reporting burdens, small businesses can focus even more attention on competing, growing their businesses, and serving consumers.

The small and rural providers in this room certainly understand this. But I want to give an example of just how large the FCC's reporting and data collection requirements have become. According to the Office of Management and Budget, the costs associated with the FCC's current information collections exceed \$790 million each year. Now that's a Texas-sized number—one that's larger than some countries' GDP. And I am confident that the actual number is substantially higher than this official estimate.

So how do we go about reducing these burdens? The good news is that the FCC has already begun taking some much-needed steps. At our last two meetings, the Commission has eliminated or sought comment on eliminating a number of unnecessary paperwork requirements.

Notably, the decision to eliminate some of those requirements stemmed from recommendations the Commission received during our biennial review process. I think the agency's willingness to consider these recommendations and move quickly on them shows its renewed interest in using that process to identify regulations in need of reform. So I'm asking for your help today in identifying additional ways we can eliminate or streamline unnecessary regulations, whether it's part of the biennial review process or outside of it. I welcome your input on this.

While I am confident that the FCC is now heading in the right direction, it is clear that we have more work to do. To make sure we stay on track, and to ensure that the public can hold us accountable, I want to propose an idea. I think we should launch a deregulatory dashboard on the Commission's website. And I think this page should do at least two things.

First, it should publicly identify the rules that the agency has eliminated or streamlined since the beginning of the year. This one-stop shop could be a good resource for the public to monitor the progress we're making in cutting through red tape.

Second, we should include a chart that tracks the burden hours associated with the Commission's reporting and data collection requirements. My expectation is that we will start seeing a trend line that shows the FCC continuing to bring those burdens down.

The Commission is working on standing up an Office of Economics and Data, and it strikes me that this type of a deregulatory dashboard is something that could pair well with that group's work. So I would be interested in seeing if the FCC could launch this project soon after this Office gets up and running.

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In closing, I want to thank CCA again for inviting me to join you. I enjoyed the chance to talk about three of the keys to our 5G future and the need for broader regulatory reform at the FCC.

Please do not hesitate to reach out to me with ideas that you think will make a difference. I am happy to hear from you and help get those ideas across the finish line. I hope that you all enjoy the rest of the conference.