

KEYNOTE REMARKS OF FCC COMMISSIONER BRENDAN CARR

AT THE WISPAMERICA CONVENTION

“GRAIN ELEVATORS, WATER TOWERS, AND OTHER WAYS TO CONNECT AMERICANS”

CINCINNATI, OHIO

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Thank you for the kind introduction, Claude. It’s an honor to join you in Cincinnati for this conference. I want to start by recognizing the great work Claude and his team are doing back at the FCC to make sure your voices are heard. In the last year-and-a-half as a commissioner, I’ve met with dozens of WISPs on spectrum, CAF, siting reform, and more creative ways to close the digital divide.

So many of you run a family business. In fact, it sometimes seems like you have to work with a sibling to qualify as a WISP. As a consequence, the meetings with WISPs are a bit more personalized than other industry meetings we have. Some telecom advocates come in pinstripe suits with glossy PowerPoint decks laden with financials. I think Claude may own a pinstripe suit, but he and his team—and especially all of the owner-advocates in this room—describe to me the specific challenges of bringing broadband to particular rural communities. You all tell stories of the latest water tower you climbed to attach an antenna and the newest neighbor you connected. Your advocacy is impactful because you’re scrappy, you get your hands dirty. At the FCC, we’re rooting for you in your drive to bring hard-to-reach places online.

I’ve spent much of the last year getting out of D.C. conference rooms and seeing those hard-to-reach places. Places like Parker, South Dakota, where I met Tyler, the founder of Leap Communications. Tyler lived on part of his family’s old homestead, which continues to be used as part of a larger farming operation.

Tyler needed a better, faster, and more reliable broadband connection. So here’s what he did. He asked a broadband provider to run fiber to the closest accessible point to his house, which happened to be an old wooden utility pole. Tyler says he had to enter the pole’s location as his “home address” to ensure that the broadband provider would run fiber to that point. He then set up a high-speed wireless link to bridge the gap between his house and the fiber connection. Turns out, this setup worked well to bring broadband to Tyler’s home. Tyler looked around and realized he could help bring more broadband to his neighbors in South Dakota by doing the same thing.

So Tyler decided to go into the broadband business with his brother, Jason. Connecting rural South Dakota is not easy work. And you can’t be afraid of heights to do it. Tyler took me on a tour of one of his deployments. We started out 180 feet above Parker, on top of the town’s water tower.

Now, I will pause here to note that this was the first tower I ever climbed. And I had no idea what this one ascent would lead to. Now, whenever I go on the road, it seems like I am not allowed back in Washington unless I put on a hard hat and harness and climb something—whether it's a 2,000 foot broadcast tower or one of the grain elevators that so many WISPs now use to beam broadband to rural communities. These experiences have certainly changed my perspective and given me a real appreciation for the work it takes to build out broadband.

But back on top of that first tower in Parker, South Dakota, Tyler showed me where he placed a wireless backhaul antenna that he uses to send data to a fiber link a few miles away. Swinging around to the other side of the tower, he showed me a fixed wireless link that beams broadband about nine miles down the road.

At the other end of that link is Duane's farm. Like many farmers today, Duane is producing more food from his land by using Big Data. Sensors on the land feed data on soil moisture and nutrients back to the cloud, where they are processed and instructions are sent back to his tractors and combines.

When I first met Duane, he volunteered that he used to go to church regularly. I thought this was an odd confession to lead off with. But then he told me the rest of the story. Before Tyler's homemade WISP connected his farm, Duane didn't have a lot of good options for his data traffic. So Duane, like so many enterprising people in rural America, figured out how to make do with what he had. And so he went to church—or more specifically, to the church parking lot, which had good Wi-Fi. Duane took his laptop and thumb drives and drove down to church a few times a week, in Duane's words, to improve his connection. Now, for the record, Duane was quick to point out that he still goes to church, but with a broadband connection provided by Jason's company, he can spend his time there focused on a higher purpose.

Tyler's do-it-yourself attitude and problem-solving skills I've noticed are common to WISPs. Many of you live in communities that straddle the digital divide. And when you see neighbors like Duane or a family whose kids' education could be bettered through broadband or a business that could more ably provide for their family through a high-speed connection, you take action. So thank you. Your work is key to closing the digital divide—to bringing more broadband to more Americans.

At the FCC, we're working to be good partners for broadband builders like you. And today, I'd like to mention a few of the ways we're trying to do that: through modernized infrastructure rules, fair support programs, and smarter spectrum policies.

Let's start with infrastructure. I've helped lead the wireless infrastructure reforms we've made in the last year. In March, we updated our environmental and historic preservation rules to reflect new technology. Our old rules were written in an era when nearly every wireless build meant placing a large, macro antenna on top of a 200-foot tower. So we clarified that those rules do not apply to the deployment of small cells the size of a backpack.

In September, we examined impediments to infrastructure buildout imposed by city and state governments. We clarified that the fees governments charge for siting small cells in rights-

of-way must not exceed a reasonable approximation of their costs, and we tightened the shot clocks for approving small cell applications so that we can get this infrastructure up more quickly.

When I was working on the September order, I was struck by the difference between the attitudes of civic leaders in some of our biggest coastal cities and those leaders elsewhere in the country. As you know, so many of our rural and suburban communities are desperate for a broadband connection or for more choices. I've met with the mayors, county commissioners, and other local leaders in these small towns and communities. They view next-generation broadband as an economic engine—the way to provide their workers with advanced training, to give kids a first-rate education, to reverse the so-called “brain drain” of young talent from their communities, and to enable small businesses to stay put and compete. So leaders from these communities don't hassle or tax broadband builders; far from it, they try to help you do your jobs. It's far different in some of our biggest urban centers. A few of the big city mayors recognize that they have leverage over the buildout of broadband. If you're in New York City or San Jose in Silicon Valley, you might get robust broadband service almost regardless of what the politicians do.

So a few of these politicians have tried to place special taxes and other barriers on building next-gen broadband. In some cases, they demand a million dollars up front, in addition to per site fees. That just shuts the door on smaller providers, WISPs included. By limiting competition, these policies end up hurting everyone in the community that wants to see more choices for their broadband dollars. But these policies also hurt all of the people who live in rural and suburban communities where the business case for broadband is less certain. They take the investment that could go to those communities and capture it in so-called “must serve” big cities. It is this type of outlier conduct that we at the FCC were trying to correct through our September order. We want to see next-generation broadband in every community and town. Not just our country's largest cities.

And we're now heading in the right direction. Economists who examined our two infrastructure orders concluded that those actions alone are estimated to save \$3.6 billion—money that can be reinvested in new antennas and poles. In fact, one provider reports that they're clearing new small cells for construction at six times the pace as before. Another says they're doubling the number of cells sites they're building. And another projects that it will increase capital spending this year by around \$1 billion to accelerate investment in 5G.

While these are great results, we're not going to slow down in our efforts to modernize our infrastructure rules. This year, I am taking another look at the federal rules governing wireless infrastructure deployment. We will look to fully and faithfully implement the decisions Congress has made to streamline the deployment of next-generation technologies. We will push the government to be more pro-infrastructure by eliminating needless restrictions on siting wireless facilities.

Another focus for us at the FCC is to ensure that we have a fair and robust support program for reaching those homes that still lack broadband access. The FCC has a number of programs that support the buildout of broadband. And we recently concluded an award of CAF-

II funds to close the digital divide. We're tech-neutral in this endeavor. We want robust broadband for as many Americans as possible, regardless of the particular delivery mechanism. We pay for performance. And I was glad to see that not only a number of WISPs participated in CAF-II, but a number of WISPs won preliminary bids to build more broadband. Now it's up to you to use that funding commitment to deliver service to the neighborhoods that need it.

Last but certainly not least for you all is spectrum. It's the lifeblood of wireless Internet service. One spectrum band that I have been focused on this year is the C-Band. It is prime, mid-band spectrum that can help fuel next-gen wireless services. And there have been many productive conversations at the FCC and among industry about the best way to open up the C-Band for terrestrial use. One proposal on the table involves clearing around 200 MHz of the 500 MHz total to be used for mobile. I think we can do better. So I am focused right now on approaches that will clear more than 200 MHz, at least in big cities where demand for high-capacity, mid-band spectrum is greatest. And I think we should move forward this year with an order that gets us there. This will help further solidify U.S. leadership in wireless for the coming decade.

Overall, we want to be partners with you. We get it. Driving down backroads in search of the tallest object—a grain elevator, a water tower—isn't the most glamorous work. It's not always easy to knock on a door cold to convince a homeowner who never has heard the term "WISP" to lend some space for wireless antennas. I get it, because I've seen it. I know how important this work is. And I for one can tell you I'm here to stand with you and your mission.

So thank you, again, for the chance to offer a few remarks this morning. And thank you for the work you do to connect communities across the country with the opportunity that broadband enables.