

**REMARKS OF FCC CHAIRMAN TOM WHEELER
AS PREPARED FOR DELIVERY
COMPETITIVE CARRIERS ASSOCIATION
SEATTLE, WA
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Thank you, Steve.

It's always great to be with the Competitive Carriers Association.

I love how CCA is even offering competitive choice for wireless conferences in September.

I was with many of you in Las Vegas earlier this month, and I harkened back to 1992, when I started at CTIA.

Coincidentally, 1992 is also the year that CCA was established ... I'm not sure if I should take that personally.

CCA started out as nine rural and regional carriers. A commitment to rural America is your DNA. Accordingly, promoting world-leading wireless connectivity for rural America will be our focus today.

At the FCC, we're pursuing an aggressive agenda to seize the opportunities of mobile for rural America.

Not surprisingly, it starts with competition.

When competition exists, consumers win. It drives innovation, investment and economic benefits.

And CCA members are vital to ensuring a competitive wireless marketplace in rural America.

At the FCC, we want to protect competition where it exists, and promote competition where it may not be fulsome.

One of the most effective tools to help fuel competition in the wireless marketplace, going back to the early 80s, is roaming.

To compete in the mobile marketplace, carriers must be able to offer nationwide coverage. Roaming agreements have made it possible for smaller providers – particularly in rural areas – to do business.

The Commission's 2011 data roaming Order was, at that time, a significant step to preserve roaming for the Internet age, but our roaming rules are already due for a fresh look.

In the past two years, multiple providers have filed formal complaints and requests for mediation alleging that the data roaming rates offered by larger providers are commercially unreasonable. Because of high rates, we know that some smaller providers have placed usage and speed restrictions on data roaming traffic.

The Commission has helped successfully mediate specific roaming disputes, but there are reasons for considering further action.

There are currently two roaming frameworks; a "just and reasonable" standard for voice roaming and a "commercially reasonable" standard for data roaming.

In the 2015 Open Internet Order, the Commission committed to revisiting data roaming obligations of mobile providers.

CCA has been vocal in holding the Commission to its word and calling on us to apply uniform roaming standards across voice and data services.

We've heard you, and we're ready to act.

Before the end of the year, I plan to call on my fellow Commissioners to adopt a Notice of Proposed Rulemaking on the Commission's data roaming framework.

Tackling this issue will allow the Commission to provide greater certainty in the marketplace, and promote consumer benefits and competition.

While nurturing competition is always going to be option A for maximizing consumer benefits, that is not an option in many parts of the country.

Indeed, many rural areas do not have access to robust rural broadband at all.

The FCC has an affirmative responsibility to make sure all Americans have access to our nation's critical communications networks.

That's where the Commission's universal service fund comes in.

In 2011, the Commission adopted landmark reforms to USF, reorienting this 20th-century program for providing phone service to support broadband connectivity. One of the big innovations of the revamped USF was to create the Mobility Fund to spur deployment of advanced wireless infrastructure, and replace the old "CETC" support, which the Commission concluded was not well-targeted.

The Commission is working to move forward with Phase II of the Mobility Fund, by the end of this year.

At a high-level, here's what I see as the keys to the future of the Mobility Fund.

First, we need to identify where there's actually no 4G LTE wireless coverage.

There's an old saying that "you can't manage what you can't measure." Well, when it comes to measuring wireless coverage in America, our record, quite frankly, is – like coverage in many rural areas - spotty.

The problem is the way we collected data. For the one-time support distributed under Phase I of the Mobility Fund, we relied on a third party and used the data at the census-block level, which is getting down to a pretty small area. But it wasn't granular enough, particularly for the geographically large census blocks found in rural areas. A census-block would get identified as having coverage. But, within that census block, the East side of the area might have service, while the West side has none.

So we're fixing that. Here's how.

Twice a year, the Commission requires mobile carriers to submit Form 477, which contains network coverage data. This data allows the Commission to create a significantly more detailed picture of actual wireless coverage *within* the census block. Instead of generalities, we can drill much deeper to see that there's coverage here, but there's not coverage there.

By the end of this month, we expect to release an analysis of this 477 data. You'll have to wait for all the details, but I can share some of the headline findings.

The main takeaway is that there is a clear need for the Mobility Fund.

The data confirms what everyone knew from experience – that significant LTE coverage gaps still exist throughout America. Excluding Alaska, 11 percent of the nation’s road miles have no 4G LTE coverage at all, including no subsidized coverage.

We now know that 16 percent of all square miles have no LTE coverage or only subsidized coverage. And 1.4 million Americans currently have no access to LTE coverage at all, and 1.7 million live in areas where the only LTE coverage relies on a subsidy.

It’s no accident that I’ve been describing the unserved areas as those without access to 4G LTE. 4G is table stakes for wireless connectivity in 2016. As we’re gearing up for 5G, we can’t consign parts of the country to second-class digital citizenship by settling for 3G service.

If the first key to the Mobility Fund’s future is better measurement, the second is using this new data to make sure our investments are properly focused, and that focus is clear: unserved areas.

I’m part of the broad, bipartisan coalition that supports the “Walden Rule,” which says we should not use ratepayer funds to support service in an area that is served by an unsubsidized provider. The Walden Rule’s namesake, Rep. Greg Walden represents a rural Congressional district in Oregon, which is larger than Ohio, so this is a person with real-world experience dealing with rural connectivity issues. He’s also Chairman of the FCC’s oversight committee in the House of Representatives, and a thoughtful leader in policy development.

Although the idea of “non-duplication” is clearly a settled policy principle, it raises very real challenges.

Every USF dollar used to support duplicative service is a dollar that is not available to bring service to the more than 550,000 miles of unserved roads where somebody might have an accident and need to contact 911. That just won’t do.

Having said that, we recognize that there has been reliance on these subsidies for the provision of duplicated service. We can’t just go cold turkey, but we need a responsible phase-out period.

That’s why the third big challenge for the Mobility Fund is going to be phasing out support in a way that is fair to those who have been receiving universal service funding in duplicative situations.

In the months ahead, we want to engage with CCA to get this right.

But let’s be clear: the FCC’s mandate is to support service where there is none, and diverting dollars from that purpose is not in the long-term public interest.

So far, I’ve been talking mainly about expanding the availability of today’s mobile broadband networks. Now let’s talk about tomorrow’s mobile networks. Let’s talk about 5G.

Where today’s wired and wireless networks force customers to choose EITHER high speed and capacity OR mobility, 5G promises gigabit mobile connections at any location.

The limitations of speed, capacity and latency are about to become history, and these changes will define our future.

Fiber-fast wireless connectivity will deliver that long-sought goal of competitive high-speed Internet access for rural consumers. C-Spire, for example, successfully tested 5G fixed wireless service in its home state of Mississippi, reaching speeds of 2 gigabits-per-second.

Whether it's 5G or the ubiquitous delivery of 4G into unserved areas, there are three keys for what the Commission must do.

The first is ensuring ample availability of spectrum to a range of competitors.

On that front, the FCC has opened the door to the spectrum trifecta.

We've targeted low-band, mid-band, and high-band airwaves that make available unprecedented amounts of spectrum.

After years of work, we are finally in the midst of the historic incentive auction to make available greenfield low-band spectrum. We've created a market in the Incentive Auction that makes available a significant amount of prime beachfront spectrum in the 600 MHz band. And we created the first-ever market-based spectrum reserve to provide competitive carriers and new entrants with an opportunity to obtain a portion of this valuable resource.

As you know, the first stage of the auction closed when the cost to clear 126 MHz of broadcast spectrum exceeded the bid prices of the carriers. We resumed bidding last week in the reverse auction to determine the cost to clear a reduced amount - 114 MHz - of spectrum. Following the close of Stage 2 of the reverse auction, we'll again turn to the forward auction to determine if the spectrum is worth that cost to you.

The Incentive Auction, however, is just a part of the spectrum trifecta.

The Commission's record-setting AWS-3 auction and creation of the new Citizens Broadband Radio service in the 3.5 GHz band are landmarks in using new sharing tools to open up more mid-band spectrum in multiple forms, whether exclusive, shared access, or unlicensed.

Such sharing will only become more important, which is why we are pushing aggressively to make the Spectrum Access System a reality for 3.5GHz and beyond.

And, of course, this summer, the FCC approved an order making the U.S. the first country in the world to open up high-band spectrum for 5G networks and applications. And in order to give this industry the opportunity to lead the world in 5G, we did it in record time—only nine months from proposal to final decision.

The second key component of the Commission's strategy is fostering competitive provision of infrastructure, specifically backhaul.

Regardless of the spectrum allocation, 5G will require a lot more cells, particularly at the higher frequencies. These small cell sites will need to be connected, so we'll need a lot more backhaul.

But backhaul isn't just about 5G.

If there is going to be universal wireless coverage, there needs to be fair access to backhaul. In many areas, competition in the supply of backhaul remains limited, and that can translate into higher costs for wireless networks, higher prices for consumers, and an adverse impact on competition.

CCA filed a study with the Commission last month echoing this assessment, and I appreciate your engagement on this issue.

CCA also has put in the record a very important benchmark – the fact that backhaul accounts for about one-third of cell site operating costs.

Before the end of this year, I will present the Commission with a reform proposal that will tackle this issue and encourage innovation and investment in what we now call Business Data Services, while ensuring that lack of competition in some places cannot be used to hold back wireless coverage.

Notably, reform is supported by the nation’s leading wireless carriers, save one.

And the issue of an expanded number of cell sites brings us to the third challenge: siting.

Estimates are that 5G will require a 10x growth in cell sites, and potentially significantly more. That’s hundreds of thousands of new antennas. That’s hundreds of thousands of siting decisions. Which raises a key question: how can we work with siting authorities to allow the plethora of antennas that will be required quickly and at a reasonable cost?

One thing we must do is to tell the story of what 5G is--and not just in terms of technology, but as deliverables that mean something to real people.

We will be unsuccessful in dealing with NIMBYism and the recalcitrance of local authorities if all we talk about is engineering. We have to help leaders at the local level – and all levels for that matter – understand that 5G will make the Internet of Things real. But even talking about IoT is too obtuse.

Let’s talk about the benefits of smart-city energy grids, safer transportation networks, and new opportunities to improve health care. Let’s paint the picture of how 5G will unleash immersive education and entertainment industries, and how 5G will unlock new ways for local employers to grow, whether it’s a small specialty shop or a large factory, creating new jobs and improving services for the community.

It is also necessary to explain that the nature of 5G technology doesn’t just mean more antenna sites, it also means that without such sites the benefits of 5G may be sharply diminished.

In the pre-5G world, fending off sites from the immediate neighborhood didn’t necessarily mean sacrificing the advantages of obtaining service from a distant cell site. With the anticipated 5G architecture, that would appear to be less feasible, perhaps much less feasible.

Furthermore, the nature of the technology makes the review and approval by community siting authorities, and the associated costs and fees, all the more critical. There are just over 200,000 cell towers in the U.S., but there may be millions of small cell sites in the 5G future. If siting for a small cell takes as long and costs as much as siting for a cell tower, few communities will ever have the benefits of 5G.

Make no mistake, localities play a vital role in the siting process, and they have important and legitimate rights, but those rights don’t extend to blocking a national communications pathway.

Given the importance of ubiquitous expansion of 4G and the rollout of 5G to our economic future, it’s not reasonable for localities to view cell site deployment as a potential new revenue stream, which is something we’ve seen. It’s not reasonable for cities to “franchise” their siting to a third party, who acts as a gatekeeper.

For our part, the Commission is united in its commitment to cutting red tape and facilitating siting. We’ve streamlined our environmental and historic preservation rules, and tightened our ‘shot clock’ for siting application reviews.

And there's a bipartisan commitment to do more as warranted. Both my Republican colleagues, for instance, have recently agreed that where states or localities are imposing fees or not being "fair and reasonable" for access to local rights of way, the FCC should preempt them. We shouldn't be afraid to use all of our authority under the Communications Act to address unreasonable local barriers.

Before I close, there are a couple of other important issues that warrant mentioning.

Our wireless networks must be secure.

The Commission has been engaged with industry to make sure cybersecurity is addressed, including during the design phase for the entire 5G ecosystem, including devices.

Privacy is another important topic.

Digital networks create Big Data, so it's imperative that carriers have privacy policies that enable customers to understand and control how their personal information about their digital activity is being used.

The bottom line is that there is a roadmap to chart both our path to ubiquitous wireless LTE and to our 5G future.

Now is the time to make it happen.

Now is the time to update our data roaming rules to promote and preserve wireless competition in rural America.

Now is the time to move forward with the next phase of the Mobility Fund to ensure that every American can access high-speed wireless connectivity.

Now is the time to come together to build the mobile future.

Thank you.