

**Remarks of Michael O’Rielly, Federal Communications Commission
Before the Competitive Carrier Association
2015 Annual Convention
October 7, 2015
(as delivered)**

It is an honor to be here with you this afternoon at CCA’s 2015 Annual Convention, and I thank Steve Berry for his kind invitation. The written invite requested I address an ambitious range of topics, including the challenges and opportunities facing the wireless industry and the Commission’s efforts to increase access to spectrum and promote facilities siting. In the current world of wireless that’s just about everything but the kitchen sink. Let’s see how much I can cover in fifteen minutes.

Wireless Spectrum & Infrastructure

From the Commission’s AWS-3 auction¹ and our work on the 3.5 and 5 GHz Bands,² to the upcoming incentive auction,³ the Commission is getting spectrum out into the commercial marketplace. We have also started a proceeding to consider the future use of millimeter waves above 24 GHz.⁴ This past work is all well and good, but we must develop more spectrum bands for future use. We can’t rest on our laurels or wish it on another day. This means that Federal government users are going to need to reduce their footprint by becoming more efficient and decreasing their spectrum holdings by upwards of 400 MHz by the end of this decade to meet the expected demand for licensed spectrum.⁵ While I appreciate CCA’s support for Federal government user incentives to relinquish spectrum, I suggest that we are going to need “sticks” as well. That’s why I’ve suggested federal government spectrum fees to generate greater spectrum efficiency.⁶ I’d appreciate your taking a look at this proposal and giving me your feedback.

At the same time, spectrum alone will not relieve America’s insatiable demand for wireless services. So, let’s spend a few moments discussing infrastructure deployment.

¹ FCC, *Auction 97, Advanced Wireless Services (AWS-3)*, http://wireless.fcc.gov/auctions/default.htm?job=auCTION_summary&id=97 (last visited Oct. 6, 2015).

² *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 GHz Band*, GN Docket No. 12-354, Report and Order and Second Further Notice of Proposed Rulemaking, FCC 15-47 (Apr. 21, 2015); *Revision of Part 15 of the Commission’s Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, ET Docket No. 13-49, First Report and Order, 29 FCC Rcd 4127 (2014).

³ *Expanding the Economic and Innovation Opportunities of Spectrum through Incentive Auctions*, GN Docket No. 12-268, Report and Order, 29 FCC Rcd 6567 (2014).

⁴ *Use of Spectrum Bands above 24 GHz for Mobile Radio Services*, GN Docket No. 14-177, Notice of Inquiry, 29 FCC Rcd 13020 (2014).

⁵ Coleman Bazelon & Giulia McHenry, *Substantial Licensed Spectrum Deficit (2015-2019): Updating the FCC’s Mobile Data Demand Projections* (June 23, 2015), http://www.ctia.org/docs/default-source/default-document-library/bazelon_mchenry_spectrum-deficit_2015-06-23.pdf; Thomas K. Sawanobori & Dr. Robert Roche, *From Proposal to Deployment: The History of Spectrum Allocation Timelines to Re-Allocate the Additional 350 MHz of Licensed Spectrum Needed by 2019, Policymakers Must Act Now*, <http://www.ctia.org/docs/default-source/default-document-library/072015-spectrum-timelines-white-paper.pdf>.

⁶ Posting of Michael O’Rielly, *Enacting More “Sticks”: Spectrum Fees for Government Users*, <https://www.fcc.gov/blog/enacting-more-sticks-spectrum-fees-government-users> (Sept. 8, 2015).

Everyone must accept the simple fact that you can't have wireless networks and the services that result, including wireless broadband, without infrastructure. Not only is infrastructure needed to deliver the latest innovations and offerings, but is also needed to maintain the economic growth of the wireless sector, along with its corresponding benefits to the U.S. economy, and the U.S. position as the leader in wireless and Internet technologies. So, what can the Commission do to facilitate deployment?

First, the Commission must provide a regulatory environment that promotes infrastructure investment and deployment by reducing regulatory costs and increasing market certainty. On this, the Commission has a mixed scorecard. On one hand, the vague and burdensome Net Neutrality decision will likely affect investment negatively.⁷ The Commission's desire to create imaginary authority under section 706 is misguided, and once headed down this path, its unwillingness to correspondingly reduce burdens as stated in the law is flawed. On the other hand, the Commission has tried to ease certain regulations affecting infrastructure deployment, such as updating rules regarding the marking and lighting of towers.⁸

Additionally, in less than two weeks, we'll reach the one year anniversary of the Commission's *Infrastructure Order*.⁹ In adopting this order, as clearly directed by the 2012 Spectrum Act,¹⁰ the Commission finally ended – or so we thought – some of the disruptive practices of states and localities to impede the placement of wireless towers.

Unfortunately, resistance to tower siting continues. Some localities continue to place roadblocks in front of infrastructure deployment. For example, on the other side of this state, a company relied on a permit it received from Destin, Florida to build two small cell towers on a right-of-way, only to have the locality backslide and create new hurdles.¹¹ After some unnecessary delay and handwringing, the city council met to consider the fate of the towers and ultimately ruled that the towers must be taken down. Even worse, it was decided that no small cell towers can be placed on the city rights-of-way. In doing so, it also rejected the options of alternative sites or disguising the towers as palm trees. One council woman is reported to have said, "Personally, I'm opposed to any cell towers at that location."¹² That's simply outrageous. Other localities and the relevant associations should get active in this case because it provides you all with a black eye.

⁷ *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601 (2015).

⁸ *2004 and 2006 Biennial Regulatory Reviews – Streamlining and Other Revisions of Parts 1 and 17 of the Commission's Rules Governing Construction, Marking and Lighting of Antenna Structures*, WT Docket No. 10-88, Report and Order, 29 FCC Rcd 9787 (2014).

⁹ *Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting; 2012 Biennial Review of Telecommunications Regulations*, WT Docket No. 13-238, Report and Order, 29 FCC Rcd 12865 (2014) ("*Infrastructure Order*").

¹⁰ Middle Class Tax Relief and Job Creation Act of 2012 § 6409(a), 47 U.S.C. § 1455(a).

¹¹ Savannah Vasquez, *Scenic 98 Cell towers on Hold: City and Company Reviewing Options*, DESTIN LOG, Aug. 26, 2015, <http://www.thedestinlog.com/article/20150826/NEWS/150829520>.

¹² Matt Algarin, *Cell Towers to be Removed from Scenic Hwy. 98 after Tuesday Vote*, DESTIN LOG, Sept. 11, 2015, <http://www.thedestinlog.com/article/20150911/NEWS/150919827>.

In the near term, wireless providers need to install thousands of new facilities to provide service to meet capacity needs, relieve congestion and expand coverage areas.¹³ Accomplishing this task, requires cooperation, not unnecessary hindrances and mounds of paperwork, from local governments. I am fully aware that not everyone likes the aesthetics of towers, but they are a necessity for wireless broadband. Do these localities really want their communities to not have broadband? Do they understand the economic impact on their local businesses? For those localities that continue to stall or try to block tower siting, know that you will see the Commission step in with appropriate authority to push things forward.

On that note, the Commission has already shown that it's prepared to do just that. In the *Infrastructure Order*, the Commission excluded certain collocations on buildings and non-tower structures that already host antennas and utility structures (e.g., utility poles and electric towers) from environmental and historic preservation regulations. Now, as we previously committed, we are preparing to expand this exclusion to include small cell and DAS equipment that is being installed on any structure, including those with no pre-existing antennas.¹⁴ My focus will be to ensure the process is completed in the agreed upon timeframe of 18 to 24 months. I hope CCA and its members will engage on these issues, as you have a unique perspective as to how siting hindrances affect smaller businesses.

Second, the Commission must promote the collocation of facilities. Generally, macro sites on average have 2.5 tenants per tower, but can accommodate between five and six tenants on average.¹⁵ It has also been estimated that 2000 new physical tower structures will be built over the next three years, and this number does not include small cells and building locations, which could reach the tens of thousands.¹⁶ Not only does collocation reduce the need for additional towers, which localities, such as Destin, Florida, find aesthetically unappealing, but is especially important for smaller wireless providers that benefit the most from the cost savings of facilities sharing.

This is why the Commission must address the problem of "twilight towers."¹⁷ I know that Commission staff, industry and other stakeholders have been working together to resolve this issue that affects more than 4000 tower structures. Until this review is concluded, no antennas can legally collocate on these structures. This regulatory purgatory must come to an end. We need facilities to be deployed; we cannot afford to have towers that are not filled to capacity.

Third, it is time for the Commission to review its technical rules for rural America. Specifically, we should look at such requirements as antenna height and power limits to see if they can be liberalized to reduce deployment costs and expand coverage area, benefitting Americans in rural areas unserved by

¹³ Walter Piecyk, *Answering the Call for Capacity, Initiating Coverage on the Towers: AMT, CCI, SBAC*, June 17, 2015, <http://www.btigresearch.com/2015/06/17/answering-the-call-for-capacity-initiating-coverage-on-the-towers-amt-cci-sbac/#post-60783>.

¹⁴ *Infrastructure Order*, 29 FCC Rcd at 12871, 12878, 12906 ¶¶ 13, 28, 89.

¹⁵ Comments of PCIA – The Wireless Infrastructure Association, Wireless Telecommunications Bureau Seeks Comment on the State of Mobile Wireless Competition, June 29, 2015.

¹⁶ Piecyk, *supra* note 13.

¹⁷ *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, WT Docket No. 13-135, Seventeenth Report, 29 FCC Rcd 15311, 15370 ¶ 115 (WTB 2014). These towers – constructed between March 2001 and March 2005 – were not specifically required to go through historic preservation review process.

broadband providers. The current arbitrary height and power limitations may not make sense in every circumstance, particularly for WISPs, and may harm broadband deployment. The Commission should modify the applicable rules, as necessary, to the benefit of both licensed and unlicensed providers.

Fourth, the Commission should also work with other federal agencies to promote infrastructure siting on federal lands. This is an issue I spent a great deal of time in my past, so I understand its importance to CCA. Regrettably, the Commission doesn't have a great role when it comes to federal lands, but we should step forward and provide any assistance and encouragement possible.

Mobility Fund Phase II & USF High-Cost Reform

Switching topics, let me spend some time discussing Mobility Fund Phase II, which I know is of interest to your association and member companies, and the Connect America Fund Phase II auction as means to finance capital-intensive infrastructure deployment.

When the Commission adopted the Mobility Fund in 2011, which predated my arrival, it was seen as a way to transition from the old identical support rule to a new structure that would support a single wireless provider in areas that needed it the most. In the four years since the order, however, circumstances and policies have changed substantially. Particularly, we've seen mobile coverage expand to approximately 98 percent of Americans.

Accordingly, it should not be a surprise that, last year, the FCC sought comment on narrowing the scope of any future Mobility Fund efforts and reallocating some of the funding to other programs. Since then, there has been very little discussion about completing Mobility Fund Phase II, which leads me to believe that it is unlikely to happen.

For those of you seeking such a fund, however, you should be fully aware that *even if* it were created, it is unlikely to look like anything previously envisioned. During the last few years, the Commission has continued to make policy changes to its high-cost programs generally, and those would likely apply here as well.

In particular, areas that are overlapped by an unsubsidized competitor are ineligible for support. Numerous census blocks in otherwise high-cost areas of price cap carriers' territories were excluded when the Commission offered support earlier this year. Even rate of return areas, which had been seen as a harder case, are subject to the overlap rule. The Commission recently issued a list of areas that are completely or almost entirely overlapped and, therefore, could lose support. There will be a challenge process to ensure that the data is accurate, but support will be phased out in overlapped areas.

With nearly all of the nation covered by large wireless providers, the areas eligible for a mobility fund would be considerably fewer than just a few years back. I recognize that larger carriers may not serve every location in an area. But that won't end the discussion. Instead, that is viewed as a factual matter to be resolved through a challenge process.

I also understand the argument that without ongoing support, service in areas that are currently covered could diminish. It is what some have termed the "rusty towers" problem. However, most of the expense is in the installation of the towers and the initiation of service, rather than the ongoing maintenance of them. Therefore, I still expect that the Commission's focus will remain on targeting support to those areas that are truly unserved.

In addition to the overlap issue, the Commission has steadily increased the speed and usage requirements it expects of high-cost support recipients. For rate-of-return carriers and price cap carriers receiving model-based support, the Commission increased the speed requirement from 4/1 to 10/1. For providers that receive support in price cap areas through the auction, the Commission has already said that the 10/1 standard will be insufficient. And, in the rural broadband experiments, the Commission prioritized—and allocated 75 percent of the funding—to projects that could deploy a network capable of delivering 100/25, and offer at least one service plan that could provide 25/5 to all locations.

In addition to speeds, the Commission has also increased usage allowances. In 2013, the Commission set a usage allowance of 100 gigabytes for price cap carriers accepting model support. In the rural broadband experiments, the Commission prioritized projects that could provide 250 GB or even unlimited usage. The Commission has also required and/or prioritized latency of 100 milliseconds or less. Therefore, any provider that would receive some type of mobility funding will also be expected to provide at the very minimum speeds of at least 10/1, usage allowances of at least 100 GB and latency of 100 ms or less to all or nearly all locations.

Of course, absent a Mobility Fund Phase II, legacy support is frozen at 60 percent of what it was in 2011, or approximately \$600 million. That support still funds multiple providers in some places. Additionally, there are no broadband buildout obligations associated with the support since it was intended as a temporary bridge to the new program that would include such obligations. These practices cannot continue.

That's not to suggest that there is no role for wireless in universal service going forward. Far from it. Parts of at least 20 states will be included in the Connect America Fund Phase II auction, and wireless may be the best option in some of those places. Therefore, I have been pushing to ensure that the auction is structured in a technologically neutral way, with the goal of maximizing coverage in a cost-effective manner. But I need your attention and assistance to help make sure that happens.

Unfortunately I am constrained in what I can say because we have an item pending before us on the subject. But if the rural broadband experiments are a preview of things to come, then wireless providers could find themselves on the sidelines while wireline providers get the first shot—and maybe even the second shot—in the CAF Phase II auction. That auction was supposed to use competition to drive down the required subsidies, spreading the available funding to ensure that the greatest number of consumers get served. The way to do that is to let all providers that can meet the universal service speed and other performance requirements compete directly against each other. Giving an artificial leg up to certain providers reduces competition, guaranteeing we will overspend in many areas while leaving others behind.

Why would the Commission do that? Because it has developed a view that fiber is the only way to guarantee “future proof” networks. And to be clear: fiber is a great technology. But I've also spoken with consumers in more rural parts of America that think their local WISP provides outstanding service, and I've also seen reports of what 5G could deliver. The Commission should not tip the scales based on outdated information and assumptions.

That's where you all come in. I urge you to participate in this proceeding to correct any misimpression and create a record that will enable the Commission to adopt a technologically neutral auction. I would hate to see a situation where focus on Mobility Fund Phase II comes at a cost of being able to participate in high-cost altogether. If that happens, it will be the consumers in unserved areas, and really all of us that pay in to support universal service, who will lose out.

LTE-U

Building on the theme of the importance of technological neutrality, I would like to express concerns about the Commission's inquiry into LTE-U and the corresponding standards process.¹⁸ For years, the standards process has successfully been conducted independently without any FCC input or interference. I appreciate that certain members of the Wi-Fi community have concerns about the effect that the deployment of LTE-U will have on their pre-existing networks. I also understand the interest of LTE-U proponents in introducing a new, promising technology. I want to be clear that any coexistence concerns need to be worked out by stakeholders through the standards setting body. Not only must the Commission be very careful that it does not – either intentionally or unintentionally – put itself in a position where it influences or sets standards, but it also should not be taking sides with various stakeholders in the midst of the process or have any say about what technologies should or should not be deployed. Doing so will just delay innovation and the deployment of future networks.

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I thank you again for having me here today and listening to my thoughts on issues affecting the wireless industry. Going forward, I would be interested in hearing all suggestions you might have about ways to increase investment and broadband deployment, while decreasing the burdens of building out networks. No idea is too small or insignificant, so I implore you to reach out to me or my staff.

¹⁸ *Office of Engineering and Technology and Wireless Telecommunications Bureau Seek Information on Current Trends in LTE-U and LAA Technology*, ET Docket No. 15-105, Public Notice, 30 FCC Rcd 4457 (May 5, 2015); Letter from Julius Knapp, Chief, Office of Engineering and Technology, Federal Communications Commission, to LTE-U Forum, c/o Dean Brenner, Qualcomm Incorporated, ET Docket No. 15-105 (Aug. 5, 2015).