

5G & Wireless Capacity

March 24, 2019 by Jonathan Chaplin

We have written three reports that have expanded on the theme of 5G and its impact on wireless capacity in the US in the past couple of weeks. In this Global Weekly Review, we highlight our expectations for how the C-Band and other sources of 5G spectrum may transform the wireless, cable, and tower industries.

First, we published our second report focused on the impact of the C-Band spectrum on the US connectivity market ([LINK](#)). We conclude that 180MHz of C-Band will not create enough capacity for mobile carriers to pursue the home broadband market. This spectrum would do little more than feed rapidly growing mobile usage.

We show that the spectrum could have a profound impact on competitive positioning among the wireless carriers though, depending on who gets it. If the T-Mobile / Sprint deal is approved, Verizon will be most in need. If the deal is blocked, both Verizon and T-Mobile will need it.

In our first report on the C-Band, we argued that with Massive MIMO and beam forming, this spectrum could be extremely valuable. In dense markets, where Massive MIMO should work, the C-Band could deliver 3x the capacity of standard 2GHz spectrum that can't use Massive MIMO ([LINK](#)).

Second, we published an analysis of T-Mobile's capacity and their competitive position if they are able to acquire Sprint and keep the 2.5GHz spectrum ([LINK](#)). We conclude that T-Mobile will have a capacity advantage that should drive rapid subscriber growth fed by continued share gains. If the deal is blocked, T-Mobile will need capacity from another source or they will need to increase price to slow the pace of capacity consumption on their network.

Third, we published an analysis of the US Towers that showed that the C-Band and DISH's spectrum are the two key spectrum bands that could drive tower growth materially above consensus expectations ([LINK](#)). Moreover, the C-Band may require greater site density given its lower propagation than currently

deployed spectrum. If both spectrum bands are deployed, and site density increases, we believe consensus revenue growth expectations may be 250bps too low over the next five years.

We have more on the way, including an analysis of T-Mobile's ability to attack the home broadband market with 2.5GHz spectrum and an analysis of the threat and opportunity presented by the C-Band and CBRS spectrum to the Cable companies. Please stay tuned.

For the full weekly review and updated comp sheets, see [HERE](#)

Full 12-month historical recommendation changes are available on request

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