

**TFI Communications Technology  
Asset Valuation Conference**

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Property Tax Issues to Consider as a  
Result of Massive 5G Small Cell  
Deployment.

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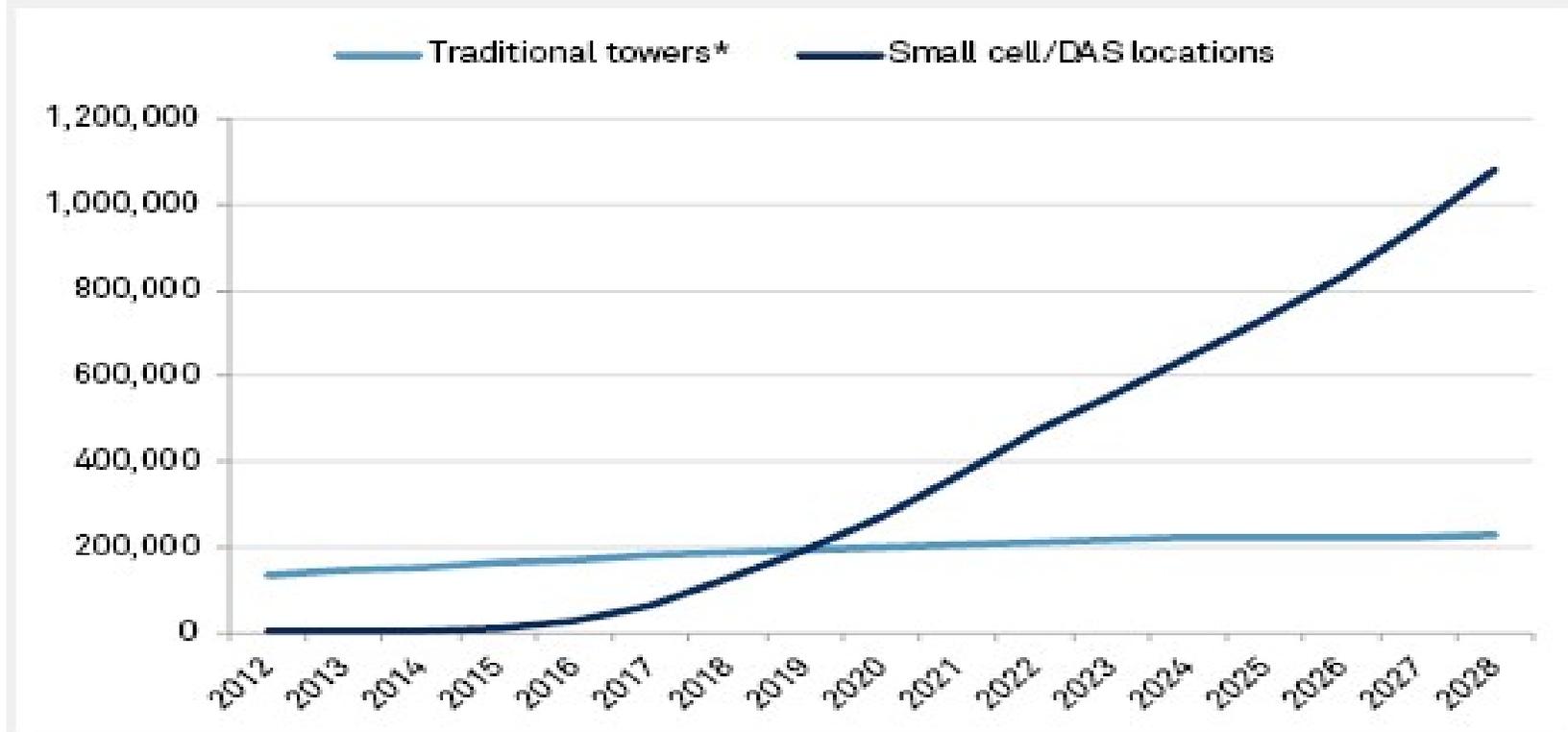


# The 5G War

- 5G deployment has been characterized as a war with China that we intend to win
- Currently Kagen predicts that there will be a total of 1.31M cell sites in the US by 2028. Up from 317K today
- Small cells will make up 1.08M of the 1.31M (83%) up from 129K today (41%)

# Cell Site projections

## Tower and small cell projections, 2012-2028



\*Macro, monopole, pole, guyed, stealth, water tower, self support, rooftops, etc.  
Small cells defined as indoor/outdoor antenna/radio towers which include fiber/microwave backhaul for each node/antenna. DAS have multiple nodes per single backhaul. Collocation can be part of either system if designed accordingly.  
Includes only active locations. Excludes "available" locations without equipment like empty rooftops and sites in development.  
Source: Industry data and Kagan estimates.  
Kagan, a media research group within the TMT offering of S&P Global Market Intelligence.  
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# The FCC Enacts Rules Related to Deployment of Small Cells

- The FCC has enacted nation-wide rules for deployment of small cells.
- Rules released Sept. 27, 2018. WT DK. No. 17 to 79 and WC Dk. No. 17 to 84
- Extend unrepresented Federal authority for carrier deployment of small cells in the public ROW
- Rules provided for under Sec. 253C of the Communications Act. "Should be focused on protecting the interests of providers"
- State & local governments suggest the FCC simply gave the carriers what they requested
- Priority to win the 5G war with China

Source: Seeking Alpha – Ryan Crane  
– 5G Revolution not Evolution

## Examples of the FCC Rules Criteria

- Rules require that local fees are cost based whether within or outside the public ROW
- Provide shot clocks within which time cities have to act on applications - 60 days to 150 days depending on the type of site.
- Require only nominal one-time fees that range from \$100 per site to \$1,000 for a new site
- Cap monthly rent that can be charged at \$22.50 per month or \$270 annually per public ROW location

# Examples of the FCC Rules Criteria (continued)

- Recognize that a local requirement can be an effective prohibition of service even if not insurmountable barrier
- Significantly limited the authority of state and local government to manage the public rights-of-way
- Aesthetics requirements not prohibited if they are reasonable, no more burdensome than other types of infrastructure
- Spacing to have the same requirements as aesthetics

## Actions at the State Level

- There are thousands of existing agreements that may run counter to the new FCC rules
- Cities have filed legal challenges to the FCC deployment rules. They believe the FCC overstepped its authority by a wide margin.
- Accordingly 5G deployment could slow to a crawl as the litigation is addressed.
- So far 21 states have enacted rules for deployment of small cells that generally conform to the FCC requirements

# The Impact of 5G Small Cells on Property Taxation

- Do the FCC rules limit the state and local authorities' ability to impose property taxes on small cells and their related equipment?
- Do the references to limitations on fees include taxes?
- Could there be as many as 1M new personal property accounts across the country?
- Could there be another 1M possessory interest accounts related the carriers' use of real property?
- The possessory interest in this case is that of a carrier's interest in the real property associated with poles and structures in the public ROW



# SMALL CELLS

## WHAT ARE THEY AND WHAT DO THEY LOOK LIKE?

# New Jersey Small Cell Added to an Existing Pole



# New Jersey Small Cell on a New Pole





Omni Antenna

Cable & u-guard

Radios in a shrouded box

Power meter supplied by power company

### New Jersey Small Added to Existing Pole



# Small cells in North Carolina





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