



**Testimony of Lisa McCabe
Director, State Legislative Affairs
CTIA – The Wireless Association
February 7, 2017
Regarding Senate Bill 536
Concerning Establishing A State-Wide Plan and Process
for Siting Small Cell Canister Antenna and Distributed Antenna Systems**

Before the Joint Committee on Energy and Technology

Chairpersons Windfield, Formica and Reed and members of the Committee, thank you for the opportunity to testify today. I am here on behalf of CTIA, the trade association for the wireless communications industry, in opposition to Senate Bill 536 regarding establishing a state-wide plan and process for siting small cell antenna systems and instituting a moratorium on small cell siting in Connecticut. We believe the existing process for siting works well. Today, new siting applications go through the Connecticut Siting Council and applications for siting on existing utility poles go through the Public Utilities Regulatory Authority (PURA). We are extremely concerned that a moratorium on small cell antenna approvals would harm the ability of Connecticut communities to develop and reap the benefits of expanded coverage and the next generation of wireless service, 5G.

Consumer demand for wireless connectivity is exploding as new devices, technologies and services are continuously coming online. Wireless data usage has nearly tripled in the last two years; U.S. consumers used 269.1 billion megabytes of data per month in 2013, but in 2015 that number had grown to 804.2 billion megabytes per month.¹

In order to accommodate this demand, today's wireless networks need to be densified and updated in preparation for the rollout of the next generation of wireless networks, referred to as 5G. While traditional macro towers will always remain an important component of wireless technology, small cells will provide the densification needed for 5G. Small cells are wireless antennas that are being installed on existing structures like utility poles, street lights and traffic signal poles. Small cells enhance capacity on existing 4G LTE wireless networks by efficiently using scarce spectrum and will be required for higher-frequency 5G spectrum. The proposed moratorium on small cell siting may inadvertently introduce coverage gaps as well as slow the ability of many communities in Connecticut to take advantage of the benefits of advanced services in the future.

¹ CTIA Annual Wireless Industry Survey for Year-End 2015, <http://www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey>, last accessed 2/2/2017.



Implementing a moratorium on the installation of small cell antennas will hurt communities in their effort to attract investment and realize the benefits of 5G. 5G networks will provide increased capacity to accommodate growing consumer demands and will connect 100 times more devices. Towns and cities will be able to leverage wireless technology and the Internet of Things to enable smart cities, allowing them to monitor public infrastructure and conditions and operate more cleanly and efficiently. Global smart city economic benefits are estimated to range from \$644 billion to \$1.2 trillion by 2025.²

A recent study by Accenture estimates the benefits of 5G in Connecticut communities will be great. The study estimates that the benefits of 5G in Hartford would lead to the creation of over 1,100 jobs, nearly \$72 million in Smart City benefits, such as cost and energy savings from smart city solutions, greater efficiencies in operations and improved public safety, transportation and productivity, in addition to an estimated GDP growth of \$190 million. The benefits of 5G to the City of Bridgeport are estimated to be nearly 1,400 jobs created, over \$85 million in Smart City benefits and \$225 million in estimated GDP growth. For New Haven, 5G benefits are estimated to include over 1,200 jobs created, over \$75 million in Smart City benefits and an estimated GDP growth of \$198 million. For Stamford, 5G benefits are estimated to include nearly 1,200 jobs created, over \$74 million in Smart City benefits and \$195 million in estimated GDP growth. For New London, the 5G benefits include over 250 jobs created, over \$8 million in Smart City benefits and \$42 million in estimated GDP growth.³

The wireless industry wants to meet the needs of its customers – who are also your constituents. Significant investments have been made in infrastructure to ensure that the industry can meet this robust, growing consumer demand for wireless service and

² Sawanobori, Thomas K. "5G: The Next Generation of Wireless: 5G Leadership in the U.S." (February 9, 2016), http://www.ctia.org/docs/default-source/default-document-library/5g_white-paper-web.pdf, last accessed 2/2/2017.

³ "How 5G Can Help Municipalities Become Vibrant Smart Cities," Accenture Strategy, Jan 12, 2017. These estimates are based on expected benefits for the United States from next generation wireless networks and some smart city technologies. They are based on per capita application of the estimated national benefits to individual cities (e.g., the number of construction jobs are national averages assigned on a per-capita basis), and may vary depending on the individual city. Estimated GDP Growth is the growth in domestic output resulting from the impact of new technologies and jobs created as a result of the next generation of wireless technology. Estimated jobs from benefits of using 5G reflects are jobs created as a result of 5G's adoption, and the benefits of applications relying on faster networks (e.g., e-learning, telecommuting, etc.) as of the end of the build-out period. Select Smart City benefits include cost and energy savings from smart city solutions, greater efficiency in operations, improved public safety, transportation and productivity. https://newsroom.accenture.com/content/1101/files/Accenture_5G-Municipalities-Become-Smart-Cities.pdf last accessed 2/4/17.



broadband.⁴ However, in order to ensure that the wireless industry can continue to meet this demand in Connecticut, the industry's investment must be met with forward-looking infrastructure policies that promote rapid and efficient deployment. The proposed bill does not reflect such a forward-looking regulation. As such, we would respectfully ask that you not move this bill.

⁴ CTIA Wireless Industry Survey, The wireless industry made \$32 billion in capital investment in 2015 alone, and nearly \$100 billion in the last three years, not including further massive investments in spectrum at federal auction, *fn* 3.