



October 9, 2017

Susan Norton  
Director of Communications  
Fayetteville City Council  
113 West Mountain Street  
Fayetteville, AR 72701

Blake Pennington  
Assistant City Attorney  
Fayetteville City Council  
113 West Mountain Street  
Fayetteville, AR 72701

**RE: “110.03 Small Cell Facilities and Networks” – Fayetteville, Arkansas Small Cell Ordinance**

Dear Ms. Norton and Mr. Pennington,

On behalf of CTIA, the trade association for the wireless communications industry, we write to express concerns with the proposed small cell ordinance, “110.03 Small Cell Facilities and Networks” (“Ordinance” hereafter). Per the attached mark-up, CTIA and its members believe the proposed Ordinance has some problematic provisions. We welcome the opportunity to work with the City Council in addressing these concerns.

Consumers' demands for wireless connectivity is exploding as new devices, technologies and services are continuously coming online. In 2016, wireless data traffic reached yet another record high. In all, traffic totaled 13.72 trillion MBs – the equivalent of 1.58 million years of streaming HD video – an increase of 4.07 trillion megabytes over 2015. Over the past two years, data use has increased 238 percent.<sup>1</sup>

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<sup>1</sup>CTIA's Wireless Industry Summary Report, Year-End 2016 Results, 2017, <https://www.ctia.org/docs/default-source/default-document-library/annual-year-end-2016-top-line-survey-results-final.pdf?sfvrsn=2>, last accessed 10/6/2017.



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 benefits provided by 5G are astounding. 5G networks will provide increased capacity to accommodate growing consumer demands and will connect 100 times more devices. Imagine a future where nearly everything is connected to ubiquitous wireless networks at speeds up to 100 times faster than today. Imagine communities that are smarter and more connected. Entire sectors, from public safety to transportation, will be transformed.

In fact, Accenture recently published a study noting that 5G wireless networks could create as many as three million jobs and boost the U.S. GDP by nearly \$500 billion over the next seven years.<sup>2</sup> More specifically, communities that embrace the next-generation of wireless connectivity will realize significant economic benefits. For instance, 5G deployment in a community like Fayetteville may create over 780 jobs, increase GDP by \$128 million and provide for over \$48 million in select smart community benefits.<sup>3</sup>

Unfortunately, the proposed Ordinance as currently drafted may inhibit Fayetteville's ability to realize these benefits. At a high-level, we have concerns with two major provisions of the proposed Ordinance. Per the attached, we have concerns with the interpretation of the stealth and camouflaging provisions and the potential increased cost it may impose for compliance. Specifically, we are concerned these stealth

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<sup>2</sup> "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.

<sup>3</sup> *Ibid.*



requirements could be applied arbitrarily and may be disparately treating wireless infrastructure in streetscapes that are otherwise dominated by utility poles and other apparatuses that are not subject to similar stealth requirements. In addition, high-cost stealth requirements may drive up the cost of small cell installations by 30-50%, which will impede our ability to invest elsewhere.

Secondly, we have concerns with the proposed spacing limitations in the proposed Ordinance. Placing restrictions on the placement of poles carries the very real possibility of creating areas of inadequate wireless coverage in Fayetteville that either cannot be addressed or require the proliferation of facilities in less ideal locations to address the gap. These limitations may also preclude carriers from addressing capacity issues in areas in Fayetteville requiring additional wireless capacity where there are no poles or the existing poles are inadequate/incapable of supporting such facilities. Wireless communications in these areas, including emergency communications, may be at risk.

In closing, thank you for the opportunity to express our concerns with the proposed Ordinance. Please note that we may have additional comments on the proposed Ordinance forthcoming. We welcome the opportunity to work with the City Council in addressing these concerns.

Sincerely,

Bethanne Cooley  
Director, State Legislative Affairs  
CTIA