Testimony of
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Support for Arizona House Bill 2365
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Before the Arizona House Commerce Committee

Chair Weninger, Vice-Chair Norgaard and members of the Committee, on behalf of CTIA, the trade association for the wireless communications industry, I am here in support of House Bill 2365, related to the deployment of small wireless facilities. The people of Arizona continue to demand – at increasing levels – access to wireless products and services. This is demonstrated by the fact the number of wireless subscribers in Arizona has grown 24% since 2010, amounting to over 6.5 million subscribers, and that 69% of high speed broadband connections are mobile. [1],[2] These demands from the wireless industry's customers – your constituents – require that wireless networks be updated today and readied for the next generation of wireless networks. House Bill 2365 is a needed mechanism to solve today's problem and help to realize the future.

Small wireless facilities – also known as small cells – are being widely deployed to accommodate this increased demand. Small cells are wireless antennas, typically no more than six cubic feet in volume, and associated equipment, generally less than twenty-eight cubic feet, that are being installed on existing structures like utility poles, street lights and traffic signal poles. This global trend is sweeping the country. More than 250,000 small cells are expected to be installed over the next few years in the United States, nearly the number of traditional "macro" cell sites built over the last 30 years.

Small cells enhance capacity on existing 4G LTE wireless networks by efficiently using scarce spectrum, and they 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 ten 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.[3] More specifically, Arizona communities – from small towns to big cities – that embrace

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[1] FCC, Voice Telephone Services Report: Status as of June 2015, August 2016, at https://www.fcc.gov/wireline-competition/voice-telephone-services-report, last accessed 1/30/2017.
[2] FCC, Internet Access Services: Status as of June 30, 2015, August 2016, at https://apps.fcc.gov/edocs_public/attachmatch/DOC-340664A1.pdf, last accessed 1/31/2017.
[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

the next-generation of wireless connectivity will realize significant economic benefits. For instance, 5G deployment in a community like Flagstaff may create nearly 650 jobs and increase GDP by $105 million, and a community like Phoenix may create 14,000 jobs and increase GDP by over $2.3 billion.[4]

Furthermore, a report recently published by Deloitte illustrates how other industries are leveraging today's wireless platform for innovation and growth – and how increased wireless deployment will spur even more advancements in these key economic sectors[5]:

- **Energy**. Wireless-enabled smart grids could create $1.8 trillion for the U.S. economy—saving consumers hundreds of dollars per year.
- **Health**. Wireless devices could create $305 billion in annual health system savings from decreased costs and mortality due to chronic illnesses.
- **Public Safety**. Improvements made by wireless connectivity can save lives and reduce crime. A one-minute improvement in emergency response time translates to a reduction of 8% in mortality.
- **Transportation**. Wireless powered self-driving cars could reduce emissions by 40-90%, travel times by nearly 40% and delays by 20% – and translate to $447 billion per year in savings, and, more important, 21,700 lives saved.

That's the promise of the next-generation of wireless technology. America needs to lead in its deployment.

House Bill 2365 helps to remove barriers to efficient deployment of small cell wireless infrastructure by streamlining processes and imposing reasonable, nondiscriminatory rates and fees. House Bill 2365 allows providers the opportunity to deploy small cells responsibly by having reasonable access to existing local infrastructure within and outside of the public rights-of-way (ROW). Such access will help to meet customer demands for faster data speeds, stronger in-building signals and an overall improved customer experience. House Bill 2365 makes small cells on existing infrastructure a "permitted use" and not subject to discretionary review like larger "macro" towers. The legislation would also ensure that a small cell application is approved within 60 days if there are no deficiencies indicated by local government. In addition, House Bill 2365 also allows for consolidation of substantially similar small cell applications, in order to minimize administrative impacts while improving efficiency.

Finally, it is important to note that House Bill 2365 places no limitations on localities' ability to deny permits based on building, safety or electrical codes or standards. There is no removal of localities jurisdiction in this regard.

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number of construction jobs are national averages assigned on a per-capita basis), and may vary depending on the individual city.

[4] *Ibid.*

[5] Deloitte, "Wireless Connectivity Fuels Industry Growth and Innovation in Energy, Health, Public Safety, and Transportation," http://www.ctia.org/docs/default-source/default-document-library/deloitte_20170119.pdf, last accessed 2/2/2017.

In closing, since 2010, wireless providers have invested more than $177 billion to improve their coverage and capacity to better serve Americans, with $32 billion invested in 2015 alone.[6] As stated above, more than 250,000 small cells are expected to be installed over the next few years in the United States. The regulatory and land use environment must allow for capital to be efficiently spent as capital tends to flow to places that are ready for investment. House Bill 2365 will send a signal that Arizona is ready for investment.

Thank you for the opportunity to testify in support of House Bill 2365. CTIA strongly urges its approval.

[6] CTIA's Wireless Industry Summary Report, Year-End 2015 Results, 2015, http://www.ctia.org/industry-data/ctia-annual-wireless-industry-survey, last accessed 1/29/2017.

Example of a Small Cell

5G Benefits: Arizona

- **Phoenix**
  - Over 14,000 jobs created
  - Over $887 million in Smart City benefits
  - $2.34 billion in estimated GDP growth
- **Tucson**
  - Nearly 5,000 jobs created
  - Nearly $305 million in Smart City benefits
  - $804 million in estimated GDP growth
- **Flagstaff**
  - Nearly 650 jobs created
  - $39.7 million in Smart City Benefits
  - $105 million in estimated GDP growth
- **Scottsdale**
  - Over 2,100 jobs created
  - Over $133 million in Smart City benefits
  - $351 million in estimated GDP growth
- **Chandler**
  - Nearly 2,400 jobs created
  - Over $146 million in Smart City benefits
  - $387 million in estimated GDP growth