March 17, 2017

Honorable Clarence K. Nishihara
Chair, Senate Committee on Public Safety, Intergovernmental, and Military Affairs
Hawaii State Capitol
Room 214
Honolulu, HI 96813

Honorable Glenn Wakai
Chair, Senate Committee on Economic Development, Tourism, and Technology
Hawaii State Capitol
Room 216
Honolulu, HI 96813

Honorable Glenn Wakai
Vice Chair, Senate Committee on Public Safety, Intergovernmental, and Military Affairs
Hawaii State Capitol
Room 216
Honolulu, HI 96813

Honorable Brian T. Taniguchi
Vice Chair, Senate Committee on Economic Development, Tourism, and Technology
Hawaii State Capitol
Room 219
Honolulu, HI 96813

RE: Support House Bill 625 HD3 – Small Wireless Facility Deployment

Dear Chairs Nishihara and Wakai and Vice Chairs Wakai and Taniguchi:

On behalf of CTIA, the trade association for the wireless communications industry, I am writing in support of House Bill 625 HD3, related to the deployment of small wireless facilities. The people of Hawaii continue to demand – at skyrocketing levels – access to wireless products and services. This is demonstrated by the fact that, according to the Federal Communications Commission (FCC), there are more wireless connections than there are people in Hawaii, representing a wireless penetration rate of over 100%.[1] The number of wireless subscribers in Hawaii has grown nearly 16% since 2010 amounting to over 1.4 million subscribers and 99.5% of Hawaiians have

[1] U.S. Census, Population Estimates, at http://www.census.gov/data/tables/2016/demo/popest/state-total.html, last accessed 3/17/2017.

access to mobile broadband service.[2,3] 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 625 HD3 is a needed mechanism accommodate consumer demands 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, about 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 the higher-frequency spectrum 5G networks will depend on. 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 industries, 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.[4] More specifically, Hawaii communities – from small towns to big cities – that embrace the next-generation of wireless connectivity will realize significant economic benefits. For instance, 5G deployment in a community like North Kona may create over 300 jobs and increase GDP by $50 million and a community like Honolulu may see the creation of nearly 3,500 jobs and increase GDP by $570 million.[5] That's the promise of the next-generation of wireless technology. America needs to lead in its deployment.

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[2] 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 3/17/2017.
[3] Broadband Now, Broadband Internet in Hawaii, at: http://broadbandnow.com/hawaii, last accessed 3/17/2017.

[4] "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.

[5] *Ibid.*

House Bill 625 HD3 helps to remove barriers to efficient deployment of small cell wireless infrastructure by streamlining processes and imposing reasonable rates and fees. Furthermore, the legislation 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 these areas.

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 625 HD3 would send such a signal that Hawaii is ready for investment.

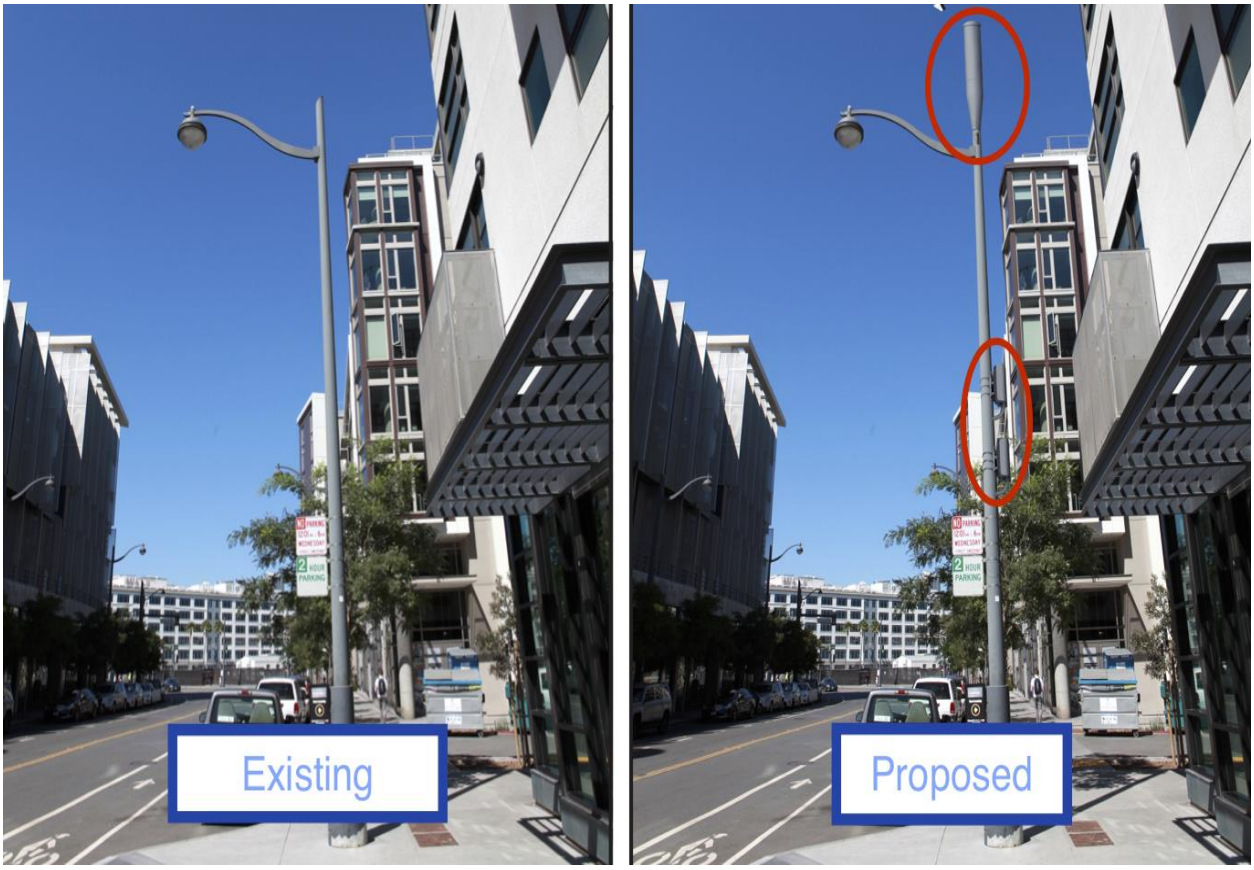
Thank you for the opportunity to submit testimony in support of House Bill 625 HD3 and we strongly urge its approval.

Sincerely,

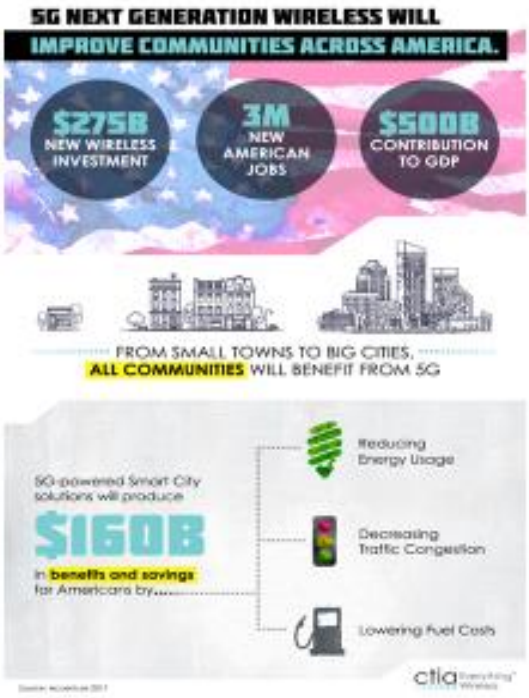
Bethanne Cooley
Director, State Legislative Affairs
CTIA

[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 3/17/2017.

Example of a Small Cell



5G Benefits: Hawaii



- **Honolulu**
  - nearly 3,500 jobs created
  - over $216 million in Smart City benefits
  - $571 million in estimated GDP growth
- **Ewa**
  - over 2,600 jobs created
  - over $166 million in Smart City benefits
  - $426 million in estimated GDP growth
- **North Kona**
  - over 300 jobs created
  - Nearly $10 million in Smart City benefits
  - $50 million in estimated GDP growth

Source