

DAVID Y. IGE  
GOVERNOR



TODD NACAPUY  
CHIEF INFORMATION  
OFFICER

**STATE OF HAWAI'I**  
**OFFICE OF ENTERPRISE TECHNOLOGY SERVICES**

P.O. BOX 119, HONOLULU, HI 96810-0119  
Ph: (808) 586-6000 | Fax: (808) 586-1922  
ETS.HAWAII.GOV

Testimony of  
**TODD NACAPUY**  
Chief Information Officer, State of Hawai'i

Before the

**SENATE COMMITTEE ON WAYS AND MEANS**

Wednesday, February 28, 2018

11:00 A.M.

State Capitol, Conference Room 211

**SENATE BILL NO. 2704, SD1**  
**RELATING TO WIRELESS BROADBAND FACILITIES**

Chair Dela Cruz, Vice Chair Keith-Agaran and members of the committee:

I am Todd Nacapuy, Chief Information Officer for the State of Hawai'i and head of the Office of Enterprise Technology Services (ETS), testifying in **support** of the intent, and **providing comments** on SB 2704 SD1, Relating to Wireless Broadband Facilities, which establishes a process to upgrade and support next generation wireless broadband infrastructure throughout the State.

As a strong advocate of adopting new technologies beneficial to State government, we fully support deploying the next generation cellular broadband technologies for the many economic and competitive advantages cited in the bill. We offer these comments.

We have major concerns about expanding wireless locations, as proposed in this bill, to State and county properties, facilities, and buildings that support critical public safety and emergency communications activities. While the bill mentions "safe operations of public safety equipment" as one reason to deny such requests, there are many other issues related to access and sharing of communication resources that could compromise security and reliability of emergency operations. We recommend adding specific language below, where appropriate, to clearly protect those services:

"State and county poles, related structures, sites, and facilities that support public safety, law enforcement, and emergency communications shall be excluded from these small cell public access provisions."

This language will ensure that non-government systems do not hamper, obstruct, or hinder existing and future public safety communications operations and plans. Those excluded locations are but a small fraction of government sites that commercial carriers could request access to.

The State, County, and Federal governments have invested hundreds of millions of dollars building and maintaining radio antennas, poles, towers, and ground facilities for statewide public safety, emergency, and disaster management services. To minimize radio signal interference, to maintain secure physical and electronic access to sites, and to effectively manage limited infrastructure resources such as electrical power, floor space, conduit capacity, and cooling, the statewide wireless broadband and radio microwave tower systems do not permit collocating commercial systems or installing them nearby. Further, many landowner leases, partner agreements, and use licenses specifically restrict use and occupancy to government and government partners, and exclude commercial use or access for those public safety reasons.

We request that this bill strongly cite the importance of safeguarding public safety communications infrastructure when considering the deployment of small cell wireless and future broadband systems.

Thank you for this opportunity to testify in support of the intent of SB 2704 SD1 and to provide comments.



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

DAVID Y. IGE  
GOVERNOR

LUIS P. SALAVERIA  
DIRECTOR

MARY ALICE EVANS  
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804  
Web site: [www.hawaii.gov/dbedt](http://www.hawaii.gov/dbedt)

Telephone: (808) 586-2355  
Fax: (808) 586-2377

Statement of  
**LUIS P. SALAVERIA**  
Director  
Department of Business, Economic Development and Tourism  
before the  
**SENATE COMMITTEE ON WAYS AND MEANS**  
Wednesday, February 28, 2018  
11:00 AM  
State Capitol, Conference Room 211

in consideration of  
**SB 2704, SD1**  
**RELATING TO WIRELESS BROADBAND FACILITIES.**

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee.

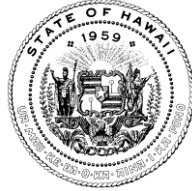
The Department of Business, Economic Development and Tourism (DBEDT) supports the intent and provides comments on SB2704, SD1, which establishes a process to upgrade and support next generation wireless broadband infrastructure throughout the State.

DBEDT respectfully recommends adding a new paragraph on page 28 at the end of the paragraph for Section – 10 Implementation.

In the absence of laws ... pursuant to this chapter.

The State or County may require the wireless broadband small cell providers to consider deployment into rural districts, where economically feasible, especially in the neighbor islands communities with low-medium density concentration of residents.

Thank you for the opportunity provide testimony in support of SB2704, SD1.



DAVID Y. IGE  
GOVERNOR

DOUGLAS S. CHIN  
LIEUTENANT GOVERNOR

STATE OF HAWAII  
OFFICE OF THE DIRECTOR  
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS  
335 MERCHANT STREET, ROOM 310  
P.O. BOX 541  
HONOLULU, HAWAII 96809  
Phone Number: 586-2850  
Fax Number: 586-2856  
cca.hawaii.gov

CATHERINE P. AWAKUNI COLÓN  
DIRECTOR

JO ANN M. UCHIDA TAKEUCHI  
DEPUTY DIRECTOR

TO THE SENATE COMMITTEE ON  
WAYS AND MEANS

TWENTY-NINTH LEGISLATURE  
Regular Session of 2018

Wednesday, February 28, 2018  
11:00 a.m.

**WRITTEN TESTIMONY ONLY**

**TESTIMONY ON S.B. NO. 2704, S.D. 1, RELATING TO WIRELESS BROADBAND FACILITIES.**

TO THE HONORABLE DONOVAN M. DELA CRUZ, CHAIR, AND MEMBERS OF THE COMMITTEE:

The Department of Commerce and Consumer Affairs (“Department”) appreciates the opportunity to testify on S.B. 2704, S.D. 1, Relating to Wireless Broadband Facilities. My name is Ji Sook “Lisa” Kim, and I am the Administrator of the Department’s Cable Television Division. The Department appreciates the intent of this bill, which is a companion to H.B. 2651, and provides the following comments.

This bill establishes a permitting, application, review, and approval process for wireless and communications service providers to install wireless facilities on state- or county-owned utility poles or to install associated utility poles in the rights of way.

The Department strongly supports efforts to improve access to broadband services for Hawaii residents and to increase competition that may result in more affordable services for consumers. The Department thus supports legislation that establishes uniform, streamlined permit and approval processes statewide that would expedite the deployment of infrastructure required for small wireless systems. The

Department also continues to recognize the need to balance expedited deployment with protecting the public interest and thus defers to state and county asset owners and managers to comment on the bill's impact on their ability to manage, maintain, and preserve those public assets, to protect the public's safety, and to use those assets for their intended public purpose. Towards that end, the Department appreciates the work of the Committees on Economic Development, Tourism and Technology and Commerce, Consumer Protection, and Health in drafting S.D. 1 to address many of the concerns raised by stakeholders.

With respect to the State's broadband coverage, the Department notes that the Federal Communications Commission's 2018 Broadband Deployment Report to Congress reported that 99.9 percent of Hawaii's population has access to either: (1) fixed broadband at 25 megabits per second download speed and 3 megabits per second upload speed; or (2) mobile LTE service with a minimum advertised speed of 5 megabits per second download speed and 1 megabit per second upload speed. Although maps using provider data show wireless coverage in the State is widespread, and wireless providers have indicated in recent years that substantial sums have been invested in building infrastructure in Hawaii, the demand for wireless service capacity continues to grow. Furthermore, there continues to be a need for broadband access in rural areas of the State that do not present a market case for providers because of the cost of extending service to those areas.

In any legislation that allows the deployment of small cell facilities on public assets or in public rights of way, the Department thus respectfully requests that the Legislature consider including statutorily enforceable commitments to extend high-speed Internet access that can bridge the digital divide for residents in the unserved and underserved areas of the State.

Thank you for the opportunity to provide written testimony on this bill.

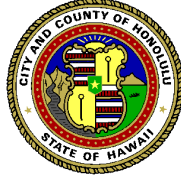
**OFFICE OF THE MAYOR  
CITY AND COUNTY OF HONOLULU**

530 SOUTH KING STREET, ROOM 300 • HONOLULU, HAWAII 96813  
PHONE: (808) 768-4141 • FAX: (808) 768-4242 • INTERNET: [www.honolulu.gov](http://www.honolulu.gov)

KIRK CALDWELL  
MAYOR

ROY K. AMEMIYA, JR.  
MANAGING DIRECTOR

GEORGETTE T. DEEMER  
DEPUTY MANAGING DIRECTOR



CITY AND COUNTY OF HONOLULU  
WEDNESDAY, FEBRUARY 28, 2018; 11:00 AM

TO: THE HONORABLE DONOVAN M. DELA CRUZ, CHAIR  
THE HONORABLE GILBERT S.C. KEITH-AGARAN, VICE CHAIR  
AND MEMBERS OF THE COMMITTEE ON WAYS AND MEANS

FROM: ROY K. AMEMIYA, JR., MANAGING DIRECTOR  
CITY AND COUNTY OF HONOLULU

SUBJECT: COMMENTS ON SB2704, SD1

Thank you very much for considering this important measure. The City and County of Honolulu (City) continues to recognize the need for the installation of small cell infrastructure to facilitate the deployment of 4G and 5G technology, as demonstrated by the City's approval of over 60 installations on Oahu to date, and provides comments on this bill.

Public Safety Concerns Not Addressed:

The City must emphasize that the installation of small cell infrastructure should not adversely impact or compromise public safety. Thus, it is important to ensure that existing City utility poles and light standards ("poles") are able to bear the additional weight of small cell equipment, particularly because this added equipment was not included in the original design, sizing, and selection of the poles. Also, the City must ensure that the equipment does not pose a hazard or obstruction to pedestrians, bicyclists, motorists, and/or people maintaining or repairing other pole-mounted equipment, components, or lines. To this end, the City is concerned with the following:

- Prohibition on regulation of deployment: Page 11, lines 13 to 17, which states that the State and the counties shall not prohibit, regulate, or charge for the deployment of small wireless facilities or any associated modified or replaced utility poles used for the collocation of small wireless facilities. This provision expressly prohibits the City from reviewing, inspecting, and regulating the deployment of small cells, which severely limits the City's ability to protect the

public and ensure that small cells are installed in a safe manner.

- Prohibits governmental discretion: Page 12, lines 14 to 20: which expressly prohibit the State and a county from exercising discretion with respect to the construction or modification of small wireless facilities in the right of way. The State and the City must be able to exercise discretion where appropriate to protect public safety.
- Prohibits requiring an application for replacing equipment: Page 22, lines 13 to 20 prohibit the City from requiring a permit for the replacement of small cell equipment with other small cell equipment that is substantially similar or the same size or smaller. Limiting the City's ability to review all equipment on its poles negatively impacts public safety. For example, this language does not allow the City to review "replacement" equipment if it is the same size and weight. The City would not know whether the "replacement" equipment interferes with public safety equipment or poses any other potential hazard to the public.
- Insufficient review time: The City supports reviewing applications in a timely manner; however it should not be required to expedite review in such a fashion that compromises public safety. This measure subjects the City to unreasonably short time frames. While the City appreciates that this measure requires the City to evaluate the permit processing timeframes one year after the enactment of this bill, this provision does not consider the effect of the carriers submitting numerous applications concurrently, thereby overwhelming existing City staff required to comply with the mandates of this bill including the determination and notice of application completeness while reviewing other accepted applications for proper design, engineering, and compliance with accepted construction techniques to protect public safety within the specified timeframes. To that end, the City is concerned with the following:
  - Upon initial submission, the City reviews and notifies the carrier in writing as to the completeness of the application. If incomplete, the City is required to notify the carrier as to why the application is incomplete and document the missing information within ten days. The burden should remain with the carrier to submit a complete application. This section unfairly shifts that burden to the City or reviewing entity. Ten days is an insufficient amount of time for the City to review an application for completeness, content, and compliance with applicable standards, regulations, requirements or practices.
  - After a complete application is submitted, the City only has 60 days to complete its review and either approve or deny the application. This is an

insufficient amount of time for the reviewing City agencies. This measure does not provide funds for the hiring of additional staff to ensure compliance with this time frame nor does it take into consideration the number of individual pole installations contained in any one application, or the scope of work involved in the review process by each affected agency. The City requests amending the language to provide 90 days to complete the review process once a complete application is received. Similarly, allowing the City only 30 days to review a resubmitted application that was previously denied is also an insufficient amount of time. The City requests 90 days to review any resubmitted application.

- Allowing the carrier to consolidate small cell equipment installations anywhere on Oahu, also results in insufficient review time for the City. While the City supports consolidating applications where appropriate, this language allows a carrier to submit an application for sites on opposite sides of the island. This greatly increases the time required to review the single application. Accordingly, this provision should be removed or amended to allow consolidated applications within a limited distance in a contiguous area as well as limit the number of poles per consolidated application. The City believes that 25 poles within a two square mile radius is appropriate.
- Actual pole condition report not required: In our review process, the City requires that the carrier submit an inspection report on the actual condition of each pole on which a carrier seeks to install small cell equipment because the physical condition of each pole differs. The current draft does not include such a requirement. Without this requirement, carriers are able to submit generic information for each pole so long as the equipment is the same. This does not address public safety concerns because the generic information is not an accurate representation of what the actual pole is able to bear.

### Fees

This measure interferes with the City's ordinance establishing rates for the installation of telecommunications equipment. Section 28-12.2, Revised Ordinances of Honolulu (ROH) establishes the rate for such equipment at \$1,000 per month. The fee language should be deleted as there is already an established City fee schedule and this provision is unnecessary. In committee hearings on the House companion measure, HB2651, the Committees on Intrastate Commerce and Consumer Protection and Commerce noted that the fee schedules for attachments to county-owned infrastructure have generally been set by the counties. The Committee on Consumer Protection and Commerce announced its intention to delete the fee provisions. The City strongly agrees with these comments from the House committees and respectfully



requests that your committee consider such an amendment.

Further, this measure limits the amount the City may charge for application review to \$100 per pole or \$100 per application batch. Reviewing an application involves visiting each pole for inspection. This fee would not cover the time and materials expense of travel to each pole in an application batch that potentially includes a multitude of poles located across the island of Oahu. Additionally, the \$40 per pole annual fee is unreasonably low. Other jurisdictions such as San Francisco charge \$4,000 per pole per year.

The City also believes that shifting the burden to the City to prove that fees are cost-based and do not exceed the actual, direct, and reasonable costs for the applicant's use of the pole are inappropriate. This burden should remain with the party raising the issue of the appropriateness of fees. If a carrier brings a lawsuit against another party, the carrier would be required to satisfy the burden of proof with respect to the claim. Similarly, the burden should remain with the carrier bringing a complaint about the appropriateness of a fee.

#### Visual Blight is Only Partially Addressed:

This bill does not allow the State or the City to regulate and prevent "Franken-poles" from emerging in the most picturesque communities. Instead, the City and the State are only able to require concealment in a "historic district." (see page 14, line 13 to page 15, line 2) Although many carriers present visually appealing photos of equipment integrated into the utility poles of other jurisdictions, this bill prohibits the State and a county from requiring similar designs everywhere except in historic districts. The City respectfully requests that your Committee amend this measure to allow the State and counties to require that all carriers make all reasonable attempts to ensure that the equipment installed on poles and facilities is done in a manner that is context sensitive and minimizes visual blight.

#### Impact on Affordable Housing:

The City is also concerned that language on page 15, line 18 to page 16, line 5, may have an unintended consequence of increasing the costs of housing. The language requires the City to adopt or amend existing ordinances regulating the development of real property to ensure that development of new property or redevelopment of existing real property provides accommodations for the deployment of small cell technology. The addition of such a requirement imposes additional costs on developers, which will cause housing prices to increase. Further, there do not appear to be any requirements that the carriers bear any of these additional costs, resulting in a windfall to the carrier at the expense of the prospective homeowner.

Community Concerns:

This measure expressly prohibits the State or City from requiring the carriers or operators to provide information to the communities in which the small cell equipment is installed. (see page 17, lines 1 to 4) While the City appreciates that for consolidated applications, the applicant must publish notice of the permit in a newspaper of general circulation in the county impacted, this provision does not allow for a higher level of community engagement. Residents have a right to know and ask questions about the equipment being installed near or right in front of their homes. To that end, the City is requiring carriers and operators to make presentations at Neighborhood Board meetings so that affected residents are able to learn about proposed installations, gather information, and ask pertinent questions. The small cell carriers or operators are the only entities able to answer questions about their equipment and operation. The City respectfully requests that an amendment be made to require participation in community meetings to give residents an opportunity to ask questions.

Interference with City Uses of its Own Poles:

The City is concerned that this measure may preclude future uses of its own poles. Carriers and operators should not be able to use all of the structural capacity on a City owned pole, such that the City cannot use the pole for its own purposes without first replacing it with a pole of a higher capacity. While the City appreciates that this measure allows the City to reserve capacity on its own poles for up to twelve months, we do not feel that this is sufficiently long enough to anticipate future technology that may require installation on City-owned poles. (see page 25, lines 3 to 15).

For example, the City is in the process of converting its light poles to utilize LED lights with advanced controls functions. This requires the City to install additional equipment on its existing light poles without the need to acquire and install new poles of higher structural capacity. If a carrier or operator installs equipment that effectively imposes structural loading to the maximum load carrying capacity of the existing pole, the City would be precluded from installing its own LED lights and controls without first bearing the cost of replacing the existing pole with one of higher capacity. The City is unable to anticipate all future uses and the need to install additional equipment of its own on each pole, and therefore requests that this measure be amended to allow the City to reserve capacity on its poles for its own future uses.

Indemnification:

The City believes that indemnification of the State and the counties is very important and supports an indemnification requirement. However, we oppose the prohibition on requiring a carrier or operator to obtain insurance naming the City as an

additional insured. The City believes that it should not have to cover any costs associated with any injury or harm caused by or resulting from small cell installations, and should be named as an additional insured in the carriers' or operators' insurance policies.

The City agrees that carriers should be required to obtain bonds to provide for the removal of abandoned or improperly maintained equipment, restoration of the right of way, and recoupment of past due fees. However, the City believes that \$200 per small wireless facility up to a maximum of \$10,000 per county, regardless of the number of installations in that county is very low. Carriers will likely install more equipment in the City compared with other counties in Hawaii. The bonding requirements should be adjusted to reflect that difference in equipment installed. The \$10,000 maximum means that a carrier would only have to obtain a bond for 50 poles. The City has already given conditional approval for over 60 poles. The carriers have also stated that they each intend to place equipment on at least 100 poles in the City. We respectfully request that the bond maximum amounts be deleted.

Repairs to the Right of Way:

If a carrier damages a sidewalk or other part of the right of way and fails to make the required repairs, the language on page 15, lines 13 to 17 allows the City to complete the required repairs and charge the applicable party the reasonable, documented cost of the repairs "within a reasonable time". The City requests that a "shot clock" be imposed on the carriers to complete required repairs to the right of way. The City is held to specific time frames for reviews and responses. It seems only appropriate that carriers be held to a similarly specific time frame.

Requiring Installation After Permits are Approved:

The City supports the provisions that require a carrier to install equipment within one year after the permit is granted. We are concerned that carriers or operators may submit permits for the sole purpose of reserving space and precluding other carriers from installing their equipment. The language on page 17, line 15 to page 18, line 2 addresses this concern.

Thank you for your consideration of this testimony. The City continues to believe that the deployment of 4G and 5G technology is important as demonstrated by the approval of over 60 installations on Oahu to date and looks forward to continuing to work with small cell carriers, operators, and the Legislature on this important issue.

Council Chair  
Mike White

Vice-Chair  
Robert Carroll

Presiding Officer Pro Tempore  
Stacy Crivello


Councilmembers  
Alika Atay  
Elle Cochran  
Don S. Guzman  
Riki Hokama  
Kelly T. King  
Yuki Lei K. Sugimura



**COUNTY COUNCIL**  
COUNTY OF MAUI  
200 S. HIGH STREET  
WAILUKU, MAUI, HAWAII 96793  
[www.MauiCounty.us](http://www.MauiCounty.us)

February 27, 2018

TO: The Honorable Donovan M. Dela Cruz, Chair  
Senate Committee on Ways and Means

FROM: Riki Hokama   
Councilmember

SUBJECT: **HEARING OF FEBRUARY 28, 2018; TESTIMONY IN OPPOSITION TO  
SB 2704, SD1, RELATING TO WIRELESS BROADBAND FACILITIES**

Thank you for the opportunity to testify in **opposition** to this measure. The purpose of this bill is to establish a process to upgrade and support next generation wireless infrastructure throughout the State and establish a permitting, application, review, and approval process for wireless service providers to install wireless facilities on state or county-owned utility poles, or install associated utility poles, in the right of way.

I **oppose** this measure for the following reasons:

1. While the improvement of Hawaii's wireless broadband services may be beneficial, it should not be accomplished by infringing on the counties' ability to decide the use of their property. Each individual county should make the decision on how its utility poles and rights of way are used, not the State.
2. This measure imposes restrictions and requirements on the counties with an expectation for results without State assistance. If the State wants to support Hawaii's growing technological needs, it should do so in other ways. It should provide grants and work with the counties to develop local technology companies, and it should partner with schools to encourage students to consider exploring technology-related professions.

For the foregoing reasons, I **oppose** this measure.

sb2704\_sd1\_jgk

**SB-2704-SD-1**

Submitted on: 2/23/2018 2:07:24 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Melodie Aduja	Testifying for OCC Legislative Priorities Committee, Democratic Party of Hawai'i	Support	No

Comments:

**PRESENTATION OF THE  
OAHU COUNTY COMMITTEE ON LEGISLATIVE PRIORITIES  
DEMOCRATIC PARTY OF HAWAI'I**

TO THE COMMITTEE ON WAYS AND MEANS

THE SENATE

TWENTY-NINTH LEGISLATURE

REGULAR SESSION OF 2018

Wednesday, February 28, 2018

11:00 a.m.

Hawaii State Capitol, Conference Room 211

RE: Testimony in Support of SB 2704 SD1 RELATING TO WIRELESS  
BROADBAND FACILITIES

To the Honorable Donovan M. Dela Cruz, Chair; the Honorable Gilbert S.C. Keith-Agaran, Vice-Chair, and Members of the Committee on Ways and Means:

Good morning, my name is Melodie Aduja. I serve as Chair of the Oahu County Committee ("OCC") Legislative Priorities Committee of the Democratic Party of Hawaii. Thank you for the opportunity to provide written testimony on Senate Bill No. 2704 SD1, relating to Small Wireless Facilities; Wireless Facilities; Broadband; Economic Development; State-owned and County-owned Utility Poles; and Permits.

The OCC Legislative Priorities Committee is in favor of Senate Bill No. 2704 SD1 and supports its passage.

Senate Bill No. 2704 SD1 is in alignment with the Platform of the Democratic Party of Hawai'i ("DPH"), 2016, as it (1) establishes a process to upgrade and support next generation wireless broadband infrastructure throughout the State, and (2) establishes a permitting, application, review, and approval process for wireless service providers to install wireless facilities on state or county owned utility poles, or install associated utility poles, in the right of way, effective 12/31/2018.

Specifically, the DPH Platform states that improvements to infrastructure are critical to providing a healthy base to the Hawaiian economy. As such, State and county governments have a key role to play in setting reasonable standards for industry and trade. (Platform of the DPH, P. 1, Lines 50, 44-45 (2016)).

"We recognize that the responsible use and development of technology in all its manifestations offers immense potential for our community, government, including institutions of higher education and business sectors. We encourage synergistic research, development, commercialization and educational programs to promote technological proficiency and innovation. In particular we support Science, Technology, Engineering and Math (STEM) initiatives in our public, private and charter schools as these prepare the next generation to address the needs of our state. We also support programs that facilitate incubator, i.e. start-up, opportunities for new and promising technologies, and encourage the local retention of our intellectual resources.(Platform of the DPH, P. 3, Lines 149-156 (2016)).

Given that Senate Bill No.2704 SD1 (1) establishes a process to upgrade and support next generation wireless broadband infrastructure throughout the State, and (2) establishes a permitting, application, review, and approval process for wireless service providers to install wireless facilities on state or county owned utility poles, or install associated utility poles, in the right of way, effective after 12/31/2018, it is the position of the OCC Legislative Priorities Committee to support this measure.

Thank you very much for your kind consideration.

Sincerely yours,

/s/ Melodie Aduja

Melodie Aduja, Chair, OCC Legislative Priorities Committee

Email: legislativepriorities@gmail.com, Text/Tel.: (808) 258-8889



# Maui Hotel & Lodging

ASSOCIATION

Testimony of

**Lisa H. Paulson**

Executive Director

Maui Hotel & Lodging Association

on

SB 2704 SD 1

**Relating To Wireless Broadband Facilities**

COMMITTEE ON WAYS AND MEANS

**Wednesday, February 28, 2018, 11:00am**

**Conference Room 211**

Dear Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee,

The Maui Hotel & Lodging Association (MHLA) is the legislative arm of the visitor industry. Our membership includes 185 property and allied business members in Maui County – all of whom have an interest in the visitor industry. Collectively, MHLA's membership employs over 25,000 residents and represents over 19,000 rooms. The visitor industry is the economic driver for Maui County. We are the largest employer of residents on the Island - directly employing approximately 40% of all residents (indirectly, the percentage increases to 75%).

MHLA is **in support** of SB 2704 SD 1, which establishes a process to upgrade and support next generation wireless broadband infrastructure throughout the State. Establishes a permitting, application, review, and approval process for wireless service providers to install wireless facilities on state or county owned utility poles, or install associated utility poles, in the right of way. Applies to permit applications filed with the State or county after 12/31/2018.

MHLA believes that this measure would modernize Hawaii's legal and policy framework to facilitate the expeditious deployment of small cells, the foundational element to high speed video-streaming facilitating wireless broadband internet access to meet the growing demands of our communities and our visitor industry.

With the advent of unlimited data plans across all wireless carriers, traffic across wireless networks has exploded and continues to exponentially grow; keeping ahead of this demand with current infrastructure is becoming increasingly challenging. Small cell technology is the essential form of wireless infrastructure needed to deliver improved 4G LTE service. Increasing network capacity is even more critical if the residents and visitors of Hawaii are to benefit from the next generation of wireless technology, 5G.

Our visitor industry needs to remain competitive globally, it is essential that Hawai'i reaffirms its position as a premier travel destination by establishing a stronger wireless network to remain attractive to visitors while keeping pace with their expectations.

Thank you for the opportunity to testify.

**SB-2704-SD-1**

Submitted on: 2/26/2018 6:44:40 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Brenda M. Palomino	Testifying for Sprint	Support	No

Comments:

Brenda M. Palomino, Govt. Affairs Manager

2180 Harvard Street, Suite 100

Sacramento, CA 95815

Telephone: 916-568-4410

Email: [brenda.coleman@sprint.com](mailto:brenda.coleman@sprint.com)

February 26, 2018

Honorable Donovan M. Dela Cruz

Chair, Senate Ways and Means Committee

Hawaii State Capitol

Room 208

Honolulu, Hawaii 96813



Honorable Gilbert S.C. Keith-Agaran  
Vice Chair, Senate Ways and Means Committee  
Hawaii State Capitol  
Room 221  
Honolulu, Hawaii 96813

**RE: Support for SB 2704 SD1 – Wireless Broadband Facilities**

Dear Chair Dela Cruz and Vice Chair Keith-Agaran,

On behalf of Sprint, I am pleased to advise you of our Support for SB 2704 SD1, related to the

deployment of wireless broadband facilities. SB 2704 SD1 is a common sense bill that seeks to

streamline deployment of wireless infrastructure so that Hawaii's consumers and businesses can

receive the wireless coverage and capacity they demand in a timely manner. SB 2704 SD1

allows providers like Sprint the opportunity to responsibly deploy small cells by having

reasonable access to existing state and county infrastructure within the public

rights-of-way (ROW). In addition to access, the bill provides for a reasonable, uniform, and reliable

process for the deployment of these facilities.

Today, wireless communication is a critical part of our everyday lives. From security to public safety, education to entertainment, fitness to finance, and much more. Our lives at home, work and school are more wirelessly connected than ever. Business,

consumers and government simply depend on it. In order to accommodate these rapidly growing demands, wireless infrastructure is needed, which is why SB 2704 SD1 is so important and timely.

While wireless providers seek to make considerable infrastructure investments to keep up with consumer demand, this process can often be delayed as a result of the permitting process, which can stall applications for months. SB 2704 SD1 helps remove these barriers by making the deployment of small cells a permitted use while retaining a locality's requirement for building and other applicable health and safety codes.

SB 2704 SD1 ensures uniformity and predictability in the application process, which will help increase and improve competitive voice and broadband services throughout Hawaii, benefitting consumers across the state. We hope Hawaii will join the thirteen other states that have already enacted small cell legislation over the last two years.

For these reasons, we are pleased to support SB 2704 SD1. Please contact me should you have any questions or require additional information.

Very truly yours,

Brenda M. Palomino

Principal Manager, State Legislative Affairs, Western Region

Sprint



**TESTIMONY OF CHARTER COMMUNICATIONS**

**Senate Committee on Ways and Means**

**Hawai'i State Capitol, Conference Room 211**

**RE: S.B. 2704, S.D.1**

**WEDNESDAY, FEBRUARY 28, 2018**

**11:00 AM**

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran and Members of the Committee,

I am Myoung Oh, Director of State Government Affairs, submitting written testimony on behalf of Charter Communications in **opposition** to S.B. 2704, S.D.1

Charter Communications is a dedicated community partner in Hawai'i. We currently have over 3,500 Wi-Fi hotspots deployed throughout the islands with a commitment to provide hundreds more in 2018. We employ 1,400 Hawai i residents and contribute to Hawai'i's economy with over \$50 million in taxes.

We have also raised our base-level broadband speed to 200 Mbps for new customers and have launched Spectrum Internet Assist, our low-cost broadband program, for low-income families and seniors, which at 30 Mbps, is the fastest program of its kind offered by any broadband provider, and we believe will have a tremendous positive impact on the communities we serve in Hawai'i.

As a connectivity and customer service company, Charter embraces new technology like 5G and the deployment of wireless facilities and continues to advance new products and services that meet the ever growing needs of our customers.

Presently, wireless companies are not precluded from acquiring right-of-way (ROW) authority to attach antennas or other wireless infrastructure. **Case in point is Resolution 18-34 that is before the Honolulu County Council.** Wireless providers have the authority to request attachment rights for both utility and county owned poles as well as the ability to work with counties on attachments for other structures.

As its currently drafted, S.B. 2704, S.D.1 would create an uneven playing field between cable and wireless providers in the State by crafting special rules for the placement of wireless facilities in the public (ROW).

Charter offers video service and so do wireless carriers. Wireless companies have made no secret of their desire to use 5G to compete against cable companies. Entities that offer a video service by using facilities in the ROW should be treated similarly, hence our proposal to subject all video providers that use the ROW to the franchise regime regardless of technology utilized in the ROW.

Charter certainly want to be sure that as long as we are subject to franchising and gross revenue fee requirements for operating video service facilities in the ROW, other providers that also seek to use the ROW to provide video to subscribers should be subject to the same regime for video, even if those facilities are wireless.

Charter believes S.B. 2704, S.D.1 is intended largely to allow unfranchised entities to circumvent the ROW authorization process, by bypassing the procedure applicable to Charter. **Access to public rights-of-way should be equitable for all occupiers without discrimination to technology.**

Additionally, the proposed expedited process does not simply apply to small cell antennas. “Wireless facility,” on Page 10, lines 4-11, may be broadly defined to include the backhaul facilities that provide the connection:

“Wireless facility“ means equipment at a fixed location that enables wireless communications between user equipment and a communications network, including:

- (1) Equipment associated with wireless communications; and
- (2) Radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration.”

As it’s currently drafted, Charter believes that S.B. 2704, S.D.1 goes far beyond just collocating an antenna or receiver on a utility pole. These 5G networks therefore look almost identical to traditional cable communications systems and it would be unfair, unjust and unreasonable to regulate this type of network differently than cable systems.

Additionally, under the definition of “Small Wireless Facilities,” it provides that associated ancillary equipment shall be no more than twenty-eight cubic feet in volume. In calculating twenty-eight cubic feet, the following ancillary equipment **are not included** which can easily increase the size of the small wireless facility:

“... electric meter, concealment elements, telecommunications demarcation box, grounding equipment, power transfer switch, cut-off switch, and vertical cable runs for the connection of power and other services.”

Our customers should not have to pay to use the public ROW when others do not. A review of the ROW regime requires serious and thoughtful analysis. If the intent is to change the payment structure for access to the right of way, it must do so fairly for all service providers and consider all unintended consequences.

Finally, this bill would do little to advance the policy goals for broadband deployment, especially in rural areas where it is needed most – closing the digital divide. Small cell technology is not a viable solution for rural broadband deployment and wireless providers have made no commitment to build out rural areas of this state.

If the Legislature intends to provide for services in the most rural areas of the state, S.B. 2704, S.D.1 will not achieve that objective as Page 16, lines 15-20 prohibits in-kind obligations (e.g. courtesy connections, institutional networks) placed upon wireless applicants:

- (1) The State and county shall not directly or indirectly require an applicant to perform services or provide goods unrelated to the permit, such as in-kind contributions to the State or county including reserving fiber, conduit, or pole space for the State or county;”

This is contrary to the Charter’s franchise obligations in Hawai‘i, including but not limited to providing INET services to State and County institutions and extending service to rural areas in the State.

In closing, Charter strongly opposes the establishment of an uneven playing field between wireline and wireless carriers. We believe this is contrary to creating a competitive environment.

**However, if the Committee is inclined to pass the bill, Charter respectfully requests the committee consider amendments that clarify and make clear backhaul facilities are not included.**

Page 8-9, starting on line 6:

~~“Small wireless facilities” means a wireless facility that meets the following qualifications: consists only of a radio transceiver and~~

~~(1) — Each wireless provider’s antenna that could both fit within an enclosure of no more than six cubic feet in volume; and~~

~~(2) — All other wireless equipment associated with the wireless facility, whether ground or pole mounted, is cumulatively no more than twenty eight cubic feet in volume. The following types of associated ancillary equipment are not included in the calculation of equipment volume: electric meter, concealment elements, telecommunications demarcation box, grounding equipment, power transfer switch, cut-off switch, and vertical cable runs for the connection of power and other services.~~

Page 10, starting on line 4:

~~“Wireless facility” means a radio transceiver and antenna equipment at a fixed location that physically enables wireless communications service to be provided between user equipment and a communications network, including small wireless facilities and micro wireless facilities, but not including:~~

~~(1) The structure or improvements on, under, or within or adjacent to which the equipment is collocated Equipment associated with wireless communications; and~~

~~(2) Wireline backhaul facilities; and~~

~~(3) Radio transceivers, antennas, Coaxial or fiber-optic cable between utility poles or communications facilities that are otherwise not immediately adjacent and directly associated with a particular antenna, regular and backup power supplies, and comparable equipment, regardless of technological configuration.~~

**Additionally, Charter respectfully requests amendments that, at a minimum, the bill must ensure that all providers using facilities in the ROW to provide video service to subscribers are subject to the same franchising framework, regardless of delivery method. A technology-neutral framework that ensures regulatory parity for all providers is the best approach for both competition and consumers.**

### **New Definition**

~~“Video programming services” means the provision of video programming directly to subscribers, without regard to delivery technology, via communications facilities located in, over, under, above, or across the right of way. The term includes, but is not limited to, video programming delivered directly to subscribers via internet protocol technology or as cable service as defined in 47 U.S.C. § 522(6). The term does not include over-the-top or online video programming offerings accessible to Internet users via the public Internet.~~

### **§ -5 Use of the right of way for small broadband or wireless facilities and utility poles.**

(b) Subject to this section, the construction or modification of small broadband or wireless facilities in the right of way shall be a permitted use not subject to zoning review or other discretionary approval; provided that such structures and facilities shall be constructed and maintained so as not to obstruct the usual travel, public safety, or other factors set forth in section -6(10) on such right of way or obstruct the legal use of such right of way by utilities. Modified or replaced utility poles associated with a small broadband or wireless facility that meet the requirements of this section are permitted uses subject to the permit process in section -6. No additional permit shall be required to maintain, operate, modify, or replace small broadband or wireless facilities and associated utility poles along, across, upon, and under the right of way. ~~The grant of a Permit for a Small Wireless Facility does not authorize the provision of any communications service or the installation, placement, maintenance or operation of any communications facility, including a wireline backhaul facility, other than a small wireless facility, in the right of way, and shall not otherwise be a general authorization to occupy and use the rights-of-way. No wireless provider, or affiliate thereof, shall furnish video programming services directly to subscribers via, in whole or in part, any communications facilities deployed in the right of~~



way without first obtaining a cable franchise subject to the provisions of Chapter 440G.

Thank you for the opportunity to submit written testimony.



Jesús G. Román  
VP of Government Affairs  
Pacific & North Central Market  
15505 Sand Canyon Avenue  
Irvine, CA 92618

February 27, 2018

Senator Donovan M. Dela Cruz, Chair  
Senator Gilbert S.C. Keith-Agaran, Vice Chair  
Members of the Senate Committee on Ways and Means  
Twenty-Ninth Legislature  
Regular Session of 2018

RE: SB 2704, SD1 – RELATING TO WIRELESS BROADBAND FACILITIES  
Hearing Date – February 28, 2018 at 11:00 a.m.

Dear Senators Dela Cruz, Vice Chair Keith-Agaran and Member of the Committee on Ways and Means:

Mahalo for the opportunity to submit testimony on behalf of Verizon Wireless in STRONG SUPPORT of SB 2704, SD1 – Relating to Wireless Broadband Facilities. Wireless broadband services are a significant and growing part of the nation's economy and will have a demonstrably positive impact on productivity in nearly every industry. As an essential part of the technology economy, the state must be ahead of the national curve by ensuring a robust and advanced wireless broadband network.

Current demands on the wireless networks have exploded over the past five years. The wireless infrastructure available in Hawaii is unable to meet the growing demand for capacity and quality of service that exists today. Moreover, as customer demands for ultrafast speeds, low latency and connection to the Internet of Things continues to grow, wireless carriers must be able to provide the latest generation wireless technology, 5G. But because of the propagation characteristics of the 5G spectrum, which covers very short distances, a different type of infrastructure is needed. Instead of the large macro towers currently in use, wireless carriers must shift to a relatively new type of cellular transmittal system known as small wireless facilities or "small cells."

As the name indicates, small cells are the latest wireless broadband transmittal systems and are much smaller than existing macro towers. Although the designs may vary slightly as required to support the network in a particular area, small cells typically consist of a small antenna, radios (that process the spectrum) and support equipment mounted on utility poles, street lights or other host structures. By definition, the small cells are no bigger than 28 cubic feet and are essential to propagating the spectrum needed to supplement 4G and 5G

Because small cells are relatively new, the state and county agencies don't have existing permitting processes to allow deployment of small cells in a timely manner. Instead, the agencies rely upon antiquated permitting processes which can take more than 18-24 months for approval. The current permitting processes may have been needed for macro towers, which are visibly obtrusive and can occupy an area of 700 square feet or more, but can provide coverage for a 10-mile radius. On the other hand, because small cells are much smaller and visibly unobtrusive, but require a greater number because of the limited propagation area, a much simpler process is needed for effective and timely deployment.



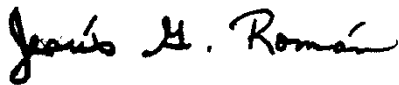
Senator Donovan M. Dela Cruz, Chair  
Senator Gilbert S.C. Keith-Agaran, Vice Chair  
Members of the Senate Committee on Ways and Means  
February 28, 2018  
Page 2

SB 2704, SD1 would provide a clear and appropriate permitting process by which carriers can upgrade the existing wireless broadband infrastructure and set the platform for 5G technology. Specifically, SB 2704, SD1 makes deployment of small cells on state and county utility poles a permitted use and sets the framework for a statewide process to approve small cells in a reasonable time and at cost based rates. The bill allows for the submission of a single permit application for a batch of small cells that are similar in form and structure, to expedite processing. Importantly, this legislation preserves state and local government control with the authority to deny an application that does not meet building, electrical, health and safety requirements.

Simply put, SB 2704, SD1 strikes the right balance between the important policy goals of encouraging ongoing investment in wireless broadband technologies statewide to stimulate the technology economy and meet the demand of Hawaii residents and visitors, while maintaining the state and county agencies' oversight of host facilities in the right of way.

We appreciate your proactive approach in supporting the rapid deployment of wireless broadband technology to meet the state's important policy objectives and strongly feel SB 2704, SD1 is the vehicle to achieve those objectives.

Mahalo,

A handwritten signature in black ink that reads "Jesús G. Román". The signature is written in a cursive style with a large initial 'J'.

Jesús G. Román



Bob Bass  
*President of External and  
Legislative Affairs, Hawaii*

AT&T Services, Inc.  
16331 NE 72<sup>nd</sup> Way RTC1  
Redmond, WA 98052

T: 425-786-8816  
F: 425-580-8652  
robert.bass@att.com  
www.att.com

February 28, 2018

Honorable Donovan M. Dela Cruz  
Chair, Senate Committee on Ways and Means  
Hawaii State Capitol  
Room 208  
Honolulu, HI 96813

Honorable Gilbert S.C. Keith-Agaran  
Vice-Chair, Senate Committee on Ways and Means  
Hawaii State Capitol  
Room 221  
Honolulu, HI 96813

RE: Support Senate Bill 2704 – Relating to Wireless Broadband Facilities

Dear Committee Chair Dela Cruz and Vice-Chair Keith-Agaran:

On behalf of AT&T, please accept this letter of support for Senate Bill 2704 – Relating to Wireless Broadband Facilities – a bill that will promote the installation of small cell wireless facilities to improve wireless networks.



Consumers and businesses are using their mobile devices more than ever before to connect to everyone and everything around them. According to the CDC's January-June 2017 National Health Interview Survey, 48.3% of Hawaii residents now use wireless services exclusively for their communication needs. Indeed, AT&T has nationally experienced a increase in data usage on our network since 2007. Additionally, as streaming video continues to become more prominent and new applications and services are introduced, data usage will continue to grow exponentially.

With this increased demand and pressure on the mobile network, small cell wireless facilities can help deliver faster download speeds, improved call quality, and a better overall wireless experience to Hawaii's residents, while also preparing our networks for 5G investment and deployment.

Senate Bill 2704 will create a framework to facilitate the deployment of small cell technology in Hawaii by wireless companies, providing access to the rights-of-way for a reasonable fee and a fair and predictable application review process, while preserving the ability of local governments to deny an application based on building, safety, or electrical codes or standards.

Please support Senate Bill 2704.



Respectfully submitted,

A handwritten signature in black ink that reads "Bob Bass". The signature is written in a cursive style and is positioned to the left of a vertical line.

Bob Bass

AT&T



February 26<sup>th</sup>, 2018

Honorable Donovan M. Dela Cruz  
Chair, Senate Ways and Means Committee  
Hawaii State Capitol  
Room 208  
Honolulu, Hawaii 96813

Honorable Gilbert S.C. Keith-Agaran  
Nice Chair, Senate Ways and Means Committee  
Hawaii State Capitol  
Room 221  
Honolulu, Hawaii 96813

**RE: Support for SB 2704 SD1 – Wireless Broadband Facilities**

Dear Chair Dela Cruz and Vice Chair Keith-Agaran,

On behalf of CTIA, the trade association for the wireless communications industry, I am writing to express strong support for SB 2704 SD1. The legislation creates a critical framework to promote job creation, economic investment and opportunity throughout Hawaii and we strongly support its passage.

The people of Hawaii continue to demand – at increasing levels – access to wireless products and services. This is demonstrated by the fact that there are more wireless devices in Hawaii than there are people.<sup>1</sup> In addition, nearly half of Hawaii residents live in wireless-only households.<sup>2</sup> These demands from the wireless industry's customers – your constituents – require that wireless networks be both updated to meet the existing demand and readied for the next generation of wireless networks.

Specifically, the existing rules governing wireless networks are designed for wireless facilities that can be as tall as 200 feet. Tomorrow's networks will be augmented by new small cell technology, often the size of a shoebox, which will be placed on structures such as utility poles and streetlights. These capacity additions are critical to keep up with exploding consumer demand on an increasing number of devices and these new networks need new and predictable rules. SB 2704 SD1 establishes an updated common sense framework to meet this immediate need and facilitate millions in new investment in Hawaii.

---

<sup>1</sup> FCC, Voice Telephone Services Report: Status as of December 31, 2016, at <https://www.fcc.gov/wireline-competition/voice-telephone-services-report>, last accessed 2/26/2018.

<sup>2</sup> CDC, National Center for Health Statistics, [https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless\\_state\\_201712.pdf](https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless_state_201712.pdf), last accessed 2/26/2018.



These small cells will help unlock new 5G services from remote healthcare solutions to autonomous cars. 5G networks will provide needed new capacity to accommodate growing consumer demands and help connect 100 times more devices. In a few short years, nearly everything will be connected to ubiquitous wireless networks at speeds up to 100 times faster than today, thanks to the framework established by SB 2704 SD1. Hawaii's communities will be smarter and more connected, and entire sectors, from public safety to tourism, to transportation, will be transformed.

Accenture has found that 5G and small cell deployments will provide tremendous economic benefits. Specifically, Accenture estimates that wireless operators will invest as much as \$275 billion nationwide over seven years creating up to three million jobs and adding approximately \$500 billion to the U.S. GDP through direct and indirect potential benefits.<sup>3</sup> More specifically in Hawaii, 5G deployment in a community like Honolulu may create over 3,500 jobs and increase GDP by over \$571 million, and a community like Hilo may create over 400 jobs and increase GDP by \$66 million.<sup>4</sup>

Furthermore, a report 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<sup>5</sup>:

- **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. Hawaii has an opportunity to be a leader in its deployment.

In closing, over the past two years, thirteen states – representing over 1/3 of the U.S. population – have enacted statewide small cell legislation both streamlining the process for small cell deployment and imposing reasonable fees for access to the infrastructure in the public rights-of-way. Several more states are considering legislation this session as you are. Appropriate siting

---

<sup>3</sup> "How 5G Can Help Municipalities Become Vibrant Smart Cities," Accenture Strategy, Jan 12, 2017, [https://newsroom.accenture.com/content/1101/files/Accenture\\_5G-Municipalities-Become-Smart-Cities.pdf](https://newsroom.accenture.com/content/1101/files/Accenture_5G-Municipalities-Become-Smart-Cities.pdf), last accessed 2/26/2018.

<sup>4</sup> *Ibid.*

<sup>5</sup> 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](http://www.ctia.org/docs/default-source/default-document-library/deloitte_20170119.pdf), last accessed 2/26/2018.



and land use regulation will facilitate and encourage capital investment because capital tends to flow to places that are ready for investment. Enactment of SB 2704 SD1 will send a signal that Hawaii is ready for investment.

Thank you for the opportunity to submit testimony in support of SB 2704 SD1. CTIA strongly urges its approval.

Sincerely,

Bethanne Cooley  
Senior Director, State Legislative Affairs  
CTIA



## Small Cell Examples











# 5G Economic Benefits: Hawaii



## • Honolulu

- Over 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

## • Pearl City

- Over 440 jobs created
- Over \$14 million in Smart City benefits
- \$73 million in estimated GDP growth

## • Hilo

- Over 400 jobs created
- Nearly \$13 million in Smart City benefits
- \$66 million in estimated GDP growth

## • Kailua

- Over 360 jobs created
- Over \$11 million in Smart City benefits
- \$59 million in estimated GDP growth

## • North Kona

- Over 300 jobs created
- Nearly \$10 million in Smart City benefits
- \$50 million in estimated GDP growth

Improving Communities Across America, from small towns to big cities.

✓ \$275B New Wireless Investment



✓ 3 Million New American Jobs



✓ \$500B Contribution to GDP



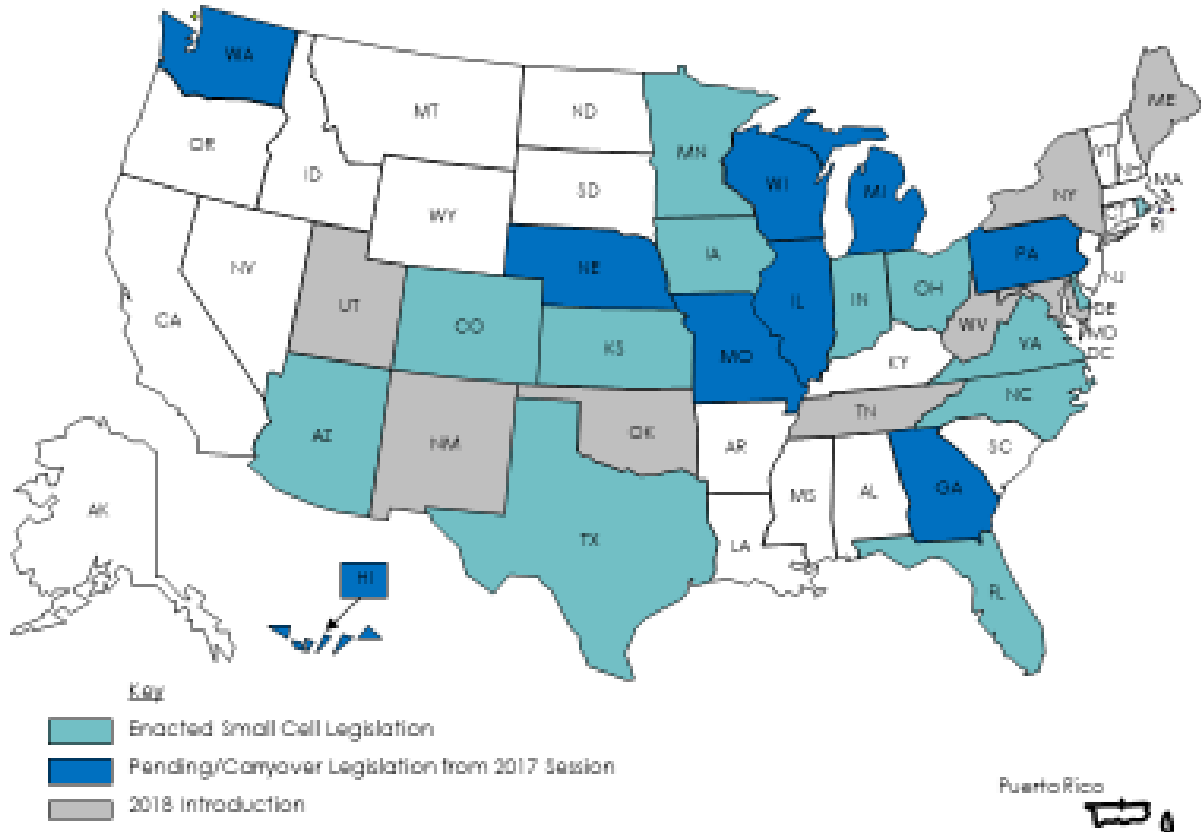
✓ \$160B in Smart Community Benefits & Savings  
by reducing energy usage, decreasing traffic congestion and reducing fuel costs



Source: <http://www.pcm.accenture.com/news/newspcmh-from-accenture-technology-division-economic-and-social-impact-of-5g-in-hawaii>



# State Small Cell Legislative Activity



**SB-2704-SD-1**

Submitted on: 2/26/2018 1:44:41 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Lois J Young	Individual	Oppose	No

Comments:

Aloha Chairman and Committee Members,

Thank you for your dedication to our state motto: the life of land is perpetuated in righteousness.

I AM IN STRONG OPPOSITION TO SB2704

I love today's technology and the many advances made toward better communication and quick responses. Unfortunately along with the technology comes ELECTRO-MAGNETIC FREQUENCIES (EMF) aka RADIATION which are known to cause cancer, tumours, seizures, headaches, tiredness.

EMF are found in anything SMART, phone, refrigerators, computers, ipads, wi-fi, tv.

Tho we were concerned about a nuclear fallout in Hawaii, we should be even more concerned about the damaging effects of EMFs aka RADIATION in our own backyard. We must have studies done on the effects it will have on our population and full proof the system from further damaging our health.

<http://www.saferemr.com/2017/08/5g-wireless-technology-millimeter-wave.html>

<https://ehtrust.org/key-issues/cell-phoneswireless/5g-networks-iot-scientific-overview-human-health-risks/>

Above you'll find a few sites that may influence your decision on holding off in advancing 5G because of unknown and known health risks.

Until studies have been implemented, I urge you to OPPOSE SB 2704.

Sincerely,

Lois Young

