



**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

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

Statement of
LUIS P. SALAVERIA
Director
Department of Business, Economic Development and Tourism
before the
**SENATE COMMITTEES ON ECONOMIC DEVELOPMENT, TOURISM, AND
TECHNOLOGY**
and
COMMERCE, CONSUMER PROTECTION, AND HEALTH
Wednesday, February 7, 2018
1:15 PM
State Capitol, Conference Room 414
in consideration of

**SB 2704
RELATING TO WIRELESS BROADBAND FACILITIES.**

Chairs Wakai and Baker, Vice Chairs Taniguchi and Tokuda, and Members of the Committees.

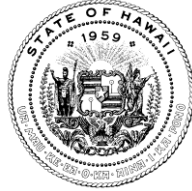
The Department of Business, Economic Development and Tourism (DBEDT) appreciates the intent of SB2704, which establishes a process to upgrade and support next generation wireless broadband infrastructure throughout the State and provides these comments.

As goals stated in the Hawaii Broadband Initiative, Hawaii needs to:

- Ensure ubiquitous access to state of the art broadband services at affordable prices.
- Increase the use of high-speed broadband services and applications for economic development, health care, education, public safety, government efficiency and civic engagement.
- Reduce the barrier to global participation with a resilient broadband network both on-island and trans-Pacific.
- Develop and implement a modern regulatory and permitting environment that supports and advances investment in broadband infrastructure.

DBEDT respectfully prefers the Admin bill and urges the Chair to hear SB2750 – Relating to Telecommunications.

Thank you for the opportunity to offer these comments.



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 COMMITTEES ON
ECONOMIC DEVELOPMENT, TOURISM AND TECHNOLOGY
AND
COMMERCE, CONSUMER PROTECTION, AND HEALTH

TWENTY-NINTH LEGISLATURE
Regular Session of 2018

Wednesday, February 7, 2018
1:15 p.m.

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

TO THE HONORABLE GLENN WAKAI AND THE HONORABLE ROSALYN H. BAKER,
CHAIRS, AND MEMBERS OF THE COMMITTEES:

The Department of Commerce and Consumer Affairs (“Department”) appreciates the opportunity to testify on S.B. 2704, 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 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 residents across the State and efforts to increase competition that may benefit consumers in accessing affordable services. The Department recognizes the benefits of small cell technology in this way and thus supports legislation that establishes statewide uniform and streamlined permit and approval processes that can

expedite the deployment of infrastructure required for small wireless systems. The Department, however, also recognizes the need to balance expedited deployment with the need to protect the public interest. Thus, the Department defers to state and county asset owners and managers to comment on the impact of this bill 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.

The Department also notes its support for the approach offered by the Department of Business, Economic Development, and Tourism in S.B. 2750 and H.B. 2323, which establish a technology-neutral, streamlined process to allow for the collocation of broadband infrastructure on state or county utility poles, light standards, buildings, or structures while also providing the State and county reasonable review and approval or disapproval procedures.

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 fixed broadband at 25 megabits per second download speed and 3 megabits per second upload speed or mobile LTE service with a minimum advertised speed of 5 megabits per second download speed and 1 megabit per second upload speed. Although wireless coverage in the State, as shown by maps using provider data, is widespread and wireless providers have in recent years indicated that substantial sums have been invested in building infrastructure in Hawaii, there is clearly a growing demand for wireless service capacity. 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 adopted by this Committee allowing the deployment of small cell facilities on public assets or in public rights of way, the Department thus respectfully requests that consideration be given to include 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 testify on this bill.

DAVID Y. IGE
GOVERNOR



TODD NACAPUY
CHIEF INFORMATION
OFFICER

STATE OF HAWAII
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 ECONOMIC DEVELOPMENT, TOURISM, AND TECHNOLOGY
SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH

Wednesday, February 7, 2018
1:15 P.M.

State Capitol, Conference Room 414

SENATE BILL NO. 2704
RELATING TO WIRELESS BROADBAND FACILITIES

Dear Chairs Wakai and Baker, Vice Chairs Taniguchi and Tokuda, 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 SB2704, Relating to Wireless Broadband Facilities, which establishes a process to upgrade and support next generation wireless broadband infrastructure throughout the State.

As a strong supporter 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. However, 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.

We recommend adding specific language below, where appropriate, to clearly safeguard those services:

"State and county poles, related structures, sites, and facilities supporting public safety, law enforcement, and emergency communications are excluded from these public access provisions."

Those excluded locations are but a small fraction of government sites that commercial carriers could request access to. In recent years, the State and county governments, along with their federal partners, have invested hundreds of millions of dollars building and maintaining radio antennas, poles, towers, and ground stations for statewide public safety, emergency, and disaster management services. To protect the longevity of those investments and to ensure that non-government systems do not hamper, obstruct, or hinder existing and future public safety communications operations and

plans, the sharing of such government facilities, infrastructure, and rights of ways, with commercial wireless services has, thus far, been limited.

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.

Thank you for this opportunity to testify in support of SB2704 and to provide comments.

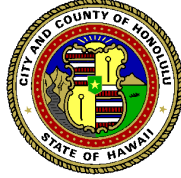
**OFFICE OF THE MAYOR
CITY AND COUNTY OF HONOLULU**

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

KIRK CALDWELL
MAYOR

ROY K. AMEMIYA, JR.
MANAGING DIRECTOR

GEORGETTE T. DEEMER
DEPUTY MANAGING DIRECTOR



CITY AND COUNTY OF HONOLULU
TUESDAY, FEBRUARY 6, 2018; 10:30 AM

TO: THE HONORABLE GLENN WAKAI, CHAIR
THE HONORABLE BRIAN T. TANIGUCHI, VICE CHAIR
AND MEMBERS OF THE COMMITTEE ON ECONOMIC
DEVELOPMENT, TOURISM, AND TECHNOLOGY

THE HONORABLE ROSALYN H. BAKER, CHAIR
THE HONORABLE JILL N. TOKUDA, VICE CHAIR
AND MEMBERS OF THE COMMITTEE ON COMMERCE, CONSUMER
PROTECTION, AND HEALTH

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

SUBJECT: COMMENTS ON SB2704

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 10, lines 14 to 18, 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 11, lines 11 to 17: 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 20, line 20 to page 21, line 4 prohibits 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. Without City review or approval, a carrier may install "replacement" equipment that is substantially heavier if it has the same dimensions as the original equipment. The City would not be able to know or to verify that the existing pole is able to handle any additional load from "replacement" equipment.
- 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.
 - 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.

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.

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.

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 13, lines 9 to 18) 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 14, lines 13 to 21, 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 Not Addressed:

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 15, line 16 to page 16, line 2) 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.

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. 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. 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 in the carriers' or operators' insurance policies.

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 19, lines 14 to 20 address 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.

SB-2704

Submitted on: 2/5/2018 2:58:26 PM

Testimony for ETT on 2/7/2018 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Councilmember Yuki Lei Sugimura	Maui County Council	Support	No

Comments:

This bill establishes a process to upgrade and support next generation wireless broadband infrastructure throughout the State. This 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.



February 4th, 2018

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

Honorable Rosalyn H. Baker
Chair, Senate Commerce, Consumer Protection and Health Committee
Hawaii State Capitol
Room 230
Honolulu, Hawaii 96813

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

Honorable Jill N. Tokuda
Vice Chair, Senate Commerce, Consumer Protection and Health Committee
Hawaii State Capitol
Room 202
Honolulu, Hawaii 96813

RE: Support for SB 2704 – Wireless Broadband Facilities

Dear Chairs Wakai and Baker and Vice Chairs Taniguchi and Tokuda,

On behalf of CTIA, the trade association for the wireless communications industry, I am writing to express strong support for SB 2704. 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.¹ In addition, nearly half of Hawaii residents live in wireless-only households.² These demands from the wireless industry's customers – your constituents – require

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 2/3/2018.

² CDC, National Center for Health Statistics, https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless_state_201712.pdf, last accessed 2/3/2018.



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 establishes an updated common sense framework to meet this immediate need and facilitate millions in new investment in Hawaii.

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. 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.³ 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.⁴

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 sectors⁵:

- **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.

³ "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, last accessed 1/2/2018.

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 1/2/2018.



- **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 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 will send a signal that Hawaii is ready for investment.

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

Sincerely,

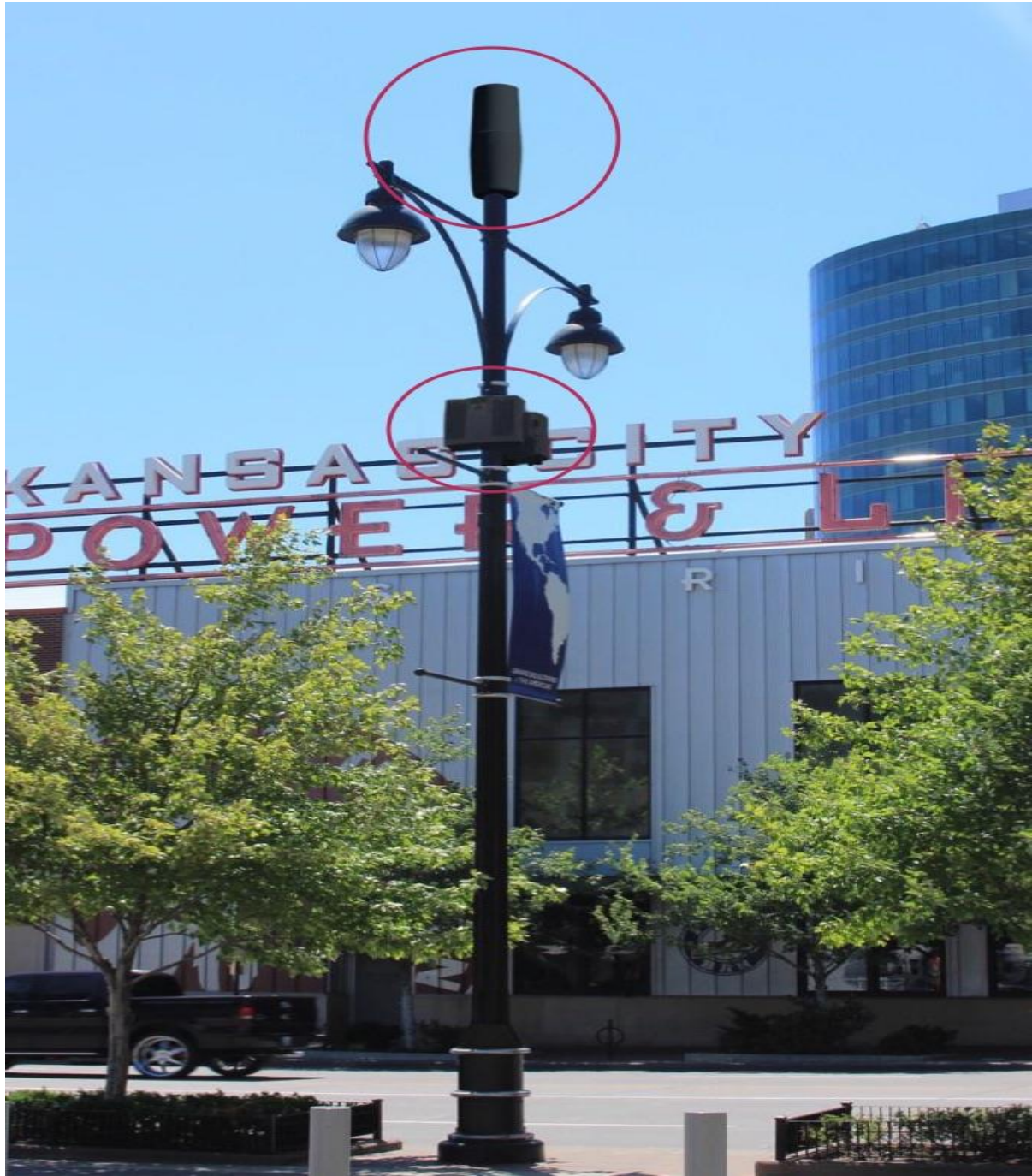
Bethanne Cooley
Senior Director, State Legislative Affairs
CTIA



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



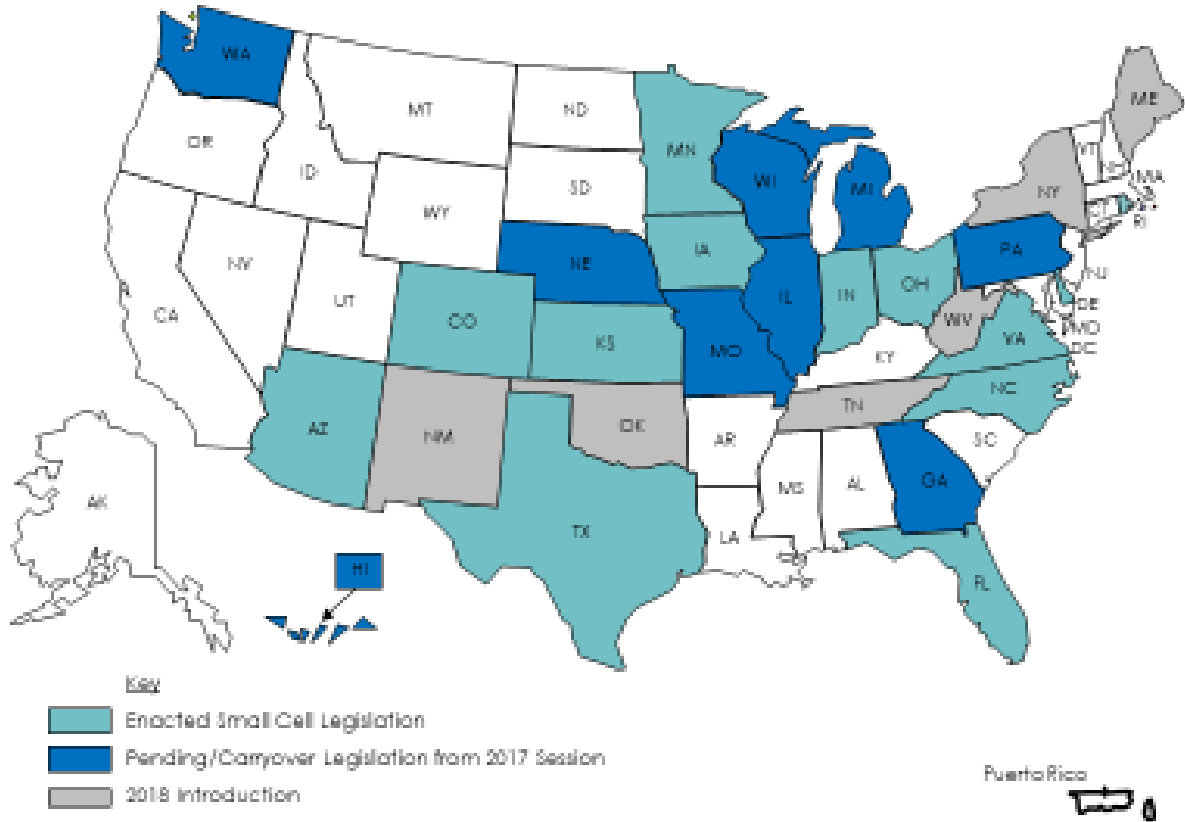
✓ \$160B in Smart Community Benefits & Savings
by reducing energy usage, decreasing traffic congestion and reducing fuel costs



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

Submitted on: 2/4/2018 3:03:26 PM

Testimony for ETT on 2/7/2018 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Brenda M. Palomino	Sprint	Support	No

Comments:

February 4, 2018

Honorable Glenn Wakai

Chair, Senate Economic Development, Tourism and Technology Committee

Hawaii State Capitol Room 216

Honolulu, Hawaii 96813

Honorable Rosalyn H. Baker

Chair, Senate Commerce, Consumer Protection and Health Committee

Hawaii State Capitol

Room 230

Honolulu, Hawaii 96813

Honorable Brian T. Taniguchi

Vice Chair, Senate Economic Development, Tourism and Technology Committee

Hawaii State Capitol Room 219

Honolulu, Hawaii 96813

Honorable Jill N. Tokuda

Vice Chair, Senate Commerce, Consumer Protection and Health Committee

Hawaii State Capitol Room 202

Honolulu, Hawaii 96813

RE: SB 2704: SUPPORT – Wireless Broadband Facilities

Dear Chairs Wakai and Baker and Vice Chairs Taniguchi and Tokuda,

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

deployment of wireless broadband facilities. SB 2704 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

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 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 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 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. 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



Jesús G. Román
VP & Assistant General Counsel
Pacific & North Central Market
15505 Sand Canyon Avenue
Irvine, CA 92618

February 2, 2018

Senator Glenn Wakai, Chair
Members of the Senate Committee on Economic
Development, Technology and Tourism

Senator Roz Baker, Chair
Members of the Senate Committee on Commerce
Consumer Protection and Health

Twenty-Ninth Legislature
Regular Session of 2018

RE: SB 2704 – RELATING TO WIRELESS BROADBAND FACILITIES
Hearing Date – February 7, 2018 at 1:15 p.m.

Dear Senators Wakai and Baker:

Mahalo for the opportunity to submit testimony on behalf of Verizon Wireless in STRONG SUPPORT of SB 2704 – 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 advent of unlimited data has provided consumers the ability to use mobile broadband anywhere, anytime, without the aid of WiFi, and consumers are using the wireless network constantly to stream high definition video, to play music and to apply for jobs, do homework, and just about all internet needs. The wireless infrastructure available in Hawaii is unable to adequately meet the growing demand for capacity and quality of service that consumers have become accustomed to and which they deserve.

But the existing challenges with providing a quality mobile broadband customer experience will only become more challenging. New technologies like 4K High Definition Video, Augmented Reality layered on smart phone apps (for example, PokeMan Go), Virtual Reality, among many others, put additional strain and demands on mobile broadband networks.

This is true for the existing 4G LTE network. But as carriers embark on the deployment of the fifth and generation of advanced wireless broadband technology, 5G, consumer demand for these services will continue to increase, along with the demand for ultrafast speeds, low latency (responsiveness of the network) and connection to the Internet of Things. Because of the propagation characteristics of the 5G spectrum (millimeter wave), which covers 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. The small cells are essential to propagating the spectrum needed to supplement 4G LTE and to deploy 5G.

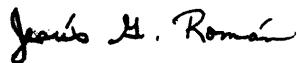
Because small cells are relatively new, the state and county agencies do not have existing permitting processes to allow deployment of small cells in a timely manner. Instead, the agencies rely upon antiquated permitting processes which can take more than 18-24 months for approval. The current permitting 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 up to 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.

SB 2704 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 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 for a host of reasons including if the proposed installation does not meet building, electrical, health and safety requirements.

Simply put, SB 2704 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 is the vehicle to achieve those objectives.

Mahalo,



Jesús G. Román

Written Statement of
Ani Menon
Director of Government & Community Affairs

**SENATE COMMITTEES ON
ECONOMIC DEVELOPMENT, TOURISM, AND TECHNOLOGY &
COMMERCE, CONSUMER PROTECTION, AND HEALTH**

February 7, 2018 1:15PM
State Capitol, Conference Room 414

COMMENTS FOR:

S.B. NO. 2704 RELATING TO WIRELESS BROADBAND FACILITIES

To: Chairs Wakai and Baker, Vice Chairs Taniguchi and Tokuda, and Members of the Committees
Re: **Testimony providing comments on SB2704**

Aloha Honorable Chairs, Vice Chairs, and Committee Members:

Thank you for this opportunity to submit comments. Hawaiian Telcom supports the development of a robust broadband network throughout the State, and believes that the benefits afforded to small wireless facilities under SB2704 should apply equally to wireline broadband.

The purpose of this legislation, enumerated in Section 1, is “to address the difficulties in deploying wireless infrastructure and to increase competitive options for communications services, improve the communications network, and promote safety, job growth, and education.”

It is our position that measures designed to encourage and promote both wireline and wireless services will speed up the build out of Hawaii’s advanced broadband network. Most importantly, including wireline broadband in this measure will provide consumers with greater options, and the competition among providers will ultimately lead to lower prices.

Hawaiian Telcom has invested close to one billion dollars in broadband infrastructure to increase connection speeds, network capacity, and develop a robust broadband network Statewide. We are designated as “critical infrastructure” by our State and federal governments, and institutions including the military, hospitals, schools, and hotels. Hawaiian Telcom also manages the next generation platform that provides 911 emergency services Statewide. We are leaders in the development and deployment of the wireline backhaul infrastructure that enables the 4th generation Long Term Evolution (4G LTE) technology, and are continuously investing in our robust next generation fiber network.

If the intention of this measure is to enable investments in broadband technology to provide “a critical platform for the ‘internet of things’...,” we believe extending the benefits within this measure to wireline broadband will generate healthy competition between providers, rapidly

advance the development and deployment of next generation technology, and enable the State's economic development initiatives.

In addition to encouraging an equal level playing field by including wireline broadband in this measure, Hawaiian Telcom respectfully requests that the definition of "state or county pole" be amended to limit the scope to solely-owned state or county poles to address concerns around poles that are jointly owned by other joint pole entities.

Lastly, as a cable provider, we are required to pay a franchise fee that totals 5% of gross revenues derived from the operation of our cable system for the provisioning of cable services. This equates to millions of dollars in fees paid annually to the State, and is a consideration we make when pricing our services. This measure allows unfranchised providers to circumvent the franchise fee. As a cable operator, we should not be discriminated against for our use of public rights-of-way when wireless providers may be shielded from the requirement.

Thank you for the opportunity to provide these comments.



Maui Hotel & Lodging

ASSOCIATION

Testimony of

Lisa H. Paulson

Executive Director

Maui Hotel & Lodging Association

on

SB 2704

Relating To Wireless Broadband Facilities

COMMITTEE ON ECONOMIC DEVELOPMENT, TOURISM, AND TECHNOLOGY
COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH

Wednesday, February 7, 2018, 1:15pm

Conference Room 414

Dear Chairs Wakai and Baker; Vice Chairs Taniguchi and Tokuda; 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, 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.

Testimony before the Senate Committees on Economic Development, Tourism, and Technology, and Commerce, Consumer Protection, and Health

By Mindy E. Hartstein
Manager, Pole Infrastructure Enterprise Department
Energy Delivery
Hawaiian Electric Company, Inc.

February 7, 2018
1:15 p.m., Conference Room 414

Senate Bill SB2704 Relating to Wireless Broadband Facilities

Chairs Wakai and Baker, Vice Chairs Taniguchi and Tokuda, and Members of both Committees:

My name is Mindy E. Hartstein, and I am testifying on behalf of Hawaiian Electric Company, Inc. and its subsidiaries, Hawai'i Electric Light Company, Inc. and Maui Electric Company, Limited (collectively, the "Hawaiian Electric Companies" or "Companies") **in support of SB2704, with clarifying language that we offer as amendments.**

The Hawaiian Electric Companies support the expansion of infrastructure and technology in order to advance Hawai'i forward. Specifically related to the Hawaiian Electric Companies' role in supporting broadband deployment (fiber and wireless), the Companies understand its obligation to serve its electric customers in a safe and reliable manner, but also understand its assets (i.e. its utility poles, light poles and other infrastructure) are critical building blocks to the efficient and speedy deployment of broadband technology. The Companies recognize that the telecommunications industry, including customers they serve, are the Companies' customer in this regard, and the Companies take great pride and commitment in ensuring positive customer experiences for all.

The Companies have carved out a new department within Energy Delivery, the Pole Infrastructure Enterprise Department ("PIE"), which is tasked with (1) employing a modern, comprehensive pole infrastructure management system to process pole attachment requests for all of its poles, (2) developing core engineering/make-ready standards to ensure efficient and safe deployment of wireline and wireless attachments, (3) creating an enhanced online application and communication process for internal and external use. These standards and processes incorporate FCC guidelines, the NESC standards, G.O. 6 provisions, and best practices and standards in the utility industry.¹ This pole infrastructure management system will be identical throughout the Hawaiian

¹ The Companies are utilizing CPS Energy's tested and adopted third-party attachment application process and standards as a starting point in developing its own attachment standards and processes. CPS Energy is a municipal electric utility in San Antonio, TX, who sits at the forefront of telecommunications deployment and development of attachment standards by an electric utility.

Electric Companies' service territories and will serve to expedite the application process, standardize engineering standards, streamline the make-ready process and ensure proper pole loading and pole maintenance for public safety. It will further allow for accurate accounting of attachment requests and better monitoring and control of unauthorized attachments.

SB2704 aims to create similar broadband deployment standards, application processes, and right of way requirements for State and county poles/facilities. The Companies encourage process planning for the State and county, similar to what the Companies are deploying internally. While the Companies support the intent of this bill and the expeditious, streamlined deployment of broadband for Hawai'i, ***the Companies wish to clarify that SB2704 only apply to State and/or county solely-owned poles and facilities, not utility poles jointly owned with the Companies or the Companies' own utility or light poles (collectively as the "Companies' Poles")***. There are situations where third-party attachers may request to attach to a Company Pole that is jointly owned with the State or county. The Companies do not wish third-party attachers to be subject to multiple sets of standards and processes when attaching to the Companies' Poles, which could cause delays in processing and confusion in standards. While the Companies recognize that the use of the Companies' Poles is critically fundamental to the speedy deployment of broadband infrastructure and desire to be the leader in providing pole infrastructure for broadband in Hawai'i, delivering safe and reliable electric energy to all end-users is paramount. We believe our standards and processes will ensure the most streamlined and effective deployment of broadband infrastructure on the Companies' Poles.

We offer clarifying language as follows:

On page 5, line 3: **[\$1] Applicability.** This chapter shall only apply to activities of a wireless provider to deploy small wireless facilities and to modified or replaced State and/or county solely-owned utility poles associated with small wireless facilities.

On page 5, line 19: "Application" means a request submitted by an applicant to the State or county for a permit to collocate small wireless facilities or to approve the installation or modification of a State and/or county solely-owned utility pole.

On page 8, line 6: "State or county pole" means a utility pole solely-owned by the State and/or county, which may be managed, or operated by, or on behalf of, the State of Hawaii and/or a county in the State of Hawaii.

On page 9, line 3: "Utility pole" means a pole or similar structure that is or may be used in whole or in part by or for wireline communications, electric distribution, lighting, traffic control, signage, or a similar function, or for the collocation of small wireless facilities. "Utility pole" shall not include wireless support structures, and shall not include utility poles or light poles that are solely-owned or jointly-owned with an investor-owned utility.

Thank you for the opportunity to testify on this matter.

**SENATE COMMITTEE
ON
ECONOMIC DEVELOPMENT, TOURISM, AND TECHNOLOGY**

and

**SENATE COMMITTEE ON
COMMERCE, CONSUMER PROTECTION, AND HEALTH**

February 7, 2018

Senate Bill 2704 Relating to Wireless Broadband Facilities

Chair Wakai, Chair Baker, and members of the Committee on Economic Development, Tourism, and Technology, and Committee on Commerce, Consumer Protection, and Health:

On behalf of T-Mobile US, I am Jim Blundell, Senior Manager, State Government Affairs, **strongly supporting** the passage of SB 2704 Relating to Wireless Broadband Facilities. T-Mobile stands with the authors and sponsors of this bill in their effort to promote investment in wireless infrastructure in Hawaii and to clear away burdens and challenges that stand in the way of first-class wireless broadband networks in Hawaii.

T-Mobile is primed to deploy small cell networks to support 5G technology in the coming years, as are the other wireless carriers in Hawaii. The deployment of small cell and 5G networks is critical for future applications that consumers are demanding, such as healthcare delivery, the Internet of things, autonomous vehicles, etc. In order to deploy these networks, we must be able to densify networks and to do so very rapidly. The rapid deployment of advanced wireless networks, and of broadband networks generally, is a statewide priority in Hawaii.

We support state efforts to establish statewide policies designed to incentivize and clear the way for these networks. T-Mobile supports state policy that seeks to advance the following priorities:

- **Access to public rights-of-way** in a manner comparable to our broadband competitors
- **Streamlined siting processes** appropriate to the comparative impacts of small cells and comparable to our competitors
- **Reasonable costs and fees** that reflect the actual costs to local government of allowing small cells in the right-of-way

This bill, SB 2704, accomplishes all three of these objectives. It provides access to the public rights-of-way, a streamlined siting process, and costs and fees that are based on compensating actual costs.

SB 2704 represents precisely the form of statewide broadband policy that a state such as Hawaii, which is focused on and committed to laying the foundation for the deployment of broadband, should undertake.

T-Mobile is proud to stand with the authors and sponsors of SB 2704 and support broadband policy that will actually achieve its intended purpose.

Thank you for the opportunity to present this testimony.

SB-2704

Submitted on: 2/6/2018 9:03:42 AM

Testimony for ETT on 2/7/2018 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Bob Bass	AT&T	Support	No

Comments:

Testimony is attached, thank you!



TESTIMONY OF CHARTER COMMUNICATIONS

Senate Committee on Economic Development, Tourism, and Technology

Senate Committee on Commerce, Consumer Protection, and Health

Hawai'i State Capitol, Conference Room 414

RE: S.B. 2704

WEDNESDAY, FEBRUARY 7, 2018

1:15 PM

Aloha Chair Wakai, Chair Baker, and Members of the Committees,

I am Myoung Oh, Director of State Government Affairs, here on behalf of Charter Communications in **opposition** to S.B. 2704.

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 barred from attaching wireless infrastructure on county property nor are they precluded from getting right-of-way (ROW) authority to attach antennas. Wireless providers currently have attachment rights for both utility and county owned poles as well as the ability to work with counties on attachments for other structures.

However, we believe S.B. 2704 would create an uneven playing field between cable and telecommunications providers in the state by crafting special rules for the placement of wireless facilities in the public rights-of-way.

In order to access the public rights-of-way Charter is required to obtain separate franchise agreements with Oahu, Hawaii, Maui, and Kauai. Additionally, we have agreements with the Navy/Airforce, Army, and Marines.

We are also subject to stringent safety requirements and other obligations, including the requirement to pay franchise fees of up to 5% of gross annual revenues for occupancy and use of the ROW. This equates to millions of dollars each year in payments.

Charter believes S.B. 2704 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.**

Additionally, the proposed expedited process does not simply apply to small cell antennas. “Wireless facility,” on Page 9, lines 9-16, is 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 such, Charter believes that S.B. 2704 goes far beyond just collocating an antenna on a utility pole. A 5G network requires wireline backhaul to connect these antennas and to carry broadband and other communications traffic from the antennas to central distribution facilities. 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.”

Charter looks forward to continuing to provide our current and new services, but it should not be treated discriminatorily, and 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. 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 will not achieve that objective. Page 15, lines 10-15 prohibits in-kind obligations (e.g. community or 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 Hawaii, 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 with almost non-existent fees, taxes, and mandates for 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: 1) clarify and make clear definitions on wireless facilities; and 2) recommends including an amendment that requires wireless and wireline providers to equitably share the franchise fee.

Mahalo for the opportunity to testify.

~~“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.~~

~~“Utility pole” means a pole or similar structure that is or may be used in whole or in part by or for wireline communications service, electric service, distribution, lighting, traffic control, signage, or a similar function, or for the collocation of small wireless facilities. “Utility pole” shall not include wireless support structures.~~

~~“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.

“Wireless facility” includes small wireless facilities.

“Wireline backhaul” means the transport of communications service or any other electronic communications by coaxial, fiber-optic cable, or any other wire.