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Statement of
LUIS P. SALAVERIA
Director
Department of Business, Economic Development and Tourism
before the
SENATE COMMITTEES ON WAYS AND MEANS

Tuesday, March 3, 2015
9:05 AM
State Capitol, Conference Room 211
in consideration of
SB 892, SD 1
**RELATING TO OMNIBUS HAWAII RESILIENCE
AND SUSTAINABILITY STRATEGY.**

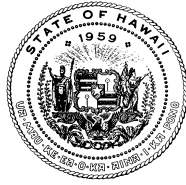
Chair Tokuda, Vice Chair Kouchi, and Members of the Committee.

The Department of Business, Economic Development and Tourism (DBEDT) supports the intent of SB 892, SD 1, provided that its passage does not replace or adversely impact priorities in the Executive Budget. This bill appropriates funding for Hawaii resilience and sustainability strategy in the areas of broadband, joint emergency management, energy efficiency and smart grid, and water and sewer infrastructure.

DBEDT agrees that increased broadband capacity is critical to businesses and the growth of Hawaii's economy. The Broadband Task Force recommended that the State establish carrier-neutral, open-access fiber-optic cable landing stations to make it less costly and time-consuming for privately-financed transpacific cables to land in Hawaii.

DBEDT contracted for a specifications study in 2012 and transmitted the final report to the Ways and Means Committee in 2014. The study determined the preferred system specifications for military and business, and preliminary estimates of cost for plan, design and construction. DBEDT is assessing the various financing options available to build the landing sites. The State could partner with the private sector for operation of the landing sites.

We defer to the other departments for comments on portions that are related to their programs. Thank you for the opportunity to offer these comments.



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. Box 3378
Honolulu, HI 96801-3378
doh.testimony@doh.hawaii.gov

**TESTIMONY COMMENTING on S.B. 892, S.D. 1
RELATING TO OMNIBUS HAWAII RESILIENCE AND SUSTAINABILITY
STRATEGY**

SENATOR JILL N. TOKUDA, CHAIR
SENATE COMMITTEE ON WAYS AND MEANS

Hearing Date: March 3, 2015

Room Number: 211

- 1 **Fiscal Implications:** No fiscal implications on the Department of Health, however,
- 2 S.B. 892, S.D. 1 will require sufficient general funding to fulfill its mandate.
- 3 **Department Testimony:** The Department of Health is correcting two misstatements on the
- 4 status and purpose of the drinking water state revolving fund (DWSRF). S.B. 892, S.D. 1 states
- 5 that there is \$100 M unused in the DWSRF. To date \$78M, have been committed to loans
- 6 leaving \$22M available for future loans until outstanding loans are repaid. While the DWSRF
- 7 encourages resiliency and sustainability, the loans are first for water system improvement, which
- 8 include projects such as water treatment plant construction, reservoir and line replacement, and
- 9 source development.
- 10 The DWSRF loans are not “for county water improvement projects that have had difficulty
- 11 obtaining necessary permits from the Department of Health.” These loans are for county water
- 12 system improvement projects which are prioritized and approved by the Department of Health.
- 13 This low interest loan program is to reduce the cost to make the improvement more affordable
- 14 while at the same time strengthening the protection of drinking water quality.
- 15 Finally, the Department of Health knows the review of water systems is a resource intensive
- 16 activity. We strongly recommend that the Committee define the mandate of S.B. 892, S.D. 1 by
- 17 citing the number and size of water and sewer systems in each county intended for review and
- 18 clearly define the scope of the watershed reviews and advanced monitoring that is intended.
- 19 Thank you for this opportunity to provide comment.



**COMMANDER, U.S. PACIFIC COMMAND
(USPACOM)
CAMP H.M. SMITH, HAWAII 96861-4028**

February 23, 2015

State of Hawaii Legislature
415 South Beretania Street
Honolulu, HI 96813

Dear Madame Chair:

We concur with Hawaii's effort to provide more secure, reliable, and resilient Internet and data connectivity. Increased broadband capacity on the island is crucial to USPACOM's ability to command and control forces across the Asia-Pacific, especially with the increasing amount of data that must be transferred.

The John Hopkins University Applied Physics Laboratory completed a study in 2011 and determined that Trans-Pacific submarine cables are currently in unsecured, publicly accessible areas, and highly vulnerable to accidental or intentional damage. The study also concluded that by 2020 required data throughput capacity will exceed available Trans-Pacific submarine cables bandwidth, ultimately affecting users throughout Hawaii and the Asia-Pacific.

Technology now allows for installation of new resilient Submarine Fiber Optic (SFOC) which has the capability to bypass Hawaii entirely. Robust broadband is the communication backbone for our 24-hour command and control coverage of the Asia-Pacific. Without additional capacity on the island, the exponential increase in technological devices, like GPS, smartphones, and high speed computing will cause the State of Hawaii and USPACOM to become increasingly vulnerable to communication degradation and/or outages.

The security and resilience of the communications network requires a collaborative effort that involves active participation by the government, academic institutions and the private sector. USPACOM is committed to working with the community to achieve these objectives.

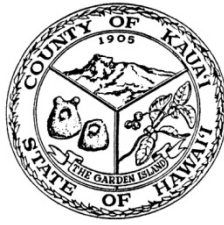
Sincerely,

A handwritten signature in black ink, appearing to be "S. J. Locklear, III", is written over a horizontal line.

S. J. LOCKLEAR, III

Copy to:
Hawaii Governor David Ige

Bernard P. Carvalho, Jr.
Mayor



Robert F. Westerman
Fire Chief

Nadine K. Nakamura
Managing Director

KAUA'I FIRE DEPARTMENT
County of Kaua'i, State of Hawai'i

4444 Rice Street, Suite 315, Lihu'e, Hawai'i 96766
TEL (808) 241-4980 FAX (808) 241-6508

March 2, 2015

The Honorable Jill Tokuda, Chair
Committee on Ways and Means
The State Senate
State Capitol, Room 207
Honolulu, Hawaii 96813

Dear Chair Tokuda

Subject: Senate Bill (SB) 892 Senate Draft (SD) 1
Relating to Omnibus Hawaii Resilience and Sustainability Strategy

I am Robert F. Westerman, Vice-Chair of the Hawaii State Fire Council (SFC) and Fire Chief of the Kauai Fire Department (KFD). The SFC and the KFD support the intent of SB 892, SD 1, which makes appropriations for a Hawaii resilience and sustainability strategy in the areas of broadband, joint emergency management, energy efficiency and smart grid, and water and sewer infrastructure.

We believe this measure seeks to improve first responder communications across jurisdictions and among different agencies. Having the ability to communicate quickly and effectively at an emergency incident is a critical component for effecting a successful outcome. Any step to secure funds for a state training facility would greatly enhance natural and manmade disaster preparedness that are currently not available to county first responders. We respectfully request consideration to participate in the planning phase of the center.

The SFC and the KFD urge your committees' support on the passage of SB 892, SD 1.

Should you have questions, please contact me at rwesterman@kauai.gov or (808) 241-4975.

Sincerely,

Robert F. Westerman
Vice-Chair

RFW/eld



P.O. Box 253, Kunia, Hawai'i 96759
Phone: (808) 848-2074; Fax: (808) 848-1921
e-mail info@hfbf.org; www.hfbf.org

March 2, 2015

HEARING BEFORE THE
SENATE COMMITTEE ON WAYS AND MEANS

TESTIMONY ON SB 892 SD1
RELATING TO OMNIBUS HAWAII RESILIENCE AND SUSTAINABILITY STRATEGY
Room 211
1:00 PM

Aloha Chair Tokuda, Vice Chair Kouchi, and Members of the Committee:

I am Christopher Manfredi, President of the Hawaii Farm Bureau Federation (HFBF). Organized since 1948, the HFBF is comprised of 1,832 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interest of our diverse agricultural community.

Hawaii Farm Bureau **supports the intent of SB 892 SD1 with comments and offers an amendment outlined below.** Increasing Hawaii's sustainability by increasing our resiliency through the use of technology is a positive step forward. Hawaii's farmers and ranchers have historically faced challenges bouncing back from economic and environmental downturns.

Innovation is critical to agriculture's long term success thus enabling Hawaii's goals of increased self-sufficiency and sustainability. Hawaii's agricultural producers find themselves increasingly dependent upon technology to innovate new practices to remain competitive in an increasingly global marketplace. Yet, in certain rural areas, reliable broadband service is not available and basic tools offered by USDA to farmers on the continent are not similarly available to Hawaii's farmers and ranchers. Satellite imagery depicting your farm's plant health is available to farmers on the mainland, yet Hawaii farmers do not typically have access to similar information because we are on the edge of the satellite imagery zone. Including technology needs of agriculture within the scope of this measure is critical to provide farmers and ranchers proactive tools to meet Hawaii's goal of increased sustainability and to achieve competitiveness with our mainland counterparts.

Additionally, State law requires a State Water Plan within which there is included an Agricultural Water Use and Development Plan. Climatic and regulatory changes make watershed planning with use of stormwater resources an important need for agriculture.

We therefore support Section 9 but request that it be ammended to include these needs.

Hawaii Farm Bureau believes agriculture is part of the business community, yet we find that farmers and ranchers are not always treated as such. We also find that watershed planning often focusses on domestic and environmental needs, forgetting the needs of agriculture. To remedy this, we suggest the following amendment:

(2) Economic development to accelerate business and agricultural development and provide new opportunities for innovation, expansion, and e-commerce. Communities that connect their residents create wealth and attract business.

SECTION 9. There is appropriated out of the general revenues of the State of Hawaii the sum of \$ or so much thereof as may be necessary for fiscal year 2015-2016 and the same sum or so much thereof as may be necessary for fiscal year 2016-2017 as a grant pursuant to chapter 42F, Hawaii Revised Statutes, for research by the Pacific-Asia institute for resilience and sustainability, established under Act 229, Session Laws of Hawaii 2014, to target the water and sewer distribution systems on each island; provided that the research shall incorporate the full watershed and research analysis including water requirements for agriculture in a few strategic locations.

Thank you for this opportunity to provide our comments and suggested amendment on this important matter. We request your support of this measure including the amendments to recognize agricultural in the measure.



March 2, 2015

To Whom It May Concern:

The objective of the omnibus bill is to provide the foundation of a comprehensive approach to specifically address the vulnerabilities of Hawaii's critical infrastructure while building a technologically advanced, knowledge-based workforce.

This bill provides a strategy for developing broadband capacity and its applications for building more resilient critical infrastructure throughout the Hawaiian Islands and is critical for the future vitality of the state.

The omnibus bill is focused on six specific areas that require immediate attention for the future livelihood of our State, including 1) Smart Grid; 2) Broadband; 3) Water and Sewer; 4) Joint Emergency Management Center; 5) Education; 6) Workforce Development. Each section of this bill provides a roadmap for how Hawaii can address its critical infrastructure needs in partnership with the private and civil sectors through manageable, prioritized next steps without putting the overall strategy at risk.

Hawaii Pacific University will be hosting the Asia Pacific Institute for Resilience and Sustainability (AIRS) as well as working with the consortia of Universities to assist in implementing this strategy.

This bill and the associated public private partnerships will allow the State to develop a knowledge-based workforce as well as diversify the economic base by promoting research, education and technological innovation while simultaneously strengthening our critical infrastructure.

Hawaii Pacific University supports SB 892 and looks forward to working with the AIRS team moving forward.

Sincerely,

A handwritten signature in blue ink, appearing to read 'G. Bannister', is written over a horizontal line.

Dr. Geoffrey Bannister, Ph.D.
President

03 March 2015

Senator Jill N. Tokuda, Chair, Committee on Ways and Means
Joint hearing on Senate Bill 892, Relating to Omnibus Hawaii Resilience and Sustainability Strategy

Professor Steve Chan, PhD
Chair, Swansea University Network/Relationship Science Analytics PhD Program
Director, Sensemaking-U.S. Pacific Command Fellowship
Director, Pacific-Asia Institute for Resilience and Sustainability (AIRS)
4365 Executive Drive, Suite 670
San Diego, CA 92121

RE: Support for SB892

Dear Chair Tokuda and members,

Support for a bill that provides a strategy for developing broadband capacity and its applications for building more resilient critical infrastructure throughout the Hawaiian Islands is vital for the future vitality of the state. Broadband or high speed internet access can provide Hawaii an increased level of access to a wide range of resources, services, and products that can enhance the everyday life of citizens throughout the state in a variety of ways, such as:

- **Public Safety and Homeland Security:** Broadband enables interoperable broadband public safety networks, which connect first responders in an emergency, and allow emergency workers to communicate across disparate networks, between jurisdictions, and across different agencies – critical capabilities at the scene of an emergency. Police, fire, and emergency medical personnel can react to crises quickly, fostering cooperation among numerous public safety agencies. High speed Internet improves victim to responder communications by enabling instantaneous digital transmissions to and from members of a connected community.
- **Economic Development/E-Commerce:** Businesses need broadband to compete on a global level and seek out high-speed broadband access when choosing to grow their business. When it comes to finding jobs, or applying for jobs, broadband Internet access is essential. The FCC recently estimated that 80% of Fortune 500 companies only advertised for positions online. High-speed access accelerates business development, and provides new opportunities for innovation, expansion, and e-commerce. Communities that connect their residents create wealth and attract business investments.
- **Education:** Broadband Internet access levels the playing field when it comes to educational resources. Children in inner city neighborhood, affluent homes, and farm communities can all access the same resources. Textbook materials can be complemented with online resources, and children can access all of these materials from school and home.





- **Healthcare:** Telehealth & Telemedicine have become an important element of efficient healthcare delivery, which promotes better patient care, and even saves lives. With medical costs rising, and the availability of insurance limited, the costs saving benefits of telemedicine are also important. Broadband facilitates efficiency in healthcare delivery and creates opportunities for doctors and healthcare specialists to work together as a virtual team – with specialists located in any part of the world. A family practitioner in a small rural town can send medical images of a patient, to a specialist in any part of the world for an instant expert consultation. Test results from a hospital emergency room or laboratory can be sent to radiologist or doctor in seconds, making rapid diagnosis a reality, and doctors are also now sending prescriptions directly from their offices to pharmacies, greatly reducing errors, with automatic checking for interactions.
- **Communications:** Being digitally connected means communications can improve people's lives on the job, in their personal lives, and unite people with disabilities. Broadband empowers people with disabilities and removes barriers that keep them from participating in everyday activities. In addition to general communications social media also keeps people connected, and can facilitate meetings and communications, where face-to-face interaction was previously required. Broadband enables people to work from home, saving time and expenses, and the environment. Employers have been encouraging this concept to save overhead expenses and improve employee satisfaction. Smart Grid technology will also enable homeowners to monitor energy usage in real time, and adjust usage patterns to save energy costs and aid in conservation efforts. Energy conservation measures can be started, with real-time savings calculated.

Policy makers are now frequently defining broadband as a necessity, in the same category as electricity, water, and phone service. Broadband is no longer a perk or special benefit. For communities, it is a critical piece of infrastructure for attracting new capital investment. As with electric service, the reliability of broadband service is heavily scrutinized to ensure the operation will not be placed offline (especially for information-intensive projects like data centers) or that the risk of being offline is minimal. The competitiveness of the service is also important. Locations with numerous providers have an advantage because competitiveness will drive up speeds and drive down cost.

Locations with inadequate connectivity are quickly passed over for projects requiring broadband. Communities lacking broadband infrastructure make the process of elimination easier for investment decision-makers and influencers. That said, merely having broadband likely places a location on a level playing field with other communities and having a robust plan for how broadband is integrated gives your community a competitive advantage. In today's landscape, wherein "being connected" is central to becoming a critical node within the global supply chain, and particularly for the case whereby Hawaii desires to enhance its economic posture, the discussed broadband element of critical infrastructure is, perhaps, the key ingredient for all of Hawaii's future endeavors ranging from smart grid to becoming a cyber leader.

Very Respectfully,

Prof. Steve Chan, PhD



Written Statement of
ROBBIE MELTON
Executive Director & CEO
High Technology Development Corporation
before the
SENATE COMMITTEE ON WAYS AND MEANS

Tuesday, March 3, 2015
9:05 a.m.
State Capitol, Conference Room 016
In consideration of

**SB892 SD1 RELATING TO OMNIBUS HAWAII RESILIENCE AND SUSTAINABILITY
STRATEGY.**

Chair Tokuda, Vice Chair Kouchi, and Members of the Committee on Ways and Means.

The High Technology Development Corporation (HTDC) offers **comments** on SB892 SD1, Part II sections 3 and 4, and Part III section 5 relating to Hawaii's Resilience and Sustainability Strategy.

As part of HTDC's vision to create 80,000 new innovation jobs in Hawaii earning \$80,000 or more by 2030, HTDC supports initiatives aimed at improving Hawaii's high speed broadband infrastructure and improving Hawaii's reputation as a place to do business.

HTDC supports the intent of sections 3 and 4 appropriating resources for the Hawaii broadband initiative and broadband cable landing sites. Prioritizing broadband infrastructure remains a commonality for successful economic development efforts nationwide like in Chattanooga, Kansas City and the Research Triangle. A 2014 study by the Fiber to the Home Council Americas suggests that "gigabit broadband communities have per capita GDP that is 1.1 percent higher than communities with little to no availability of gigabit services." HTDC looks forward to working with the Department of Business, Economic Development and Tourism on these projects.

HTDC supports the intent of section 5 as we have been working with the Office of Information Management and Technology on the cybersecurity portion of this project at the Mililani High Tech Park site.

We defer to the appropriate departments regarding the budget impact.

Thank you for the opportunity to offer these comments.

From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: mauicrowe@gmail.com
Subject: Submitted testimony for SB892 on Mar 3, 2015 09:05AM
Date: Saturday, February 28, 2015 11:50:22 AM

SB892

Submitted on: 2/28/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
james crowe	Individual	Support	No

Comments: This is good for the caller, good for the suffering person and good for the judiciary.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: mailinglist@capitol.hawaii.gov
To: [WAM Testimony](#)
Cc: rich@richarddberry.com
Subject: Submitted testimony for SB892 on Mar 3, 2015 09:05AM
Date: Monday, March 02, 2015 9:05:07 AM

SB892

Submitted on: 3/2/2015

Testimony for WAM on Mar 3, 2015 09:05AM in Conference Room 211

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Berry	Individual	Support	No

Comments: Dear Madam Chair and members: Hawaii's population and level of development continue to increase, and this growth over the past five decades has placed tremendous pressure on our aging and brittle infrastructure, and places the State at great risk. Perhaps the most complex challenge in developing a sustainable and resilient community is the non-technological attributes, such as fostering a culture of innovation and developing partnerships to implement new ideas. The objective of the omnibus bill is to provide the foundation of a comprehensive approach to specifically address the vulnerabilities to our aging critical infrastructure while building a technologically advanced, knowledge-based workforce, thus providing the foundation for Hawaii's future. This bill is focused on six specific areas that require immediate attention for the future livelihood of our State, including (1 Smart Grid; (2 Broadband (3 Water and Sewer (4 Joint Emergency Management Center (5 Education (6 Workforce Development. The business model to resource each of these areas rests on the implementation of a new trans-Pacific broadband cable to provide the necessary connectivity for workforce development and economic growth. The Pacific Asia Institute for Resilience and Sustainability has designed a research and development initiative that supports the deployment of a transpacific cable through a partnership with multiple sectors in private industry that have a real interest in demonstrating the commercial applicability using sensors and new edge-processing analytics. This initiative will use the transpacific cable, unmanned aerial vehicles (UAVs), next generation buoys, and advanced satellites to develop an operational framework for improving ocean hazard modeling — weather and seismic events (e.g. tsunami). This partnership allows the State to develop a knowledge-based workforce, diversify the economic base by promoting research, education and technological innovation and simultaneously strengthen our critical infrastructure. I recommend supporting this bill as a means to comprehensively address our state's critical infrastructure.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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