



STATE OF HAWAI'I | KA MOKU'ĀINA O HAWAI'I
STATE PROCUREMENT OFFICE

P.O. Box 119
Honolulu, Hawaii 96810-0119
Tel: (808) 586-0554
email: state_procurement_office@hawaii.gov
<http://spo.hawaii.gov>

TESTIMONY
OF
BONNIE KAHAKUI, ACTING ADMINISTRATOR
STATE PROCUREMENT OFFICE

TO THE SENATE COMMITTEES
ON
LABOR AND TECHNOLOGY
AND
GOVERNMENT OPERATIONS

February 15, 2023, 3:00 PM

SENATE BILL 284
RELATING TO INFORMATION TECHNOLOGY

Chair Moriwaki, Chair McKelvey, Vice Chair Lee, Vice Chair Gabbard, and members of the committees, thank you for the opportunity to submit testimony on Senate Bill 284. The State Procurement Office provides comments and recommendations on Section 2, page 3, lines 10 to 20 and page 4, lines 1 to 21:

"§103D- Information technology-related projects; in-state cloud servers and services. (a) A governmental body that enters into a contract under this chapter for an information technology—related project having an estimated value of not less than \$250,000, shall decrease the bid amount of a bidder by five per cent if the bidder provides cloud systems that are located within the State. The lowest total bid, taking the preference into consideration, shall be awarded the contract unless the solicitation provides for additional award criteria. The contract amount awarded, however, shall be the amount of the price offered, exclusive of the preference.

(b) At the time of submission of a competitive sealed bid or a competitive sealed proposal by a bidder, the bidder shall furnish written proof that the bidder provides cloud systems that are located within the State and, if awarded the contract, shall continue to certify monthly in writing that the bidder provides cloud systems that are located within the State. This subsection shall be deemed to be incorporated into any applicable contract. A bidder who is awarded a contract shall be subject to the following sanctions if, after commencement of work, the bidder at any time during the project no longer provides cloud systems that are located within the State:

(1) Temporary or permanent cessation of work on the project, without recourse to breach of contract claims by the bidder; provided that the governmental body shall be entitled to restitution for nonperformance or liquidated damages, as appropriate; or

(2) Proceedings to debar or suspend under section 103D-702.

(c) For purposes of this section, "bidder" means an entity that submits a competitive sealed bid under section 103D—302 or submits a competitive sealed proposal under section 103D—303."

COMMENTS: The National Institute for Public Procurement (NIGP) does not support the use of local preference policies as an appropriate tool for improving local economies because they are in conflict with the fundamental public procurement principles of impartiality and full and open competition (the position paper is found at <https://www.nigp.org/resource/position-papers/Local%20Preference%20in%20Public%20Procurement%20Position%20Paper.pdf?dl=true>).

The National Association of State Procurement Officials (NASPO) passed 16 resolutions between 1953 and 1992, opposing all types of preference law and has passed two resolutions asserting that procurement preference legislation results in decreased competition and increased prices (the position paper is found at https://www.naspo.org/wp-content/uploads/2012/08/Final_2020_StatePref_Paper_8.5X11C-1.pdf).

The Hawaii Public Procurement Code is the single source of public procurement policy to be applied equally and uniformly, while providing fairness, open competition, a level playing field, government disclosure and transparency in the procurement and contracting process vital to good government. In-state preference in procurement may not always result in the best value for the State due decreased competition, which can lead to higher prices for goods and services.

RECOMMENDATION: Should the legislature determine such a preference is warranted to support local business, the SPO recommends that the preference be placed in part X, "Preferences", of Chapter 103D.

Thank you.

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LIEUTENANT GOVERNOR



JADE T. BUTAY
DIRECTOR

WILLIAM G. KUNSTMAN
DEPUTY DIRECTOR

STATE OF HAWAII
KA MOKU'ĀINA O HAWAII
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS
KA 'OIHANA PONO LIMAHANA

February 15, 2023

To: The Honorable Sharon Y. Moriwaki, Chair,
The Honorable Chris Lee, Vice Chair, and
Members of the Senate Committee on Labor and Technology

The Honorable Angus L.K. McKelvey, Chair
The Honorable Mike Gabbard, Vice Chair

Date: Wednesday, February 15, 2023

Time: 3:00 p.m.

Place: Conference Room 224, State Capitol and Video Conference

From: Jade T. Butay, Director
Department of Labor and Industrial Relations (DLIR)

Re: S.B. 284 RELATING TO INFORMATION TECHNOLOGY

I. OVERVIEW OF PROPOSED LEGISLATION

Require the technology services consolidation working group to decommission the office of enterprise technology services' primary data center located in the Kalanimoku building and relocate the office of enterprise technology services' entire data center to a single, standalone facility; and use cloud storage for all consolidated state information technology data with consideration of latency-sensitive systems that may require local presence or hybrid-cloud design. Extends to June 30, 2028 the dissolution date of the technology services consolidation working group and establishes requirements for procurement contracts for information technology-related projects.

II. COMMENTS ON THE SENATE BILL

The Department of Labor and Industrial Relations (DLIR) **supports the intent** of establishing a high speed printing facility in the capitol district along with extending the Technology Services Consolidation Working Group to June 30, 2028.

DLIR defers to the Office of Enterprise Services on matters related to cloud services and time frame to decommission the data center.



OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

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

Written Testimony of
DOUGLAS MURDOCK
Chief Information Officer
Enterprise Technology Services

Before the
SENATE COMMITTEE ON LABOR AND TECHNOLOGY AND THE COMMITTEE ON
GOVERNMENT OPERATIONS
WEDNESDAY, FEBRUARY 15, 2023

SENATE BILL 284 RELATING TO INFORMATION TECHNOLOGY

Dear Chairs Morikawa and McKelvey, and Vice Chairs Lee and Gabbard, and members of the committees:

The Office of Enterprise Technology Services (ETS) **supports** this bill to decommission the data center in the Kalanimoku building and relocate the data center to a standalone facility. We offer a few comments on the bill.

ETS has moved almost all critical state servers from the data center to other locations. Therefore, we recommend Section 1, second sentence on line 4 be modified to read:

“Nevertheless, Because the data center can no longer be brought up to acceptable modern data center standards, it is no longer used to run all any critical-key state programs.”

As the data center is decommissioned, it is important to note that some networking and emergency radio equipment will remain in the data center area.

We also recommend changing Section 2 regarding HRS section 103D to replace all instances of the words “cloud systems” on page 4, lines 11, and 15 and page 4, lines 3, 6, and 11 with “infrastructure-as-a-service, platform-as-a-service, or software-as-a-service systems”. This change will create clarity by using the industry standard terminology. Alternatively, the language “Cloud systems and servers include infrastructure-as-a-service, platform-as-a-service, or software-as-a-service systems and servers.”

Any data center that is decommissioned should receive funding for removing IT infrastructure as necessary and recommissioning for other uses.

ETS is currently expecting a contracted study of the Executive Branch data center-type facilities to be complete in mid-March. We expect this study to provide an estimate of resources needed to meet the states needs in this area.

Thank you for the opportunity to provide testimony on this measure.



TESTIMONY IN SUPPORT OF SENATE BILL 284 RELATING TO INFORMATION TECHNOLOGY

Senate Committee on Labor and Technology
The Honorable Sharon Y. Moriwaki, Chair
The Honorable Chris Lee, Vice Chair

Senate Committee on Government Operations
The Honorable Angus L.K. McKelvey, Chair
The Honorable Mike Gabbard, Vice Chair

Wednesday, February 15, 2023, 3:00 p.m.

Videoconference
State Capitol
415 South Beretania Street

Chairs Moriwaki and McKelvey, Vice Chairs Lee and Gabbard, and members of the Committees,

Thank you for this opportunity to offer our support for Senate Bill 284 Relating to Information Technology. My name is Richard Zheng President and CEO of Servpac.

As a locally owned company established in 2004, Servpac has evolved from a Hawaii telecommunications provider to an all-in-one cloud-based technology solution, offering high speed fiber internet, VoIP phones, cloud computing, data center colocation and managed IT services. We understand the unique challenges that Hawaii's businesses face and we provide customized solutions to keep them connected in a mission-critical world.

Data centers and fiber optic networks are driving forces that support the creation and growth of the high-tech sector in Hawaii. These facilities enable the creation of high paying jobs in the technology sector, thereby contributing to the diversification of Hawaii's economy.

Awarded and certified as the only internationally recognized Tier IV facility in Hawaii today, Mililani Tech Park Data Center sits 850 ft above sea level, making it the most naturally secure facility to protect our clients' mission-critical data protected against



tsunami's, Category 4 hurricanes, floods from storms, coastal flooding, and other extreme weather events.

Tier IV facilities provide the ultimate in fault tolerance: Everything is dual-powered; redundant electrical, distribution and storage systems are available; and highly redundant server and network architectures are in place. Tier IV facilities should survive any failure, provided there is enough fuel to fill the facility's generators and areas outside the data center owner's control, such as public networks, are available. There are currently more than 1,700 certification facilities across 98 countries.

As the state advances the First Responder Technology Campus (FRTC) in Mililani Tech Park, Oahu, the state-of-the-art facility could serve as a complimentary training and technology hub for multiple Federal, State of Hawaii, and county for disaster preparedness purposes.

Mahalo for allowing Servpac to share our perspectives on SB 284.



TIME/DATE: 3:00 pm, Wednesday, February 15, 2023
PLACE: State Capitol Conference Room 224 & Videoconference
COMMITTEES: Senate Labor and Technology, Senate Government Operations, and Senate Ways & Means
BILL: SB284, Relating to Information Technology
POSITION: Support

Aloha Chair Moriwaki, Vice Chair Lee, Chair McKelvey, Vice Chair Gabbard, Chair Dela Cruz, Vice Chair Keith-Agaran, and committee members:

THG (Transform Hawai'i Government) supports SB284, relating to information technology. As a nonprofit organization that has collaborated with state government for more than a decade, we strongly support the modernization and investment in backbone IT infrastructure requirements to create more efficiency and responsiveness.

Access to data is key to timely, informed decision-making to benefit Hawai'i's people. We believe the relocation and consolidation of our state's main data center is key to systemically creating more resiliency. A physical location that is not subject to flooding or natural disasters and a consolidated approach to protecting data from cyberattacks will help preempt or mitigate service disruptions.

Last year, THG was one of the presenting sponsors of the first Hawai'i Cloud Innovation Summit in our state to showcase the possibilities of cloud migration to public, private and nonprofit leaders. We fully support the state's commitment to cloud innovation to keep pace with the rest of the world.

Mahalo for considering our testimony.

Sincerely,

A handwritten signature in blue ink, appearing to read 'C. Sakuda', is written over a light blue circular graphic element.

Christine Sakuda
Executive Director
Transform Hawai'i Government
email: csakuda@TransformHawaiiGov.org | phone: (808) 321-2811
web: www.TransformHawaiiGov.org



DR Fortress, LLC
3375 Koapaka Street, Ste. D198
Honolulu, HI 96819

Tel: +1 (808) 528-7500
Fax: +1 (808) 528-7545
www.drfortress.com

February 15, 2023

TO: Chair Sharon Y. Moriwaki
Members of the Committee on Labor and Technology
Chair Angus L.K. McKelvey
Members of the Committee on Government Operations

FR: Rosa White
Co-President

RE: **SB284 Relating to Information Technology. - COMMENTS**

DRFortress is in support of the intentions of SB284 RELATING TO INFORMATION TECHNOLOGY. We believe with some important amendments; this bill can help the State of Hawaii to implement its modernization plans and secure its critical IT systems.

DRFortress is Hawaii's largest commercial datacenter, currently providing 55,000 square feet of facility space and 4.3 megawatts capacity. With a history dating back to 2000, we have grown with the industry to become the hub of the internet in Hawaii; servicing tech giants like Apple, Microsoft, Facebook and Google, cellphone and telecommunication carriers, large hospitals, banks and airlines¹.

As noted, DRFortress agrees with the aims of this bill as it is critical to safeguard the State's infrastructure by ensuring it is located in physically secure and hardened facilities in a timely fashion. Similarly, the bill requirement of cloud providers having a local node makes good sense in creating a win for the state regarding performance and usability as well as ensuring that well-paying jobs and maintenance expertise remain in the state. Furthermore, we further agree with the intent to follow some of the recommendations of the Gartner report such as having on island but physically diverse primary, secondary (failover/DR), and even more remote archival sites. This is the current IT gold standard, by helping ensure that neither regular outages occur (by having a primary site in a dense network mesh area with physically diverse connections), and a secondary physically diverse datacenter that can take on the critical processing if there is a catastrophe such as a large fire or hurricane.

¹ Refer to www.peeringdb.com/ix/267 though some companies may be sublevelled under DRFortress' peering ASN.

Privileged and Confidential

The information contained herein is intended only for the privileged and confidential use of DR Fortress. Unauthorized use or disclosure is prohibited without signed non-disclosure agreement.

To better align these aims within the bill, we offer the following amendments for your consideration.

Section 1.

Page 2, lines 7-9

"[C]onstruct a modern Tier 3 primary data center at an interior location on Oahu to ultimately house all of the State's primary [information technology] assets." consolidate its various equipment into secure and resilient primary and secondary sites. The legislature also believes

Page 2, line 12

computing technologies -with a preference that such technologies be hosted physically in the State of Hawaii to address latency and financial impacts.

Page 2, line 19-20; Page 3, lines 1-2

a primary secure and resilient single-standalone facility; and to establish backup continuity equipment in a geographically diverse secondary secure and resilient facility; efficiently use cloud computing with consideration of latency-sensitive systems that may require local presence or hybrid-cloud design; and cloud/remote physical storage for all consolidated state information technology archival data with consideration of latency-sensitive systems that may require local presence or hybrid-cloud design;

Section 2

Page 3, line 17

the industry standard preferences into consideration, shall be awarded the contract

Section 3

Page 6, line 14

Including the use of internships, partnering with private providers and carriers, and assess the

Page 7, line 7

Information technology data to a-standalone an interim

DRFortress agrees with the prioritization of the transition out of the Kalanimoku building, however we do recommend removing the prescriptive requirements for the interim facility in Section 3 of the bill. This will provide the state with greater near term options in achieving its long-term goals. It may also avoid unintended procurement issues regarding competitive solicitation of qualified offerors.

The first requirement references the Uptime Institute tier IV design. Please note that the Uptime Institute is a third party, non-governmental organization. We recommend providing the desired design and performance outcomes without reference to a third-party certifications.

Page 7, line 9-13

Possesses ~~the resiliency to perform concurrent maintenance or upgrades such that equipment can continue to be powered and environmentally controlled even with specific equipment malfunction or maintenance on primary distribution equipment~~ Uptime Institute tier IV design facility certification or otherwise conforms to Uptime Institute's tier IV design facility standard or equivalent facility, safety, or disaster standards;

For background, there are 2,500 data center facilities in the U.S. of which only four (4) are certified are Uptime Institute tier IV certified. Two facilities, in Ohio and Kansas, were purpose-built by financial institutions for very specific uses cases. One large commercial facility in Nevada was built by Switch, which has over 3.5 million square feet in multiple data centers of which only one portion of one is certified tier IV. The last facility is ServPac's Hawaii Facility.

Tier IV basically requires enough power and environmental equipment for two independent datacenters. Added to this is a level of integration so both sides can work as needed as well as actively redundant 24/7 onsite operations personnel. This results in a datacenter that is very difficult and expensive to scale, unnecessarily complicated to keep running, expensive to build and operate, as well as ecologically unfriendly due to all the standby equipment maintained at lower utilization rates.

The remaining 2,496 data centers provide processing for Amazon, streaming live videos, running the New York Stock Exchange, managing HIPPA hospital data, as well running every other U.S. state and Federal IT workload – and none operated from a Tier IV certified data center. Most could be considered tier II and tier III.

The second and third requirements are intended to address the desire for data center location away from shoreline disaster risk. Since the referenced 2013 Gartner report was published, the federal government has made formal studies providing extreme tsunami's impact data as well as projected sea level rise for the next 30 years (10-12 inches), neither of which requires anything like the requirements stated in the bill².

² For Tsunami threat please refer to Tsunami Evacuation and Extreme Evacuation Zones: <https://tsunami.coast.noaa.gov/#/> for the Federal version and <https://cchnl.maps.arcgis.com/apps/webappviewer/index.html?id=39a9e07068a14d01a85b437adcf50beb> for the City of Honolulu's Map. Additionally, potential climate related sea level rise is



DR Fortress, LLC
3375 Koapaka Street, Ste. D198
Honolulu, HI 96819

Tel: +1 (808) 528-7500
Fax: +1 (808) 528-7545
www.drfortress.com

Page 7, line 14-15

Is located outside of the Extreme Tsunami Evacuation Zone and not located in FEMA flood zone A, B, C, or V or impacted by the NOAA anticipated climate related sea-level rise of 10-12 inches over the next 30 years at least five hundred feet above sea level and three miles inland;

Page 7, line lines 16-17

Capable of continuing connectivity with at least 3 physically and logically diverse carriers operating in a “lights out” mode with minimal on-premise human intervention;

Lastly, we would recommend addressing integrity of the data center, especially as it relates to governmental functions.

Page 7, line 18-21

Has not been significantly invested in or has significant ties to any counties listed in the EAR Supplement No 1 to Part 740 Group D or E Maintain a telework-enabled workforce with capitol district office spaces or workspaces, or both, for support of executive branch agencies in the area; and

Thank you very much for your time and consideration.

anticipated to be 10 – 12 inches (0.25 – 0.30 meters) in the next 30 years (2020 – 2050):
<https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report.html>.

Privileged and Confidential

The information contained herein is intended only for the privileged and confidential use of DR Fortress. Unauthorized use or disclosure is prohibited without signed non-disclosure agreement.