

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

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

INFORMATION AND COMMUNICATION
SERVICES DIVISION

OFFICE OF INFORMATION MANAGEMENT
AND TECHNOLOGY

Statement of
Todd Nacapuy
Chief Information Officer

Before the

**SENATE COMMITTEES ON
WAYS AND MEANS
AND
ECONOMIC DEVELOPMENT, ENVIRONMENT, AND TECHNOLOGY**

Informational Briefing
Friday, December 18, 2015, at 1:30 p.m.
State Capitol, Conference Room 211

Chairs Tokuda and Wakai, Vice Chairs Dela Cruz and Slom, and Committee Members:

I, Todd Nacapuy, State Chief Information Officer (CIO), thank Committee members for this opportunity to provide information with regard to State information technology (IT) initiatives and to report on our progress in achieving our objectives.

On April 8, 2015, I was honored to be named by Governor David Ige as our State's third full-time CIO. Confirmed by the State Senate on April 22, 2015, I formally stepped into the CIO role on May 4, 2015, leading the Office of Information Management and Technology (OIMT), administratively attached to the Department of Accounting and General Services (DAGS), and overseeing DAGS' Information and Communication Services Division (ICSD).

Over the last seven months, I have assembled my executive technology team and identified the following six priority areas to build upon progress achieved thus far and further increase efficiency, reduce waste, and improve transparency and accountability in State government:

1. **IT Workforce Development** — Implement programs, strategies and reforms to develop and empower the State's IT workforce to increase our ability to modernize government processes, systems, solutions and services while reducing overreliance on third parties. Establish flexible programs to attract and retain individuals possessing modern IT disciplines to fill service and skill gaps within the State's IT operations. Build outreach campaigns to recruit candidates from non-traditional sectors. Continue to develop internship and apprenticeship programs to expose government opportunities to high school graduates as well as two-year and four-year degree program participants.

2. **IT Governance** — Establish governance processes and standards that guide the management and oversight of the State’s IT and information resource investments, acquisitions and projects, as outlined in statute (HRS Section 27-43), to seek efficiencies and cost-savings through economies of scale, leveraging of shared assets, reduction of waste, and alignment with statewide IT strategies and industry best practices. Implement governance procedures across enterprise programs and projects to ensure successful outcomes and positive return on investment (ROI) to the extent possible. Efficiently manage the statewide portfolio to ensure projects are prioritized appropriately and resources are sufficiently managed.
3. **Enterprise Shared Services** — Identify and launch centrally managed “Service-Oriented Infrastructure” (SOI) that leverages the State’s enterprise status and related economies of scale (e.g., network, security, data management, unified communications, data center, and various cloud services).
4. **Enterprise Programs and Projects** — Facilitate the establishment and execution of programs and projects identified as priority and/or enterprise in scope (e.g., tax, asset management, budget, finance, grants, human resources, payroll, procurement, and time and attendance).
5. **Open Government** — Build on established open data and transparency platforms to facilitate open government mandates outlined in statute (HRS Section 27-44).
6. **Cyber Security** — Establish cyber security standards, maintain the security posture of the State Network, and direct departmental remedial actions, if necessary, to protect government information or data communication infrastructure, in accordance with statute (HRS Section 27-43.5).

These focus areas align with the Ige Administration’s priority goal to ensure an effective, efficient and open government, and supports the legislative intent in the cited statutes.

In response to the Committees’ posted agenda, I respectfully submit the following testimony:

Description of the IT Program Governance Policy

On December 10, 2015, Governor David Ige and I announced a new, mandatory governance process to ensure success for State IT programs and projects. This new IT governance process is intended to ensure that tax-payer funds for IT development and modernization programs will be subject to an efficient planning review and approval process. The goal is to provide the essential state oversight necessary so that intended objectives are achieved and positive return on investment is realized for the people of Hawai‘i.

Under the IT governance process, projects must pass several review “gates” during four key phases: pre-initiation (concept); initiating; planning; and contract execution and implementation. At each gate, prerequisite documentation will be required for an investment or project to be approved, denied or deferred by a reviewing body before proceeding to the next phase (see Exhibit A: “IT Governance Process: Project Request Timeline”). This graduated approach

provides multiple review points for IT investments and projects, from inception through completion.

Initially, projects subject to the new governance requirements will include:

- IT development and modernization projects identified under Section 41 or any future related legislation or budget bills;
- IT projects that require technology resources estimated at \$1 million or greater; and
- enterprise modernization projects identified by the CIO, typically those that will leverage business and operational efficiencies and benefits for multiple departments or agencies.

Pursuant to Act 119, Section 41, SLH 2015, I will be submitting an updated report on expenditures made under Section 41 as well as discussion of the operational and financial feasibility of sustaining such a process.

Status of the Office of Enterprise Technology Services' Priority Projects

In addition to identifying the aforementioned CIO priority areas and developing, then launching a strong IT governance process, we have successfully completed and/or significantly accelerated the following projects:

Office 365 Project Acceleration — Significantly expedited the Office 365 Project to migrate Executive Branch personnel to the Office 365 platform. The scope includes the majority of departments (excluding the Department of Education and University of Hawai'i), which are being upgraded in phases. Over the past year, the project team has aided in the deployment of 9,891 user licenses and the migration of 7,408 mailboxes. Most of the remaining user licenses are on track for deployment within the next two months — along with the benefits of added security, disaster recovery, applications/tools, and long-term budget sustainability.

Electronic Signature Services — As part of the Ige Administration's effort to move State government toward a more efficient "paperless" environment, we launched "eSign Services" with the goal of eventually implementing an electronic signature process across all departments where documents are reviewed and approved in digital form without any paper exchanges. The governor's office began piloting eSign Services on October 1, 2015, and since then more than 17 departments and agencies have begun the process of adopting this more efficient way of doing business. Already over 1,400 documents have been processed electronically via eSign Services for signature within departments.

IT Broadbanding Pilot Project — Initiated the IT Broadbanding Pilot Project, a partnership between ETS* and the Department of Human Resources Development (DHRD), to update the current Information Technology position classification system that is more than 40 years old, inflexible, complex, labor intensive, and unresponsive to changing needs. Re-describing IT positions to more appropriately match modern technologies and processes will further ongoing efforts to hire and retain IT personnel and expand career path opportunities for public sector workers. Previously, Reductions in Force (RIF) in the 1990s and 2000s caused ICSD staff levels to plummet from over 300 to less than 150, while at the same time funding remained static or was cut throughout that 25-year period. These factors have resulted in decentralization of procurement, diminished governance, and overreliance on consultants instead of internal state staff. Broadbanding will help our efforts to restore IT staffing levels to the appropriate levels.

and will allow the state to be competitive with the commercial world in the recruitment of IT workers. It will provide more options to state personnel; for example, permitting current IT workers to choose a technical carrier that does not necessarily require managing individuals.

Anuenue Interisland Digital Microwave Network — Successfully achieved “full operating capability” of the Anuenue Interisland Digital Microwave Network on shared infrastructure designed by State of Hawai‘i and U.S. Coast Guard (USCG) engineering professionals to provide robust and survivable communication links and facilities throughout Hawai‘i. The Anuenue network is jointly managed by the state and the USCG Base Honolulu C4IT Division. This backbone communications network supports the Statewide Shared Blended land mobile radio system; Maritime Wireless Network System; Hawai‘i Emergency Management Agency; and the Departments of Public Safety, Transportation, Health, and Land and Natural Resources; and many county partnering agencies, such as the Maui Police Department.

State Web Portal Program Manager — Successfully filled this position to facilitate the Access Hawai‘i Committee’s legislatively mandated duty to oversee the statewide web portal program. This portal program manager functions as the relationship manager between the portal user agencies and the contracted portal service provider; and evaluates the portal contractor’s activities and financial reports. State CIO Todd Nacapuy, who serves as chair of the committee, expedited the filling of the vacant position after attending his first committee meeting in June 2015.

Status of the Information Technology Projects under the Proviso of Section 41 of Act 119, Session Laws of Hawai‘i 2015

Section 41 directs the CIO to strive for “commonality and efficiency of information technology systems” in the use of a combination of general, special, federal and revolving funds for the following IT projects:

- Information technology system upgrades and repair and maintenance for rabies quarantine (AGR131)
- Datamart upgrades for information processing and communication services (AGS131)
- Statewide voter registration system for the office of elections (AGS879)
- Child support enforcement (keiki) system modernization feasibility study for child support enforcement services (ATG500)
- Computer hardware and software compliance upgrade for the Hawai‘i housing finance and development corporation (BED160)
- ALIAS project completion for professional and vocational licensing (CCA105)
- Complaints management system replacement for regulated industries complaints office (CCA112)
- Student information system for state administration (EDN300)
- Security management and compliance plan administration and monitoring for general support for health care payments (HMS902)
- Kauhale on-line eligibility assistance (KOLEA) system maintenance and operation for general support for health care payments (HMS902)
- Information technology system conversion for general administration (TRN995)

These projects — several of which were already in flight — have received initial evaluation by the CIO executive team (see Exhibit B: “Status of Projects Identified Under Act 119, Section 41,

SLH 2015”). Each project will be subject to the IT governance process described above, entering at the appropriate gate given the project phase.

Status of Actions under the Proviso of Section 42 of Act 119, Session Laws of Hawai‘i 2015

Under the CIO priorities described above, ETS is building capacity to address items identified under Section 42. Already, in calendar year 2015, improved contract monitoring and oversight has resulted in an estimated \$11 million in avoided cost achieved by eliminating duplication, reducing overreliance on third parties, and decreasing recurring operations and maintenance expenses. Where permissible, funds are being utilized more effectively to further related initiatives benefiting the state and tax-payers.

In the area of cyber security, ETS continues to work closely with the U.S. Department of Homeland Security (DHS) to protect and monitor the state’s technology infrastructure. One example is the DHS Cyber Hygiene Program, which provides network vulnerability scanning of external-facing public IP addresses to help the state understand how it appears to attackers on the Internet. State departments and agencies receive scan results that identify their vulnerabilities that require remedial action.

In addition, the State’s Security Operations Center (SOC), established in 2014 as the State’s first such operation, possesses the ability to conduct additional vulnerability scans against the State’s assets to further supplement the CyHy program and provide direct operational support to departments to assess the vulnerability status of their public-facing assets. After review and implementation of mitigation measures, departments/agencies may request supplemental scans conducted (outside the regular schedule of the CyHy program) to validate issues have been remediated.

Pursuant to Section 42, ETS will report to the legislature no later than August 1 the health status of each department’s information technology environment as it relates to functionality, risk and maturity.

In addition, ETS will submit its next quarterly report on the information security and audits of the executive branch information technology systems by January 1. Initially, due to the sensitive nature of the State’s cyber security measures, compounded by the requirement to post reports online in accordance with HRS Section 93-16, ETS sought input from members of the Senate and House of Representatives to clarify means of reporting in order to safeguard data, personally identifiable information (PII) and other sensitive information entrusted to departments and agencies. Upon full consideration of feedback, including input from the Chairs of the Senate Committee on Economic Development, Environment and Technology (EET) and House Committee on Economic Development and Business (EDB), ETS has satisfied its concerns and will resume quarterly high-level reporting. Should additional detail be required, the CIO and his cyber security team are available upon request to provide a higher level security briefing.

Status of the Consolidation of the Office of Information Management and Technology and the Information Processing and Communication Services Division

With the support of the Administration, we have initiated discussions to consolidate the authority, operations and resources of OIMT and ICSD, including moving signatory authority

from the acting ICSD Administrator to the CIO, and the preliminary adoption of the use of “Office of Enterprise Technology Services” (ETS) for the unified OIMT/ICSD team. The reorganization is intended to create greater efficiency in state government and clarify roles and responsibilities in the new governance process. Pending completion of discussions and the formal reorganization, the two agencies have already begun working as one team under ETS. As such, correspondence, websites and social media accounts now reflect the new office name (all other operational documents will remain unchanged until the proposed formal reorganization is implemented).

We intend to submit legislation to formally achieve this consolidation, including identification of other areas in statute that might be impacted.

Summary of the Proposed Supplemental Budget Requests for AGS130 (Information Management and Technology Services) and AGS131 (Information Processing and Communication Services)

Priority Number	Program	Prog ID	Request Title	EXEC BUDGET	
				FY 17	
				FTE	Amount
1	OIMT	130	Office 365 Enterprise Licenses		54,750
2	OIMT	130	Enterprise Adobe Licenses		400,000
3	OIMT	130	GIS System Migration		200,000
4	ICSD	131/EA	Security Postions	5.00	134,160
5	ICSD	131/ED	Web Developer Positions	11.00	277,002
6	OIMT	130	Chief Information Security Officer	1.00	75,000
7	OIMT	130	System Engineers	9.00	385,000
8	ICSD	131/EF	Network Technicians	5.00	134,160
10	OIMT	130	Enterprise Anti-Virus Licenses		150,000
13	OIMT	130	Infor Enterprise Licenses		1,600,000
Total				31.00	3,410,072

Thank you for the opportunity to testify.

EXHIBIT A

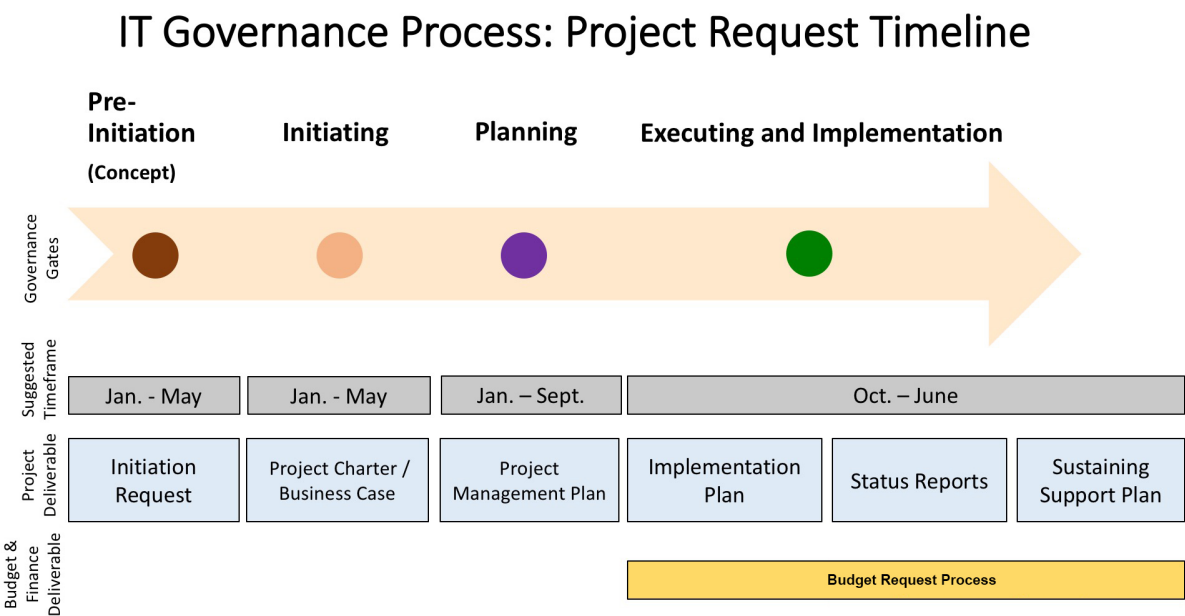


EXHIBIT B

Status of Projects Identified Under Act 119, Section 41, SLH 2015
(as of December 18, 2015)

HB 500 EXECUTIVE BUDGET ACT 119 SLH2015

OTHER AGENCY APPROPRIATIONS

Program ID	Agency	Description	Amount	MOF	Amount Approved	Funds Transferred or Delegated to Agency
AGR131	AGR	Funds for IT Upgrades Animal Quarantine System	218,712.00	B		
AGS131	DAGS	Funds for FAMIS Datamart Upgrades (Archive System)	339,943.50	A		
AGS879	DAGS	Funds for New Statewide Voter Registration System	84,987.00	A	84,987.00	
ATG500	ATG	Funds for a Child Support Enforcement system modernization feasibility study	231,161.00	A		
ATG500	ATG	Funds for a Child Support Enforcement system modernization feasibility study	600,000.00	P		
BED160	DBEDT	Funds for computer hardware and software compliance upgrades for HHFDC	100,000.00	W	100,000.00	
CCA105	DCCA	Funds for the ALIAS Project Completion and annual maintenance costs	585,000.00	B	585,000.00	585,000.00
CCA112	DCCA	Funds for complaints management system CMS replacement	540,000.00	B	540,000.00	540,000.00
HMS902	DHS	Funds for the HIPAA Security Management and Compliance plan administration	67,988.00	A	67,988.00	67,988.00
HMS902	DHS	Funds for the HIPAA Security Management and Compliance plan administration	298,394.00	N	298,394.00	298,394.00
HMS902	DHS	Funds for the Kauhale On Line Eligibility Assistance KOLEA System Operations & Maintenance	1,686,444.00	A	1,686,444.00	1,686,444.00
HMS902	DHS	Funds for the Kauhale On Line Eligibility Assistance KOLEA System Operations & Maintenance	7,401,606.00	N	7,401,606.00	7,401,606.00
TRN995	DOT	Funds for legacy Back Office IBM Domino Application modernization	351,033.00	B		
EDN300	DOE	New Statewide Student Information System (SSIS)	3,079,476.00	A	3,079,476.00	

12/18/15

