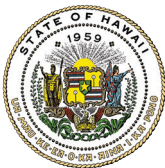# Follow-Up on Recommendations from Report No. 16-01, *Report on Selected Executive Branch Departments' Information Technology Expenditures*

A Report to the Governor
and the Legislature of
the State of Hawai'i

**Report No. 18-07**
May 2018



**OFFICE OF THE AUDITOR**
STATE OF HAWAI'I

# OFFICE OF THE AUDITOR
## STATE OF HAWAI'I

## Constitutional Mandate

Pursuant to Article VII, Section 10 of the Hawai'i State Constitution, the Office of the Auditor shall conduct post-audits of the transactions, accounts, programs and performance of all departments, offices and agencies of the State and its political subdivisions.

The Auditor's position was established to help eliminate waste and inefficiency in government, provide the Legislature with a check against the powers of the executive branch, and ensure that public funds are expended according to legislative intent.

Hawai'i Revised Statutes, Chapter 23, gives the Auditor broad powers to examine all books, records, files, papers and documents, and financial affairs of every agency.  The Auditor also has the authority to summon people to produce records and answer questions under oath.

## Our Mission

To improve government through independent and objective analyses.

We provide independent, objective, and meaningful answers to questions about government performance.  Our aim is to hold agencies accountable for their policy implementation, program management, and expenditure of public funds.

## Our Work

We conduct performance audits (also called management or operations audits), which examine the efficiency and effectiveness of government programs or agencies, as well as financial audits, which attest to the fairness of financial statements of the State and its agencies.

Additionally, we perform procurement audits, sunrise analyses and sunset evaluations of proposed regulatory programs, analyses of proposals to mandate health insurance benefits, analyses of proposed special and revolving funds, analyses of existing special, revolving and trust funds, and special studies requested by the Legislature.

We report our findings and make recommendations to the governor and the Legislature to help them make informed decisions.

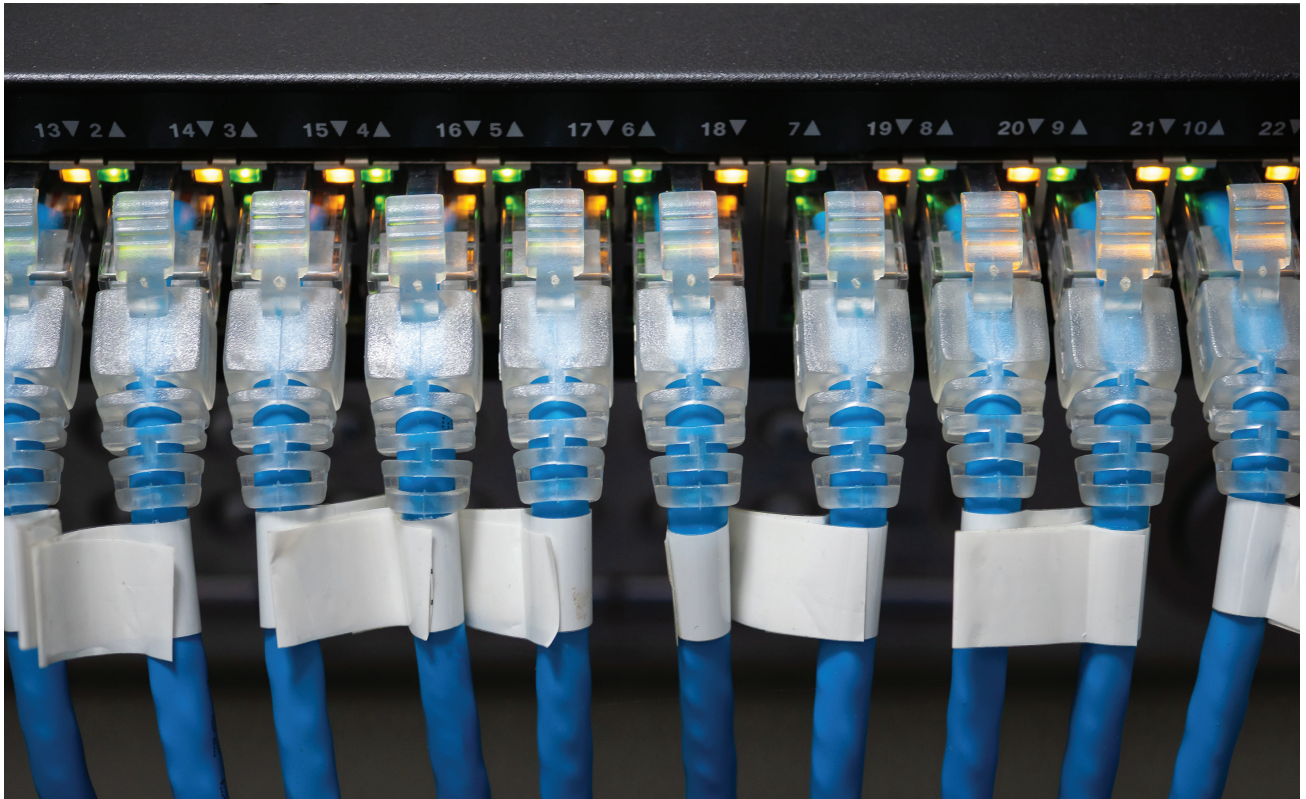*For more information on the Office of the Auditor, visit our website:*
http://auditor.hawaii.gov

PHOTO: THINKSTOCK.COM

# Follow-Up on Recommendations from Report No. 16-01, Report on Selected Executive Branch Departments' Information Technology Expenditures

*Section 23-7.5, Hawai'i Revised Statutes, requires the Auditor to report to the Legislature annually on each audit recommendation more than one year old that has not been implemented by the audited department or agency. This report presents the results of our review of five recommendations made to the Office of Enterprise Technology Services in Report No. 16-01,* Report on Selected Executive Branch Departments' Information Technology Expenditures, *which was published in March 2016.*

## Why we did the 2015 Audit

The 2015 audit was performed pursuant to Senate Concurrent Resolution No. 162 of the 2015 Legislature (SCR 162), which asked the Auditor to conduct a financial audit of information technology expenditures in the executive branch departments and attached agencies, excluding

> **We found that ETS has implemented two recommendations, partially implemented two recommendations, and that one recommendation has not yet been implemented at this time.**

the Department of Education, University of Hawai'i, and Office of Hawaiian Affairs, over the previous four fiscal years.

In SCR 162, the Legislature noted that the Office of Information Management and Technology (OIMT) was responsible for modernizing the State's patchwork of antiquated information technology (IT) systems and for streamlining business practices across 18 departments, 108 attached agencies, and 168 boards and commissions.  The Legislature further noted that the State's accounting system, inventory management system, tax system, and health care entitlement system all ran on legacy computer equipment whose eventual breakdown would mean the irretrievable loss of data.  The Legislature also noted that Hawai'i's IT budget was decentralized across the executive branch, limiting the opportunities for consolidating procurement efforts, leveraging economies of scale, and transitioning to integrated systems.

## The Office of Enterprise Technology Services (ETS)

At the time of our 2015 audit, as the head of OIMT, the State Chief Information Officer (CIO) was responsible for organizing, managing, and overseeing statewide IT governance, including supervision and oversight of the Department of Accounting and General Services' Information and Communications Services Division (ICSD).  Shortly after taking his position in 2015, the newly appointed CIO announced the initiation of efforts to consolidate OIMT and ICSD to form a unified team under the Office of Enterprise Technology Services (ETS).  The reorganization was intended to centralize and better synchronize the State's modernization and IT workforce development efforts while ensuring continuity of service and security.

Act 58 (Session Laws of Hawai'i 2016) formally consolidated OIMT and ICSD, including all related IT functions, in ETS under the direction of the CIO.  The Act also expanded the CIO's responsibilities to include working with each executive branch department and agency to develop its respective multi-year IT strategic and tactical plans and roadmaps, and coordinating each department and agency's IT budget request, forecast, and procurement purchase.

According to the agency's website, ETS provides governance for executive branch IT projects and seeks to identify, prioritize, and advance innovative initiatives with the greatest potential to increase efficiency, reduce waste, and improve transparency and accountability in State government.  ETS also supports the management and operation of all State agencies by providing effective, efficient, coordinated and cost-beneficial computer and telecommunication services such that State program objectives may be achieved.

## What we found in 2015

In Report No. 16-01, *Report on Selected Executive Branch Departments' Information Technology Expenditures*, we noted that departments had varying interpretations of which goods and services constituted "IT expenditures." As a result of this lack of standardization, IT expenditure data was spread throughout dozens of unrelated categories (known in accounting as object codes), thus making an accurate and comprehensive compilation of these costs extremely time-consuming, if not impossible to complete. In addition, without an annual reporting requirement to a central agency, the State was unable to manage its IT resources in the short-term or plan for long-term IT growth. We found that, while IT expenditures had increased significantly, IT staffing had flattened out. We also noted that a handful of vendors were providing goods and services to a majority of departments.

## What we found this year

Our follow-up on the implementation of recommendations made in Report No. 16-01, conducted between February and April 2018, included interviews with selected personnel, examining relevant documents and records, and evaluating whether ETS' actions appeared to fulfill our recommendations. We found that ETS has implemented two recommendations, partially implemented two recommendations, and that one recommendation has not yet been implemented at this time.

**Exhibit 1**
## Audit Recommendations by Status

| 2 | 2 | 1 |
|:---:|:---:|:---:|
| Implemented | Partially Implemented | Not Implemented |

Source: Office of the Auditor

## Recommendations and their status

Our follow-up efforts were limited to reviewing and reporting on the implementation of our audit recommendations. We did not explore new issues or revisit old ones that did not relate to the original recommendations. The following details the audit recommendations made and the current status of each recommendation based on our review of information and documents provided by ETS.

## Definition of Terms

**WE DEEM** recommendations:

**Implemented**

where the department or agency provided sufficient and appropriate evidence to support all elements of the recommendation;

**Partially Implemented**

where some evidence was provided but not all elements of the recommendation were addressed;

**Not Implemented**

where evidence did not support meaningful movement towards implementation, and/or where no evidence was provided;

**Not Implemented - N/A**

where circumstances changed to make a recommendation not applicable; and

**Not Implemented - Disagree**

where the department or agency disagreed with the recommendation, did not intend to implement, and no further action will be reported.

## Recommendation 1

**ETS should be the central agency to establish policies and procedures over IT governance statewide. This is consistent with the governor's December 10, 2015 announcement that ETS be the lead agency for IT planning and procurement.**

**Implemented**

**Comments**

The Governor's Administrative Directive No. 15-02, which instituted a mandatory governance process for Executive Branch IT programs and projects, was reinforced by Act 58 merging OIMT and ICSD into a single entity, and establishing ETS as the central agency overseeing IT governance statewide. Act 58 also expanded the authority of the CIO to work with each executive branch department to develop its respective multi-year IT strategic direction and roadmaps, and coordinate each department's IT budget request, forecast, and procurement purchase.

## Recommendation 2a

**ETS should establish a statewide definition for IT that clearly defines what ETS considers IT costs.**

**Partially Implemented**

**Comments**

ETS asserts that it needs additional time to work with departments to fully adopt a standard definition of IT costs using the Technology Business Management (TBM) model and to prepare for tracking and reporting IT costs according to a new standard. ETS has already established IT Cost Transparency as one of seven CIO priority areas; conducted a pilot of the TBM cost model within ETS in December 2016; and starting in May 2017, began introducing and incorporating TBM cost categories into the departments' IT roadmaps. A summary of these cost categories is detailed in Exhibit 2. ETS is also formulating a strategy to require department IT cost reporting that will result in consistent data that can be analyzed across the enterprise.

**Target Date**

ETS estimates distributing IT cost reporting guidance to departments in September 2018.

**Exhibit 2**

# Technology Business Management Cost Categories

TBM provides a standard taxonomy to describe cost sources, technologies, IT resources (also known as IT towers), applications, and services. The TBM taxonomy provides a generally accepted way of reporting IT costs and other metrics. A summary view of the TBM taxonomy is shown below.
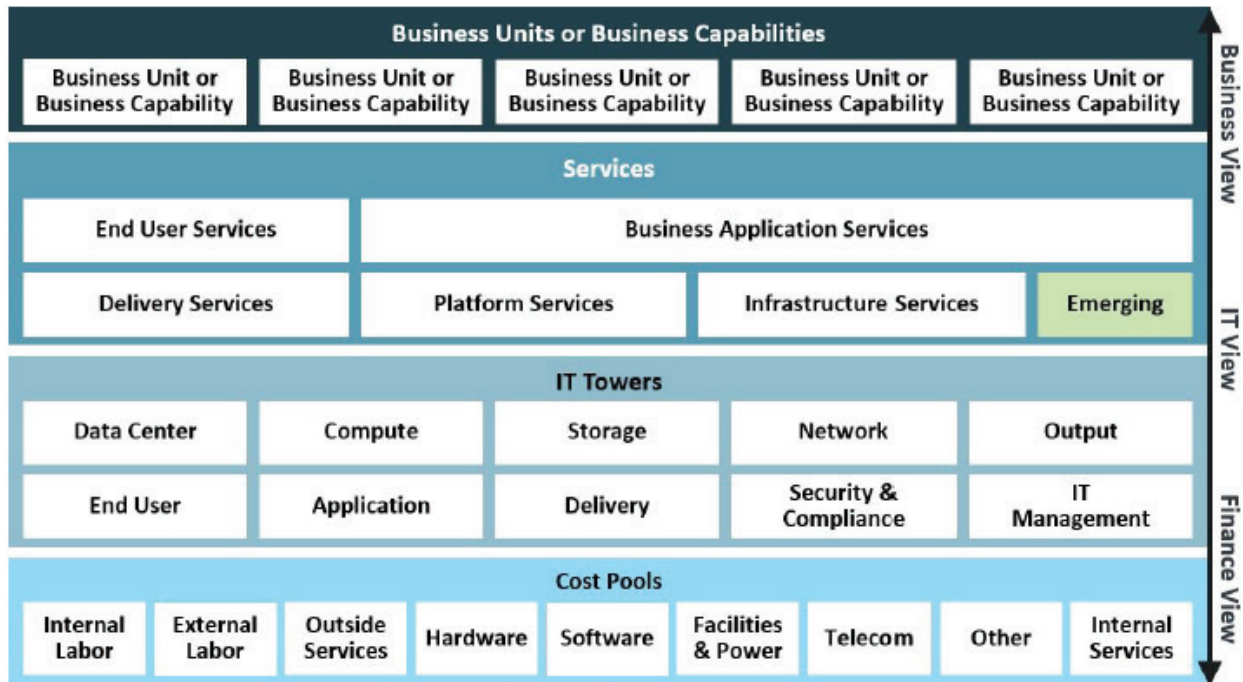


Source: *TBM Taxonomy Version 2.0*, Technology Business Management Council 10/31/2016

## Recommendation 2b

**ETS should provide statewide training to fiscal personnel to ensure all IT costs are consistently recorded to assigned object codes.**

**Not Implemented**

**Comments**

While they agree with our recommendation, ETS stated that additional time is needed to continue working with the departments to fully adopt a standard definition of IT costs and to prepare for tracking and reporting IT costs according to a new standard. Therefore, this recommendation cannot be implemented until Recommendations 2a and 2c are fully implemented.

**Target Date**

ETS plans to begin providing statewide training on the new standard by September 2018.

## Recommendation 2c

**ETS should require annual reporting by all departments to report IT assets, expenditures, contracts, and personnel costs and positions to facilitate decision-making.**

<span style="background-color:orange">**Partially Implemented**</span>

### Comments

ETS opted to include the annual reporting requirement for all IT costs in Executive Memorandum No. 17-04: *FY18 Budget Execution Policies and Instructions* (dated 8/29/2017), which requires departments to submit reports to the CIO detailing all IT purchases, contracts, and payments made for the fiscal year. ETS is still exploring ways to obtain accurate IT personnel costs and position counts from the departments, including hybrid positions where an employee is doing both IT work as well as other responsibilities.

### Target Date

Unknown because of the difficulty in compiling accurate IT personnel costs and position counts.

## Recommendation 2d

**ETS should incorporate itself into the IT budgeting process and oversee significant IT contracts and expenditures to ensure these activities align with the State's overall IT strategic plan.**
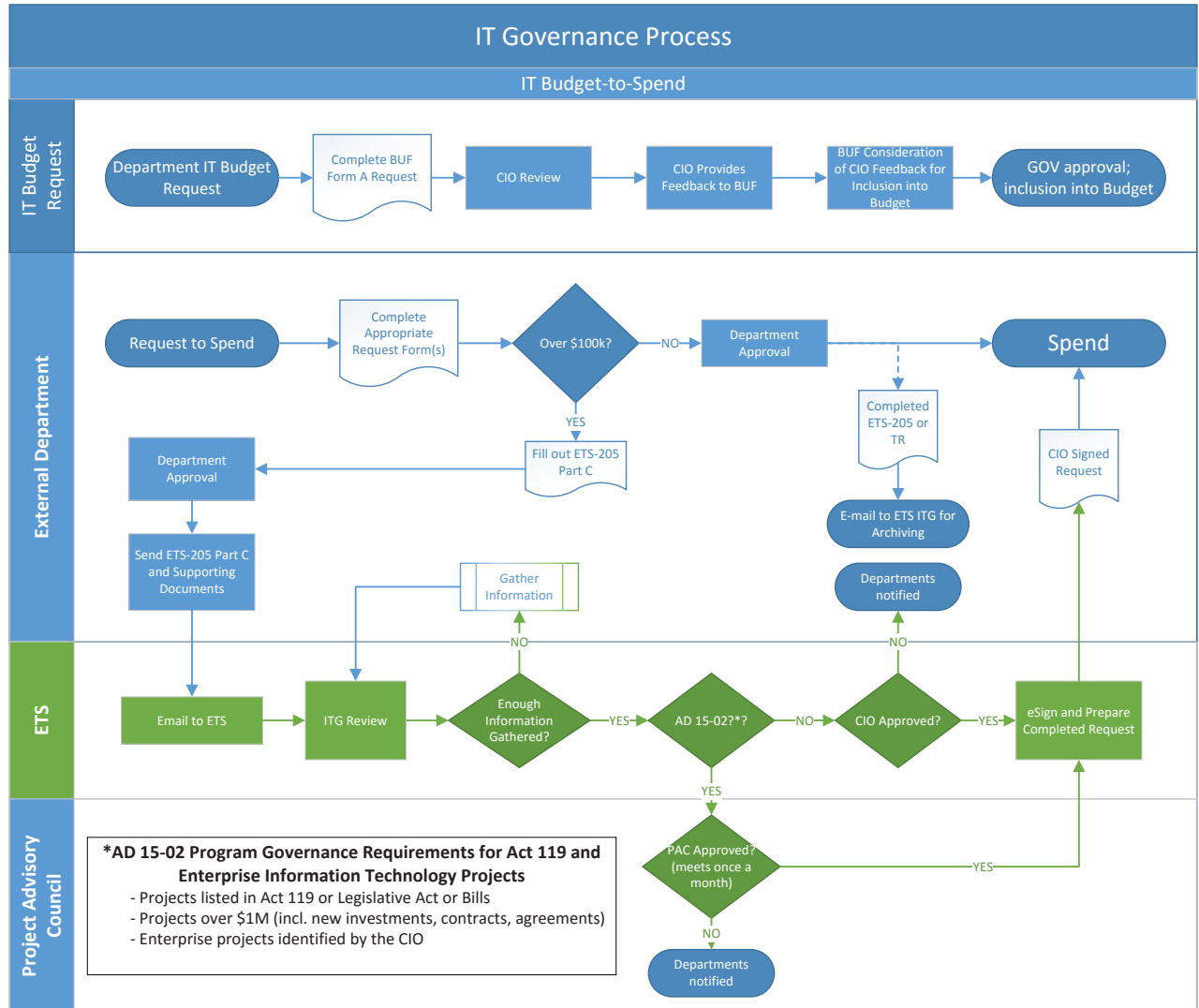
<span style="background-color:green">**Implemented**</span>

### Comments

In August 2017, ETS and the Department of Budget and Finance issued a Joint Memorandum, *Guidelines for Submitting Information Technology and Information Resource Management Roadmaps and Potential Budget Requests for Review for the FY19 Supplemental Budget*, which required departments to submit all potential budget requests along with their corresponding department IT Roadmaps. A flowchart of the state's current IT governance process for evaluating and approving IT investments and projects is shown as Exhibit 3.

In October 2017, ETS published a comprehensive guide, *IT Budget and Spend Request Cycle Documentation,* for departments to use to understand and comply with IT governance process and procedures.

**Exhibit 3**
# IT Governance



Source: http://ets.hawaii.gov/governance/it-governance-forms/