Internal Audit:

Computer Inventory Verification

For the Period: July 1, 2023 - June 30, 2024

Sonoma County

Auditor-Controller-Treasurer-Tax Collector

Internal Audit Report

Engagement No: 4047
Report Date September 10, 2024

ERICK ROESER
AUDITOR-CONTROLLER
TREASURER-TAX COLLECTOR

585 FISCAL DRIVE, SUITE 100
SANTA ROSA, CA 95403
PHONE (707) 565-2631
FAX (707) 565-3489

AMANDA RUCH, CPA
ASSISTANT AUDITOR-CONTROLLER
TREASURER-TAX COLLECTOR

BROOKE KOOP, CPA
ASSISTANT AUDITOR-CONTROLLER
TREASURER-TAX COLLECTOR

KATHLEEN PARNELL
ASSISTANT AUDITOR-CONTROLLER
TREASURER-TAX COLLECTOR

Damian Gonshorowski, CPA	Audit Manager
Melissa Osso, CIA	Auditor-In-Charge

Auditor-Controller-Treasurer-Tax Collector Web Site
http://sonomacounty.ca.gov/Auditor-Controller-Treasurer-Tax-Collector/

Table of Contents

Internal Audit:
Computer Inventory Verification
Engagement No. 4047

For the Period: July 1, 2023 to June 30, 2024

Executive Summary

As part of our 2024 Annual Audit Plan, the Internal Audit Division of the Auditor-Controller-Treasurer-Tax Collector (ACTTC) completed a review of internal controls over tracking the physical existence and disposition of desktop and laptop computers purchased by the County of Sonoma for the period July 1, 2015 through June 30, 2024.

Our audit is designed to identify, analyze, evaluate, and document sufficient information and evidence to achieve our audit objectives. We believe that the evidence obtained provides a reasonable basis for the findings and recommendations contained in our report.

The purpose of this audit report is to furnish management with independent and objective analyses, recommendations and other information concerning the activities reviewed. The audit report is a tool to help management identify and implement improvements.

The Internal Audit Division utilized data provided by the Information Systems Department (ISD) to identify desktop and laptop assets and their current disposition.

The County generally has well documented controls over receiving, deploying and disposing of desktop and laptop computers. We were unable to locate a Countywide policy requiring departments to track computers and report unaccounted for computers to ISD. Some individual departments lack processes to periodically inventory desktop and laptop devices which have been deployed to their department and report the results to ISD.

Although we verified the physical existence of 83% or 200 of the 240 desktop and laptop computers (out of a total population of 4,274 active and received computers) sampled, the remaining 17% or 40 devices were unaccounted for. We verified the final disposition for 95% or 192 of the 202 surplused computers sampled, out of a total population of 1,298 surplused computers. We were unable to locate documentation to support the disposition of the remaining 5% or 10 surplused computers from the sample.

Opportunities exist to improve internal controls over the physical tracking and disposition of desktop and laptop computers, which are discussed in more detail within the Findings, Recommendations and Management Reponses section of this report starting on page 5.

Background

The information Systems Department (ISD) is responsible for providing leadership, support and coordination of technological efforts in most County departments, by providing technological products and services. These services include the procurement, security, servicing and maintenance of desktop and laptop devices for most County departments (excluding Sonoma Water and Human Services). ISD tracks the physical existence and disposition of computers in their possession. Once a computer is delivered to a department, that department is responsible for tracking the physical existence of the computer and for notifying ISD if the computer is lost, damaged, or stolen.

Internal Audit (IA) reviewed all County and ISD policies and procedures regarding computer procurement, inventory tagging, inventory tracking and control, and surplusing procedures for desktop and laptop devices. IA also conducted interviews and walkthroughs with ISD administration, ISD procurement, and ISD warehouse staff to understand current ISD and County procedures for tracking and managing the equipment life cycle of desktop and laptop computers.
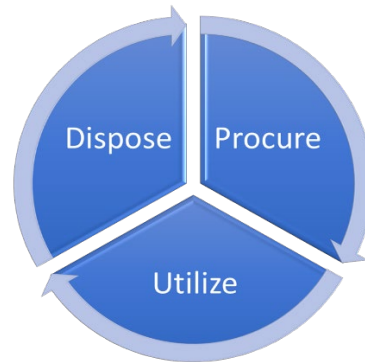
For the purposes of our Audit, the ISD Administrative Services Officer provided a data query file generated from the County Asset and Project Management System (CAPM; referred to as CAPs), to provide IA data on laptops and desktops purchased by the County after July 1, 2015. CAPs is an Access database used by ISD to track and manage the County's IT assets. The query provided by ISD resulted in a listing of 6,112 laptop and desktop devices within IA's selected scope. This included active devices, as well as recently procured (received), surplused, unsupported, retired and devices reported as missing.

Background

Status of County Desktop and Laptop Inventory as of November 2023
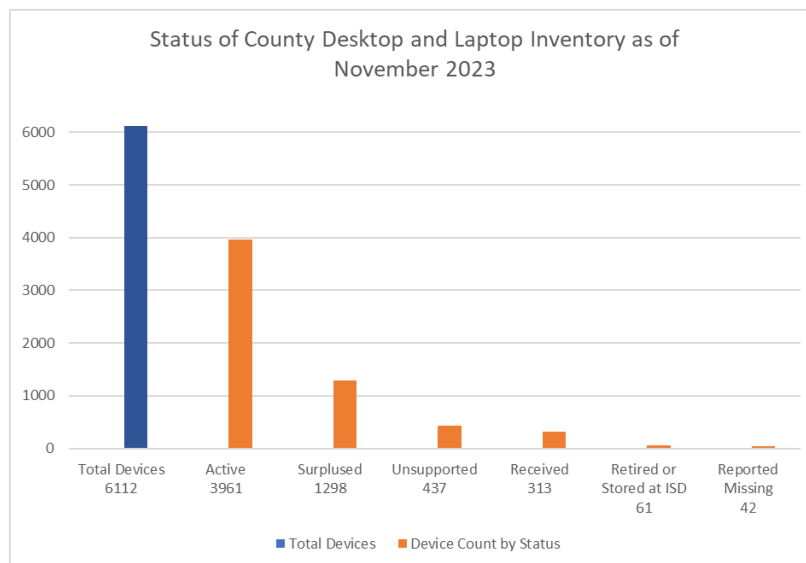
ISD has a variety of tools and scripts that poll connecting devices to ascertain location, user, software installed, connection type, and other attributes of devices. Contact information and connection data from these systems was utilized in the query provided to IA, to identify the most recent date that devices had contacted the County network.

IA judgmentally selected a sample of 240 computers from ISD, the Sheriff's Office, Health Services, Clerk-Recorder-Assessor-Registrar of Voters, and the Auditor-Controller-Treasurer-Tax Collector (ACTTC), to verify their existence. Our sample was taken from a population of 4,274 devices in Active /Received status that had not contacted the County Network since September 30, 2023 or prior. Additionally, IA selected 202 surplused computers from the ACTTC, Health Services and the Sheriff's Office, to verify their final disposition and to evaluate whether appropriate disposition and documentation of the surplused devices was available. Our sample of surplused computers was selected from a population of 1,298 devices.

The scope of the audit included the COVID pandemic disaster. During the disaster the County shifted from a primarily onsite work environment to hybrid and/or work from home options. Additionally, during the COVID pandemic, many devices were purchased and distributed to various departments. The audit included these devices along with other devices purchased in the normal course of County business. IA did not review devices in the unsupported, retired or reported missing categories displayed above as part of this audit.

ISD staff was extremely helpful during the audit process. IA also found that all areas of the ISD warehouse and computer imaging area were well organized, and included additional levels of security for building access.

The draft report was discussed with management prior to final issuance. A total of 3 recommendations were made for the findings identified. Management agreed with all recommendations, their responses to the recommendations are included in this report. In accordance with professional auditing standards, IA intends to perform a follow-up audit on the recommendations which may include other observations as presented.

Objective, Scope & Methodology

Audit reports are designed to assist management and provide constructive recommendations for improving operations. As a result, the report generally does not address activities reviewed that are functioning effectively.

Objective

The primary objective of our audit was to assess County controls over tracking the physical existence and disposition of desktop and laptop computers purchased by the County of Sonoma, and to confirm the physical existence or proper disposition of a judgmentally selected sample of these assets.

Scope

The scope of our audit covered County policies, procedures and controls over tracking computer assets purchased, utilized and decommissioned by County departments under the jurisdiction of the Sonoma County Board of Supervisors. Desktop and laptop computers belonging to Human Services and Sonoma Water were excluded from this audit, as these departments have their own IT organizations, and their devices are not managed by ISD.

Our audit was performed during fiscal year 2023-2024, and included devices purchased between July 1, 2015 and November 2023.

Methodology

To achieve our objectives we:

- Reviewed relevant County policies, procedures and controls related to tracking and disposition of County computer assets;
- Obtained computer asset information from ISD;
- Selected a sample of computers to verify their existence;
- Conducted interviews with ISD and department personnel;
- Reviewed computer asset end-of-life departmental documentation; and,
- Evaluated internal controls related to computer assets.

Findings, Recommendations & Management Responses

Finding # 1 - Risk Classification C

Condition

The County does not have a policy assigning responsibility for tracking computers, nor is there a requirement for departments to perform an annual physical inventory of desktop and laptop computers in their custody. Three (3) of the departments we reviewed (ISD, the Sheriff's Office and Health Services) were unable to locate some computers in their custody, which were listed as active/received.

Forty (40) (or 17%) out of 240 computers could not be located, of the computers that could not be located, 32 are laptops and 8 are desktops, we were able to verify existence of the remaining 200 computers; or 83%. Our selection was limited to devices listed as active/received, which had not been in contact with the network since at least September 30, 2023, and as far back as 2020, thus the sample selection was focused on computers that were at a higher risk of being unlocatable. The last recorded location of the unlocatable devices were sometimes incorrect, out of date, or not specific enough to locate the device.

We verified the final disposition for 95% or 192 of the 202 surplused computers sampled, out of a total population of 1298 surplused computers. We were unable to locate documentation to support the disposition of the remaining 5% or 10 surplused computers.

Procedures and controls over receiving and tagging devices at ISD are documented and appear to be designed effectively, however the status of devices is not always updated/documented correctly in CAPs. Devices that were listed as active were found to be missing, or devices that were marked as received were deployed and in active status within a department. Once devices are deployed to departments, there appears to be a lack of controls over tracking the location and verifying the existence of the devices.

In addition to the cost of purchasing computers, departments pay annual/monthly computer maintenance and replacement charges based on the number of active/in use computers; for grant funded departments these charges may be charged back to the granting agency. For departments that do not adequately track their computers and fail to notify ISD of missing computers, these departments are incurring monthly/annual maintenance and replacement fees for devices that are missing or no longer in use.

Criteria

County Policies should assign the responsibility for tracking computers. The physical location of devices should be tracked in a system, annual inventories should be performed, and documentation of missing or surplused devices should be maintained. Movement of devices, from ISD to a Department, or any movement of the device within or between Departments, should be communicated by department staff to ISD and entered into the system, to track the devices location.

Recommendation

ISD in collaboration with the County Executive's Office should work with ACTTC management to develop a Countywide policy for tracking computers, specifically it should address assigning responsibility and identifying requirements for an annual physical inventory certification of desktop and laptop computers to be completed by Departments. The policy should require that the certification be performed prior to ISD's budgeting process, to assure that County owned desktop and laptop computers can be tracked, and their existence can be verified in advance of the annual ISD budgeting process and subsequent billing to Departments.

Findings, Recommendations & Management Responses

Management Response

ISD supports the recommendation for establishing a process for tracking computers on a countywide basis. We will consult with CAO and ACTTC partners to determine the best path forward for addressing this in a manner which best reflects the needs and capacities of the County organization. Not all elements of this recommendation may be implemented as envisioned to achieve this goal. For example, it may be decided that development of a formal policy, which can be costly and quite time consuming, may not be necessary in order to achieve desired accountability.

Finding # 2 - Risk Classification D

Condition

The County Asset and Project Management System (CAPM – referred to as CAPs) is an Access database used by ISD to track and manage IT assets for the County.   The CAPs database was built in-house and is currently the County's only system for tracking IT Assets. The database is older and is challenged with processing time and storage space issues. The employee who built the database is no longer with the County, and the database needs to be periodically purged to improve functioning and processing time.

According to ISD staff, the bandwidth and functional issues with CAPs greatly impacts workflow issues and processing time for ISD staff. Internal Audit observed long delays in processing while working with ISD staff to locate devices in our sample selection, and while reviewing warehouse and procurement processes.

Criteria

The County needs an inventory tracking system for IT assets. The system needs to track the location of IT assets, the activity of assets (i.e. the last time the computer accessed the network, and from where), the status of devices, as well as requisition activity (including imaging information) and the security status of computers acquired, serviced and monitored by ISD.

Recommendation

ISD should work with their CEO analyst to define system needs and budget for a replacement IT inventory, procurement and service tracking system to replace the current CAPs database.

Management Response

ISD supports the recommendation for implementing a modern inventory tracking system for IT assets. ISD will evaluate options for identifying and funding a replacement for the existing system in consultation with our CAO partners.

Findings, Recommendations & Management Responses

Finding # 3 - Risk Classification C

Condition

Although there was a Certification of Computing Media Sanitation form being used during the audit period, it's use was inconsistent. Sample testing to verify devices were properly sanitized was not being done.

The audit period included the COVID pandemic, which disrupted ISD's normal operations. Additionally for a period of time ISD switched to pressing drives to destroy them, rather than wiping them, which would not require sample testing. The date this new pressing process started however is not documented.

During the Audit the ISD Warehouse implemented a new web based Media Sanitation Form that includes a sanitation verification step, Internal Audit notes this web based tool has a reporting function as well. The new tool was implemented in January of 2024.

Criteria

Administrative Policy 9-4: Information Technology Resource Management Policy, section VIII Information Technology Professionals Policy, item E. Secure Disposal or Re-Use of IT Resources 5. indicates that there should be sample testing done to verify that County data is inaccessible when a device is surplused. " *To verify Local Agency data is inaccessible, a sample of Local Agency IT resources must be tested.*"

Recommendation

The new Media Sanitation Form and reporting tool, implemented in January 2024, should be used by ISD consistently on all surplused devices.

Management Response

ISD supports the recommendation on improvements in the Computing Media Sanitation process.

Appendix A – Report Item Risk Classification

For purposes of reporting our audit findings and recommendations, we classify audit report items into four distinct categories to identify the perceived risk exposure:

- ➢ **Risk Classification A: Critical Control Weakness:**
  Serious audit findings or a combination of Significant Control Weaknesses that represent critical exceptions to the audit objective(s), policies, and/or business goals of a department/agency or the County as a whole. Management is expected to address Critical Control Weaknesses brought to their attention immediately.

- ➢ **Risk Classification B: Significant Control Weakness:**
  Audit findings or a combination of Control Weaknesses that represent a significant deficiency in the design or operation of internal controls. Significant Control Weaknesses generally will require prompt corrective actions.

- ➢ **Risk Classification C: Control Weakness:**
  Audit findings concerning internal controls, or compliance issues that require management's corrective action to implement or enhance processes and internal controls. Control Weaknesses are expected to be addressed within our follow-up process.

- ➢ **Risk Classification D: Opportunity for Improvement:**
  Audit findings concerning opportunities for improvement or efficiency/effectiveness issues that require management's consideration to implement or enhance processes. Opportunities for improvement are expected to be addressed within our follow-up process.

The current status of implementation of recommendations will be followed up no later than the end of the second fiscal year after the report has been issued. Critical control weakness findings will be followed up between six months and one year of the date of the report.