

INTERNAL AUDIT DEPARTMENT



Information Technology Audit: OC Public Works Selected Cybersecurity Controls

For the Year Ended December 31, 2024

Audit No. 2414

Report Date: March 31, 2025

Number of Recommendations



Critical Control Weaknesses



Significant Control Weaknesses



Control Findings

OC Board of Supervisors

VICE CHAIR KATRINA FOLEY SUPERVISOR JANET NGUYEN SUPERVISOR VICENTE SARMIENTO

SUPERVISOR DONALD P. WAGNER



INTERNAL AUDIT DEPARTMENT

Information Technology Audit: OC Public Works Selected Cybersecurity Controls March 31, 2025

	Audit Highlights	
SCOPE OF WORK	Perform an information technology audit of OC Public Works (OCPW) Selection Cybersecurity Controls administered or monitored by OCPW for the year end December 31, 2024.	
RESULTS	Content for sensitive findings has been removed from this report.	
Risks	Content for sensitive findings has been removed from this report.	
NUMBER OF RECOMMENDATIONS	Content for sensitive findings has been removed from this report.	
CRITICAL CONTROL WEAKNESSES		
SIGNIFICANT CONTROL WEAKNESSES		
4 CONTROL FINDINGS		
Report suspected fraud, or misuse of County resources by vendors, contractors, or County employees to (714) 834-3608		



INTERNAL AUDIT DEPARTMENT

Audit No. 2414

March 31, 2025

To: Kevin Onuma, PE

OC Public Works Director

From: Aggie Alonso, CPA, CIA, CRMA

Internal Audit Department Director

Subject: Information Technology Audit: OC Public Works Selected Cybersecurity Controls

Alonso Date: 2025.03.31 15:17:58

We have completed an information technology audit of OC Public Works (OCPW) Selected Cybersecurity Controls administered or monitored by OCPW for the year ended December 31, 2024. Due to the sensitive nature of specific findings, the results for the sensitive findings are redacted from public release. Additional information including background and our objectives, scope, and methodology are included in Appendix A.

OCPW concurred with all our recommendations and the Internal Audit Department considers management's response appropriate to the recommendations in this report.

We will include the results of this audit in a future status report submitted quarterly to the Audit Oversight Committee and the Board of Supervisors. In addition, we will request your department complete a Customer Survey of Audit Services, which you will receive shortly after the distribution of our final report.

We appreciate the courtesy extended to us by OCPW during our audit. If you have any questions, please contact me at (714) 834-5442 or Deputy Director Jose Olivo at (714) 834-5509.

Attachments

Other recipients of this report:
Members, Board of Supervisors
Members, Audit Oversight Committee
County Executive Office Distribution
OC Public Works Distribution
Robin Stieler, Clerk of the Board
Foreperson, Grand Jury
Eide Bailly LLP, County External Auditor

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RESULTS		
FINDING No. 1	Removed due to the sensitive nature of the finding.	
FINDING No. 2	Removed due to the sensitive nature of the finding.	
FINDING No. 3	Removed due to the sensitive nature of the finding.	
FINDING No. 4	IT Procedures Not Finalized	
	OCPW is in the process of finalizing the following IT procedures that are required by the County Cybersecurity Policy and County Vulnerability Management Policy:	
	OCPW Identity and Access Management (IAM)	
	OCPW Change Management Procedures	
CATEGORY	Control Finding	
RISK	Without formal IT procedures, there can be a lack of awareness and understanding of IT business processes, misuse of IT resources, and potential cybersecurity violations.	
RECOMMENDATION	OCPW management finalize its applicable IT procedures to comply with County policy.	
MANAGEMENT RESPONSE	Concur. We are in the process of finalizing the OCPW Identity and Access Management (IAM) and OCPW Change Management Procedures to comply with both the County Cybersecurity Policy and the County Vulnerability Management Policy. By June 2, 2025, we plan to submit these revised policies for approval, ensuring that they clearly outline our processes for safeguarding resources and defining accountability. We have already begun integrating feedback from previous findings and collaborating with our internal teams to refine each step of these procedures. Once approved, we will share updates and offer guidance to staff so everyone understands how to uphold and maintain these new standards. Individual(s) responsible for addressing the finding: Dov Rizzo, James Wallace, Brian Anderson, Jim Reed, Chris Jacobs, and Phil Pappas.	
	Date by which the actions were or should be completed: June 2, 2025.	

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AUDIT TEAM	Jimmy Nguyen, CISA, CFE, CEH Michael Steinhaus, CISA, CIA, CPA	Senior IT Audit Manager IT Audit Manager
	Gabriela Cabrera, CIA	Administrative Services Manager

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APPENDIX A: ADDITIONAL INFORMATION		
OBJECTIVE	Evaluate OCPW's design and operating effectiveness of internal control to determine whether [REDACTED] controls provide reasonable assurance that sensitive data is restricted, vulnerabilities and system changes are managed, and comply with best practices.	
SCOPE & METHODOLOGY	Our engagement scope was limited to selected critical security controls over [REDACTED] for the year ended December 31, 2024. Our methodology included inquiry, observation, examination of documentation, and sampling of relevant items.	
Exclusions	We did not evaluate application controls or processes that involve external parties such as OCIT, the State of California, or third-party vendors.	
PRIOR AUDIT COVERAGE	We have not issued any audit reports for OCPW with a similar scope within the last ten years.	
BACKGROUND	OCPW's mission is to protect and enrich Orange County communities through sustainable delivery of projects and services. OCPW provides its projects and services through ten service areas including Administrative Services, Development Services, Facilities & Design Construction Management, Facilities Maintenance & Central Utility Facility, Fleet Services, Construction, Environmental Resources, Infrastructure Programs, Operations & Maintenance, and OC Survey.	
	OCPW uses OCIT/SAIC to manage its IT functions and is a member of OCIT Shared Services and Managed Services. OCIT's purpose is to meet the technical needs of the agency, provide cybersecurity support, and support its core business functions. Services provided by OCIT include Data Center Services, Desktop Support, Enterprise Services, Cybersecurity, Application Development, and Help Desk Services.	

Internal Audit Department

PURPOSE & AUTHORITY	We performed this audit in accordance with the Fiscal Year 2024-25 Audit Plan and Risk Assessment approved by the Audit Oversight Committee (AOC) and the Board of Supervisors (Board).	
PROFESSIONAL STANDARDS	Our audit was conducted in conformance with the Global Internal Audit Standards issued by the International Internal Audit Standards Board.	
FOLLOW-UP PROCESS	In accordance with professional standards, the Internal Audit Department has a process to follow-up on its recommendations. A first follow-up audit will generally begin six months after release of the initial report.	
	The AOC and Board expect that audit recommendations will typically be implemented within six months or sooner for significant and higher risk issues. A second follow-up audit will generally begin six months after release of the first follow-up audit report, by which time all audit recommendations are expected to be implemented. Any audit recommendations not implemented after the second follow-up audit will be brought to the attention of the AOC at its next scheduled meeting.	
	A Follow-Up Audit Report Form is attached and is required to be returned to the Internal Audit Department approximately six months from the date of this report to facilitate the follow-up audit process.	
MANAGEMENT'S RESPONSIBILITY FOR INTERNAL CONTROL	In accordance with the Auditor-Controller's County Accounting Manual No. S-2 Internal Control Systems: "All County departments/agencies shall maintain effective internal control systems as an integral part of their management practices. This is because management has primary responsibility for establishing and maintaining the internal control system. All levels of management must be involved in assessing and strengthening internal controls." Internal control should be continuously evaluated by management and weaknesses, when detected, must be promptly corrected. The criterion for evaluating internal control is the Committee of Sponsoring Organizations of the Treadway Commission (COSO) Internal Control – Integrated Framework: 2013 (Framework). Our audit complements but does not substitute for department management's continuing emphasis on control activities and monitoring of control risks.	
INTERNAL CONTROL LIMITATIONS	Because of inherent limitations in any system of internal control, errors or irregularities may nevertheless occur and not be detected. Specific examples of limitations include, but are not limited to, resource constraints, unintentional errors, management override, circumvention by collusion, and poor judgment. Also, projection of any evaluation of the system to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or the degree of compliance with the procedures may deteriorate. Accordingly, our audit would not necessarily disclose all weaknesses in the department's operating procedures, accounting practices, and compliance with County policy.	

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APPENDIX B: REPORT ITEM CLASSIFICATION

Critical Control Weakness	Significant Control Weakness	Control Finding
These are audit findings or a combination of audit findings that represent critical exceptions to the audit objective(s) and/or business goals. Such conditions may involve either actual or potential large dollar errors or be of such a nature as to compromise the department's or County's reputation for integrity. Management is expected to address Critical Control Weaknesses brought to its attention immediately.	that represent a significant deficiency in the design or operation of internal controls. Significant Control Weaknesses require prompt	These are audit findings concerning the effectiveness of internal control, compliance issues, or efficiency issues that require management's corrective action to implement or enhance processes and internal control. Control Findings are expected to be addressed within our follow-up process of six months, but no later than twelve months.

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APPENDIX C: OCPW MANAGEMENT RESPONSE

Content in Appendix C has been removed from this report due to the sensitive nature of the management response.