

AGENDA SPECIAL AUDIT COMMITTEE MEETING OF THE BOARD OF DIRECTORS INLAND EMPIRE UTILITIES AGENCY*

WEDNESDAY, MARCH 15, 2023 9:00 A.M.

AGENCY HEADQUARTERS BOARD ROOM 6075 KIMBALL AVENUE, BUILDING A CHINO, CALIFORNIA 91708 VIEW THE MEETING LIVE ONLINE AT IEUA.ORG TELEPHONE ACCESS: (415) 856-9169 / Conf Code: 689 218 678#

The public may participate and provide public comment during the meeting by dialing the number provided above. Alternatively, public comments may be emailed to the Recording Secretary Jeanina Romero at <u>iromero@ieua.org</u> no later than 24 hours prior to the scheduled meeting time. Comments will then be read into the record during the meeting.

CALL TO ORDER

PUBLIC COMMENT

Members of the public may address the Board on any item that is within the jurisdiction of the Board; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Those persons wishing to address the Board on any matter, whether or not it appears on the agenda, are requested to email the Recording Secretary no later than 24 hours prior to the scheduled meeting time or address the Board during the public comments section of the meeting. <u>Comments will be limited to three minutes per speaker.</u> Thank you.

ADDITIONS TO THE AGENDA

In accordance with Section 54954.2 of the Government Code (Brown Act), additions to the agenda require two-thirds vote of the legislative body, or, if less than two-thirds of the members are present, a unanimous vote of those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted.

*A Municipal Water District

1. ACTION ITEMS

A. <u>MINUTES</u>

Approve Minutes of the December 12, 2022 Audit Committee meeting.

- 2. **INFORMATION ITEMS**
 - A. <u>REVIEW OF PAY ESTIMATE PROCESSES (WRITTEN/POWERPOINT)</u>
 - B. <u>PROGRESS UPDATE FOR ALL PROCURE TO PAY AUDIT</u> <u>RECOMMENDATIONS – FIFTH UPDATE (WRITTEN/POWERPOINT)</u>
 - C. <u>INTERNAL AUDIT QUALITY CONTROL REVIEW OF THE ANNUAL</u> <u>COMPREHENSIVE FINANCIAL REPORT (WRITTEN)</u>
 - D. INTERNAL AUDIT QUARTERLY STATUS REPORT FOR MARCH 2023 (WRITTEN)
- 3. AUDIT COMMITTEE ADVISOR COMMENTS
- 4. <u>COMMITTEE MEMBER COMMENTS</u>

5. <u>COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS</u>

<u>ADJOURN</u>

DECLARATION OF POSTING

I, Jeanina Romero, Executive Assistant of the Inland Empire Utilities Agency*, a Municipal Water District, hereby certify that, per Government Code Section 54954.2, a copy of this agenda has been posted at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA and on the Agency's website at www.ieua.org at least seventy-two (72) hours prior to the meeting date and time above.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Recording Secretary at (909) 993-1847 or <u>jromero@ieua.org</u>, 48 hours prior to the scheduled meeting so that IEUA can make reasonable arrangements to ensure accessibility.

Audit Committee

ACTION ITEM





MINUTES AUDIT COMMITTEE MEETING INLAND EMPIRE UTILITIES AGENCY* AGENCY HEADQUARTERS, CHINO, CA

MONDAY, DECEMBER 12, 2022 9:00 A.M.

COMMITTEE MEMBERS PRESENT via Video/Teleconference

Paul Hofer, Chair Steven J. Elie, Director

STAFF PRESENT

Shivaji Deshmukh, General Manager Kristine Day, Assistant General Manager Javier Chagoyen-Lazaro, Director of Finance Denise Garzaro, Board Secretary/Office Manager Brandon Gonzalez Contreras, Technology Specialist I Michael Larios, Technology Specialist I Jeanina Romero, Executive Assistant

STAFF PRESENT via Video/Teleconference

Deborah Berry, Controller Jerry Burke, Director of Engineering Lisa Dye, Director of Human Resources Don Hamlett, Director of Information Technology Jennifer Hy-Luk, Executive Assistant Randy Lee, Acting Director of Finance Sapna Nangia, Senior Internal Auditor Brian Stevenson, Internal Auditor Teresa Velarde, Manager of Internal Audit

OTHERS PRESENT via Video/Teleconference

Travis Hickey, Audit Committee Advisor

Committee Chair Paul Hofer called the meeting to order at 9:00 a.m. He gave the public the opportunity to comment. There were no public comments received and no additions to the agenda.

1A - 1C. ACTION ITEMS

The Committee:

- Approved the minutes of the September 12, 2022 Audit Committee meeting.
- Recommended that the Board:
 - 1. Approve the Annual Comprehensive Financial Report for fiscal year ended June 30, 2022;

- 2. Direct staff to distribute the report as appropriate, to the various federal, state, and local agencies, financial institutions, bond rating agencies, and other interested parties;
- 3. Approve an interfund loan of \$7,000,000 from Recycled Water Fund to the Recharge Water Fund to support the Recharge Master Plan Update projects execution until grants and State Revolving Fund loan proceeds from the State Water Resources Control Board are received by the Agency; and
- 4. Authorize the General Manager to execute the inter-fund loan.
- ♦ and
 - 1. Approve the Audit Committee Charter and the Internal Audit Unit Charter; and
 - 2. Direct staff to implement the charters.

2A – 2D. INFORMATION ITEMS

The following information items were presented, or received and filed by the Committee:

- Accounts Payable Operational and Internal Control Audit Report Review of Procure to Pay Processes for Materials and Supplies
- Progress Update for all Procure to Pay Audit Recommendations
- Contracts and Procurement Follow-Up Review
- Internal Audit Unit Quarterly Status Report for December 2022

3. AUDIT COMMITTEE ADVISOR COMMENTS

Audit Committee Advisor Travis Hickey congratulated Chair Hofer and Director Elie on beginning new terms on the Board. He commented on a beneficial cyber security article within the committee packet. He stated that the Agency has a long history of staying on track with Auditing.

4. COMMITTEE MEMBER COMMENTS

Director Elie stated he appreciates all that staff is doing and has done to work together on difficult issues which are significant to both the Agency and the Directors.

5. COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS

There were no Committee member requested future agenda items.

ADJOURNMENT

With no further business, Committee Chair Hofer adjourned the meeting at 10:02 a.m.

Respectfully submitted,

Jeanina Romero Executive Assistant

*A Municipal Water District

APPROVED: MARCH 15, 2023

Audit Committee

INFORMATION ITEM **2A**



Date: March 15, 2023To: The Honorable Board of DirectorsCommittee: Audit

From: Teresa Velarde, Manager of Internal Audit 03/15/23

Manager Contact: Teresa Velarde, Manager of Internal Audit

Subject: Review of Pay Estimate Processes

Executive Summary:

IA completed the Review of Pay Estimate Processes. This audit was completed as part to the comprehensive Accounts Payable Operational and Internal Control Audit. The scope of the review was to evaluate the various steps to process Pay Estimates. Pay Estimates are monthly progress payments for work completed on capital construction projects. Additionally, the scope of the review was to identify areas of non-compliance or inefficiencies and propose recommendations to make the overall process more efficient.

IA reviewed the most recent 18 month period, July 2021-December 2022. During this period, the Agency paid over 240 Pay Estimates, totaling over \$170 million. IA identified several observations related to: improving efficiencies utilizing the various software tools to ensure information is accurately calculated, uploaded and processed with the tools available. Additional observations were related to the need to eliminate duplication of efforts, minimize the number of copies with the same information and utilize reports and tools from SAP instead on creating and relying on non-secured, manually created spreadsheets. Additional controls are needed to safeguard data, improve supervisory review and approval of payment data before it is submitted to Finance, and develop or update policies and procedures for the many activities. The report attached provides details of the audit observations and the 27 audit recommendations.

Staff's Recommendation:

This is an information item.

Budget Impact Budgeted (Y/N): N Amendment (Y/N): Y Amount for Requested Approval: Account/Project Name: N/A

Fiscal Impact (explain if not budgeted): N/A

Prior Board Action:

On June 15, 2022, the Board of Directors approved the Fiscal Year 2022/23 Annual Audit Plan. The Plan proposed the various Procure to Pay Audits under the Accounts Payable Operational and Internal Control Audit, which includes Pay Estimates.

Environmental Determination: Not Applicable

Business Goal:

The Review of Pay Estimate Processes is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that IA's evaluations provide recommendations that foster a strong control environment, safeguard assets, promote a safe work environment and assist management in achieving organizational goals and objectives.

Attachments:

Attachment 1 - Review of Pay Estimate Processes Attachment 2 - PowerPoint



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DATE: February 27, 2023

TO: Shivaji Deshmukh General Manager

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FROM: Teresa V. Velarde Manager of Internal Audit

SUBJECT: Review of Pay Estimate Processes

Audit Authority

The Inland Empire Utilities Agency (IEUA or Agency) Internal Audit Unit (IA) has performed an audit of the processes related to Pay Estimates. The audit was performed under the authority given by the Board of Directors in the approved Fiscal Year (FY) 2022-2023 Annual Audit Plan and IA's Charter.

Audit Objectives and Scope

The objective of the Review of Pay Estimate Processes was to evaluate the various steps taken to process Pay Estimates for timely payment. The purpose was to evaluate that the Engineering and Finance departments have sufficient internal controls in place to properly review, verify and approve the amounts billed by the contractors. Additionally, to evaluate whether processes for payment are streamlined, follow Agency policies and Standard Operating Procedures (SOPs). Lastly, to identify opportunities for efficiencies and improvement.

The audit objectives were to:

- Evaluate the Pay Estimate processes, including invoice submission, review receiving procedures and payment processing
- Determine if Standard Operating Procedures (SOPs) are established and followed
- Evaluate internal controls
- Evaluate the timeliness and efficiency of payments
- Evaluate the use of technology and reporting tools
- Evaluate the reasons why Accounts Payable staff must set aside an entire business week to process Pay Estimates and delay all other types of payments
- Identify opportunities to make processes efficient
- Identify opportunities for improvements

Water Smart - Thinking in Terms of Tomorrow

Review of Pay Estimate Processes February 27, 2023 Page 2 of 28

IA is performing the Accounts Payable Operational and Internal Controls Audit in multiple phases. To-date, IA has issued the following audit reports:

- Interim Audit Report: Accounts Payable Operational and Internal Controls Audit (dated August 20, 2021) This comprehensive report evaluated invoice and payment data and metrics, including the total number of invoices paid on time or late and the number of days invoices were paid after the due date, along with other analysis of financial information.
- <u>Accounts Payable Operational and Internal Controls Audit Report Review of</u> <u>Procure to Pay Processes for Chemicals (dated November 24, 2021)</u> This report evaluated the Procure to Pay Processes for the Agency's chemicals (from ordering to payments). IA provided 35 audit recommendations to: Operations & Maintenance, the Accounting and Contracts and Procurement (CAP) units of the Finance Department.
- <u>Accounts Payable Operational and Internal Controls Audit Report Review of Procure to Pay Processes for Professional Services Engineering & Construction Management (dated February 24, 2022)</u> This report evaluated the Procure to Pay Processes for Professional Services as administered by the Engineering & Construction Management (E&CM) unit, specifically the Master Contracts or Design Contracts. IA provided 21 recommendations to: E&CM, CAP, and the Accounting Unit.
- <u>Accounts Payable Operational and Internal Controls Audit Report Review of</u> <u>Procure to Pay Processes for Planning and Resources (dated May 25, 2022)</u> This report evaluated the Procure to Pay Processes related to Professional Services administered by Planning and Resources. IA provided 11 recommendations to: Planning and Resources, CAP, and the Accounting Unit.
- <u>Accounts Payable Operational and Internal Controls Audit Report Review of</u> <u>Procure to Pay Processes for Home Depot (dated September 1, 2022)</u> This report evaluated the Procure to Pay Processes related to Home Depot Credit Cards. IA provided 7 recommendations to: CAP, Accounting, and all departments using Home Depot Credit Cards.
- <u>Accounts Payable Operational and Internal Controls Audit Report Review of</u> <u>Procure to Pay Processes for Materials and Supplies (dated December 5, 2022)</u> This report evaluated the Procure to Pay Processes related to Materials and Supplies. IA provided 19 recommendations to: CAP, Facilities and Water System Programs, Operations, Maintenance, Warehouse, Water Quality Laboratory, Accounting, and the Procurement Card Administrator.

Review of Pay Estimate Processes February 27, 2023 Page 3 of 28

Quarterly progress reports are submitted to the Audit Committee to report on the implementation status of all P2P recommendations. To-date 120 recommendations have been provided.

Audit Techniques Applied

- Interviews of Agency staff
- Review of Agency policies and procedures
- Review of department Standard Operating Procedures (SOPs)
- Analysis of financial transactions
- Review of supporting documents

Audit Results – Executive Summary

As of February 2023, IA has provided 120 recommendations through seven (7) Procure to Pay (P2P) audits to improve the operational efficiencies and payment processes throughout the Agency. With the completion of each P2P audit, the Agency continues to evaluate and implement efficiencies to improve the day-to-day operations and processes. IA's Review of Pay Estimate Processes is part of the P2P audits under the Accounts Payable Operational and Internal Controls Audit.

Pay Estimates or Progress Payments are monthly payments to a contractor for construction work that has been completed on a capital construction project. Pay Estimates are time-sensitive and require additional procedures to calculate the required retainer (which is the amount held until the project is completed). A "retention" is a fee or percentage of the monthly payment withheld from the contractor's payment. Retainer funds are either held by IEUA or placed in an escrow account with a third-party (i.e., financial institution). Funds are returned to the contractor after the project has been completed and the Notice of Completion has been filed.

Examples of current Agency construction projects, include:

RP-5 Expansion Project
RP-1 Flare Improvement project
Philadelphia Lift Station Generator Upgrades
RP-3 Diversion Structure
Wineville Basin/Jurupa Basin/Force Main Project
Bioassay Room Incubator Installation Contract

The audit evaluated the most recent eighteen-month period June 2021 through December 2022. During this 18-month period, Accounts Payable processed approximately 242 Pay Estimates, this was 11 to 18 per month, with an average of 13 Pay Estimates processed and paid per month.

Review of Pay Estimate Processes February 27, 2023 Page 4 of 28

IA is providing 27 audit recommendations to improve Pay Estimate processes, 11 for Finance and 16 for Engineering. The report that follows provides details of IAs observations and recommendations related to Pay Estimates. This audit report is organized as follows:

- IA observations, findings, and recommendations
- Narratives and flowcharts documenting the processes
- Background information about Pay Estimates
- Analysis of transactions selected and results of the detailed audit testing

Acknowledgements

IA would like to extend our appreciation to staff who assisted us during this review, including staff from the following units/departments: Engineering & Construction Management (E&CM), Finance (Accounts Payable and Budget), and Information Technology (IT). The observations and recommendations in this report were shared with each of the respective units and departments between February 15, 2023, through February 23, 2023, their comments have been considered and where possible their responses have been incorporated. IA looks forward to the continued collaboration.

The Review of Pay Estimates is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that IA's evaluations provide recommendations that foster a strong control environment, safeguard assets, promote a safe work environment and assist management in achieving organizational goals and objectives.

TV:sn:dp

Observations and Recommendations Pay Estimates

Pay Estimates are payments for progress completed for capital construction projects. Pay Estimate payments are governed by Public Contract Code §20104.50, which states that payments must be made Net 30. *To ensure payments are made timely, Accounts Payable (AP) allocates all resources and staff time for an entire week (approximately the week when the 20th of each month happens or the 3rd week of the month) to process Pay Estimates. Payments for other types of goods and service are put on hold (unless they are considered urgent) and processed after all Pay Estimates have been processed.*

Delays and challenges in processing Pay Estimates are due to:

- Finance cannot rely on the Pay Estimate Information submitted by Engineering. The information submitted from CIPO, Engineering's project management system, will often have errors; therefore, AP must closely reconcile all information submitted using the many spreadsheets for each project.
- There are no documented procedures or training provided for completing the receiving function in SAP and for processing Pay Estimates.
- There are no documented or training provided for Engineering and Finance staff on the correct processes related to Pay Estimates, retentions, escrows and how to resolve issues when processing payments.

Following is the matrix of IA's observations and recommendations. IA identified 76 recommendations 11 for Accounting and 16 for Engineering. The flowcharts that follow illustrate the steps involved in processing pay estimates. The financial information that follows summarizes IAs audit procedures applied to a selected sample of transactions and the results provide additional support for the observations identified.

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	Internal Audit's List of Observations and Recommendations				
	Dept taking the lead to implement	Observation, Issue, or Idea	Recommendation	Impact on revised/updated process with recommendation being implemented	
1	Accounting	 AP's Multiple Excel Spreadsheets AP utilizes multiple excel spreadsheets to track and monitor Pay Estimate payment information for each construction project. The spreadsheets include a summary of the payments, retentions, escrows, and change orders. AP relies on the spreadsheets as a verification and reconciliation tool and as a method to keep information in a centralized location (i.e. year-to-date totals, contract balance, retention withheld). The information recorded in the excel spreadsheet is already entered SAP, the Agency's ERP system, but according to AP, it not user friendly. As of February 7, 2023, the file folder located on the department's shared drive has a total of 237 excel spreadsheets. The oldest excel file in the drive is 19 years old (last modified December 16, 2004). There is a methodology for the filing system of the excel files, contractor name and project number, but this method may be inefficient when looking for a file (i.e., open, closed by fiscal year, archive files, etc.). Excel files follow the same naming convention – contractor name & project number. AP agreed that the Pay Estimate folder on the department shared drive needs to be organized. Having to maintain and manage multiple excel spreadsheets has several risks including: time and resources to manage and organize, no protection to ensure files are not modified, moved, deleted, or corrupted. E&CM indicated they would like to have visibility to AP's excel spreadsheets for verification and reconciliation prior to the release of retentions. Each time a retention release must be processed, E&CM Admin staff will request a copy of AP's excel spreadsheet associated with the project. 	AP should take the lead to work with IT to determine if there are ways to eliminate the many excel spreadsheets with centralized report tools from SAP. Reports should assist with the review, tracking, reconciliation and monitoring of Pay Estimate payment information. The reports should include contract spending, retention/escrow funds including contractor information, contract balance, description/pay estimate number, gross invoice, net invoice, retentions/escrow withheld, year-to-date totals, etc. SAP report tools should be available and visible to all staff that need the information.	Leveraging the use of existing technologies or improving internal controls for the current process will ensure the process of tracking and managing Pay Estimate data is more efficient and the integrity of the information recorded. Developing & using electronic reports (in-lieu of spreadsheets), provides: - visibility & accessibility of the information - reduces email requests - reduces digital files that have to be managed - saves time, and - quicker/faster verification of the retention funds withheld	

2	Accounting	No Evidence of Supervisory Review IA observed there is no evidence of supervisory review on AP's excel spreadsheets, which are utilized to process payments for Pay Estimates. According to AP, supervisory review occurs when reviewing the supporting documentation for each Pay Estimate prior to payment. However, there is no supervisory review of the excel spreadsheets, which serves as the basis for all Pay Estimate payments.	Determine a method or purpose for ensuring there is evidence of supervisory review on the spreadsheets to confirm that the information is up to date, accurate and reliable. This internal control may not be necessary if reports are generated from SAP since payment information, retentions/escrows withheld are automatically and independently calculated in SAP.	Supervisory review ensures there has been an independent check and verification of the payment amount and accuracy of the information recorded in the spreadsheet
3	Accounting and IT	Potential Unauthorized Access to AP's Excel Spreadsheets As of February 21, 2023, approximately 50 or more staff members have access to the shared drive folder where AP's Pay Estimate excel spreadsheets are kept. Staff that have access to this folder are in Accounting, Finance, Grants, and other units/departments.	Accounting should take the lead to request from IT limited access to the shared drive folder where the excel spreadsheets for Pay Estimates are located. Including removing unauthorized users and deactivate users that are no longer with the Agency.	Limiting the number of users preserves the integrity of the data.
4	Accounting, Engineering and IT	 CIPO- F&CM Excel-SAP-AP Excel -Esker During the audit and discussions with Finance and E&CM, it was discussed, the uses and needs of the various systems to process Pay Estimates: CIPO, Excel Spreadsheets, SAP, and possibly Esker. It may appear that there are inefficiencies in the use of the many systems. These do not interface with each other and may appear to create duplication of data entry, risk of incorrect of information being uploaded, and not one centralized location of data to pull the reports necessary. CIPO is a cloud-based platform used by Engineering to record and track project-related information. It does not interface with SAP. In SAP, there are 2 transaction codes utilized to process Pay Estimates: MIRO – to enter and upload the Pay Estimate invoice information and to pull the receiving and match to the invoice and record the information in the financial module. (Finance to evaluate the possibility of eliminating receiving, which would eliminate MIRO). -F-51 – to withhold the retention amount from the payment that is being processed. Also, F-51 is also utilized to process any funds that are to be withheld in an escrow account with bank. 	Engineering, Finance, and IT should work together to explore possibilities of CIPO interfacing with SAP.	If the systems can interface each other, CIPO with SAP, it will streamline processes and create efficiencies because there will be one centralized location for uploading the supporting documentation and this will eliminate the 7-9 copies of the Pay Estimate, workflow through CIPO for approvals to eliminate the need for DocuSign, and possibly eliminate the many Excel spreadsheets maintained by AP.

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		Multiple Excel spreadsheets – details discussed under Observation 1.		
		Esker, the new invoice recognition system used to upload, route, and monitor invoices. Interfaces with SAP. <i>As of the date of this</i> <i>report, AP and E&CM have not decided on the</i> <i>possibility of using Esker for Pay Estimates.</i>		
		Having to use multiple systems to compile, record, track, calculate, monitor, and retain the information for Pay Estimates, can create inefficiencies, duplicate information and duplicate data entry.		
5	Accounting, Engineering and IT	See observation #4 above for details.	Finance should take the lead to evaluate if there are ways to make SAP entries for Pay Estimates more efficient, currently there are two transactions codes that require processing, MIRO for the receiving and F-51 are for the retention. Determine if the receiving function in SAP is necessary or if there is a more efficient method that can be implemented to recognize the Pay Estimate liability in the Agency's financial system.	Reducing the number of SAP transaction codes utilized to process Pay Estimates provides time savings and reduces the number of SAP screens AP must navigate through to process and post the payment.
6	Accounting, Engineering and IT	See observation #4 above for details.	Finance should take the lead to evaluate reporting tools available in SAP to manage projects, contracts, contractor, etc. and eliminate the use and reliance on the many excel spreadsheets.	Leveraging technologies reduces the reliance on manual excel spreadsheets (outside of SAP).
7	Accounting, Engineering and IT	See observation #4 above for details.	Finance should take the lead to evaluate the possibility of using Esker to process Pay Estimates.	Leveraging technologies provides greater visibility of pay estimate information to assist in managing invoices and transactions and avoids manual and duplicate entries.
8	Accounting	Pay Estimates saved in multiple locations There are a total of 9 copies of the Pay Estimate documentation saved in various locations throughout the Agency. The Pay Estimate documentation can range from 4 pages to up to 40 pages or more and contains the summary and details of the amounts billed from CIPO and saved in a PDF format. Finance keeps 4 copies; Engineering keeps 5 copies.	Finance Department should reevaluate the need to have 4 copies of the Pay Estimate saved in multiple locations (both inside and outside of SAP). Finance should work with IT and Records Management to determine the most efficient method for linking/interfacing the documentation and eliminate the need for multiple copies.	Leveraging technologies and the integration of the various systems may reduce the number of copies that must retained and Pay Estimate information may be interlinked among the systems.

		Also, see observation # 4 above for details		
		related to the possibility of interfacing		
		systems to eliminate multiple copies.		
		AP saves the Pay Estimate supporting		
		 documentation in the following locations: Pay Estimate documentation provided from E&CM is saved in the Finance Department's shared drive (G drive > FA > ACCT > AP staff folder) Pay Estimate documentation uploaded in SAP (MIRO) – updated with the document number assigned in the financial module Pay Estimate documentation uploaded in SAP (F-51) – updated with the document number assigned in the financial module (same as above, when uploaded to MIRO) Pay Estimate documentation is saved in the folder on the department shared drive (G drive > FA > ACCT > AP > Invoices Paid - ACH > Payment date > Organization) that serves as the backup for payments that are scheduled for that payment cycle. Saving the Pay Estimate information in multiple locations (SAP and network drives) has always been the business practice and 		
		can take time and resources.		
9	Accounting	Standard Operating Procedures (SOPs) Currently, there are no documented SOPs for the many activities to process Pay Estimates. AP staff indicated that they currently have their own desk notes, these were not provided to IA for review, and these are not available to other staff or the supervisor.	Finance should take the lead to document the many activities and procedures to process payments for Pay Estimates. SOPs should include information for resolving issues or discrepancies. The SOP should contain the location where necessary information is saved, such as the project spreadsheets and other information.	SOPs provide guidance to ensure procedures are consistent, are a training manual for employees and provide criteria to evaluate employee performance. SOPs should be documented once all the recommendations and changes have been implemented.
10	Accounting	<u>On-going Training on Pay Estimates</u> There is a need to provide on-going training to AP staff to ensure the processing of Pay Estimates is efficient and to ensure there is always a back-up person available to process.	Finance should provide on-going training to all staff on the various accounting responsibilities, including processing Pay Estimates to ensure the processes are working as intended.	Training should be done periodically after the SOPs have been documented and any new procedures have been incorporated.
11	Accounting, Engineering and IT	Evaluate improving the Pay Estimate Document Finance Management noted that there are opportunities to improve the Pay Estimate cover sheet (<i>IEUA Construction Progress Pay</i> Estimate Periodic Estimate for Partial Payment). This is a one-page form that displays the information and costs for both the one- month period and the total contract amount (to-date). Due to the multiple pieces of information on the Pay Estimate, it can be confusing for staff that may need to review for processing and posting payments.	Finance Management should take the lead to work with Engineering to evaluate if the Pay Estimate form requires improvements to ensure it serves as an effective communication tool for both departments about the payment information. AP relies on the information on the Pay Estimate to process accounting transactions, ensuring the information is available, reliable, visible, and complete will improve efficiencies in processing payments, retentions, escrows, etc.	Improve communications about the required accounting transactions and processes resulting from a Pay Estimate request.

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		<u>CIPO – Pay Estimate Payment Information</u> Engineering's Project Management Tool		
		(CIPO) sometimes provides incorrect data		
		when generating the financial information		
		for Pay Estimates. According to Engineering		
		staff, CIPO has very complicated formulas		
		that are built into the platform, and when		
		CIPO runs updates and patches, it creates	Engineering Management should take	
		errors in the formulas and calculations that	the lead to evaluate the accuracy and	
		result in the data being exported incorrectly.	reliability of using CIPO to ensure the	
		Per Engineering staff, in the 8-month period from July 2022 to mid-February 2023, there	system is the most effective tool to gather Pay Estimate information. Or	Determine if CIPO is the most effective tool for
1	2 Engineering	have been eight (8) support tickets	work closely with IT to evaluate if there are modules or functions in SAP, the	compiling Pay Estimate information or if SAP has
		submitted from IEUA staff to CIPO related to	Agency's ERP system, to upload Pay	tools that can be
		Pay Estimates related to issues about	Estimate information.	leveraged.
		rounding errors, changes to units,		levelagea.
		discrepancies, renumbering, format, and		
		others. This equates to about one support		
		ticket every month. Often, it is AP staff who		
		identify the errors and issues (this is one		
		reason why AP relies on the many		
		spreadsheets). These are issues that require		
		they be reviewed at the Project Manager		
		level before sending to AP. These errors delay the processing of the Pay Estimates.		
		delay the processing of the Pay Estimates.	Engineering Management should work	Ensure CIPO delivers on
			with CIPO to develop an ongoing process	product quality and ensure
		See abcompation #12 above for details of	to test and verify the reliability of	there are adequate
13	B Engineering	See observation #13 above for details of observation and findings	patches and updates to ensure CIPO has	controls that assure
		observation and midnigs	accurate formulas and calculations	formulas and totals are
			before relying on the data and	accurate and can be relied
			submitting to AP for processing.	on.
		Additional Controls and Training are needed to verify the accuracy of Pay Estimate data before		
		submitting to AP		
		Each month, prior to staff creating the Pay		The responsibility of
		Estimate, there are 3 reviewers and	Engineering Management must	reviewing, verifying and approving payment
		approvers in CIPO: Inspector, Project	implement additional internal controls to	information should be the
		Manager and Contractor. Additionally,	ensure there is adequate review,	responsibility of the
		when Pay Estimates are generated by admin	verification, and approval of the Pay	department requesting
14	Engineering	staff there are 3 to up to 7 reviewers and	Estimate information from the Project	payments, not of AP. AP
		approvers. Even with this level of review	Managers and other reviewers and	should have sufficient
		and approval, there are errors on the Pay Estimates that Accounts Payable identifies	approvers prior to submitting to AP for	reliance on the
		and must be resolved by Engineering prior	payment, to ensure its accuracy and	information submitted and
		to processing the Pay Estimates.	prevent delays in payment process.	focus on processing the
				payment on time.
		The responsibility of reviewing, verifying and		
		approving payment information should be		
		the responsibility of the department		

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		requesting payments, not of AP. AP should have sufficient reliance on the information		
		submitted and focus on processing the payment on time.		
		payment on time.		
		Having incorrect data listed on the Pay		
		Estimate supporting documentation and/or		
		when the receiving function is performed		
		incorrectly in SAP, both events, can impact		
		and/or delay the processing of the Pay		
		Estimates.		
		Additional Controls and Training are needed to		The responsibility of
		ensure the Receiving Function is performed		reviewing, verifying and
		<u>accurately</u> AP staff noted that there have been issues		approving payment
			Engineering Management must	information and that the
	Engineering	and delays resulting from the incorrect receiving function in SAP. When professional	implement additional internal controls	receiving was done
		service invoices are received, staff are	and provide staff training to ensure the	accurately should be the
		required to receive for the net total amount	Receiving function in SAP is performed	responsibility of the
15		due, whereas for Pay Estimates, staff should	correctly. Additionally, there should be a process to review the receiving	department requesting
		receive for the gross invoice amount	information entered by staff prior to	payments, not of AP. AP
		because SAP calculates the retention	information sent to AP, to ensure its	should have sufficient
		amount based on this total. E&CM staff	accuracy and prevent delays in payment	reliance on the
		agreed that training for their internal admin	process.	information submitted and
		staff could be improved. Incorrect receiving		focus on processing the
		delays the processing of the payments on		payment on time.
		Pay Estimates.		
		Multiple copies of the Pay Estimate Packets		
		(possibly 7-9 copies of the Pay Estimate)		
		For each Pay estimates, E&CM saves,	Engineering Management should take	
		attaches/uploads, and retains the Pay	the lead to reevaluate the processes for	
		Estimate supporting documentation in multiple locations and/or systems, they are:	Pay Estimates and determine the need to	Reducing the number of
		CIPO, network/shared drives, SAP, and	have the Pay Estimate documentation	places/locations where the
		Laserfiche. Saving the Pay Estimate	saved/uploaded in multiple locations	Pay Estimate
16	Engineering	documentation in multiple locations (SAP	(both inside and outside of SAP). If	documentation must be
_		and network drives) has been the practice.	needed, work with IT and Records	retained will eliminate
			Management to determine the most	duplicate copies of the
		As noted earlier in the report, between both	efficient method for linking and/or	same information
		AP and E&CM, the Pay Estimate	interfacing the documentation and	
		documentation is saved at least 7-9 times.	eliminate the need for multiple copies.	
		Each time the Pay Estimate documentation		
		is saved, it may be the same as the original or updated with SAP processing information.		
		Engineering Multiple Excel Spreadsheet(s)	Engineering should take the lead to work	
		Engineering utilizes excel spreadsheets to	with IT and possibly Finance, to	Leveraging the use of
		summarize Pay Estimate information for	determine if there are ways to eliminate	existing technologies or
17	Engineering	each construction project. The spreadsheets	the reliance on excel spreadsheets with	improving internal controls
		summarize the following: contractor, project	centralized reports from SAP or	for the current process will
		number, Pay Estimate number, Change	leveraging AP's spreadsheets. Reports	ensure the process of
		Order number when applicable, amount	should assist with the review, tracking,	tracking and managing Pay
			, 8,	

18	Engineering	received, SAP receiving information. Most of the information recorded in the excel spreadsheets is already entered in CIPO and/or SAP. Engineering uses the spreadsheets to communicate the Pay Estimates and the details of each for the items that need to be processed for payment each month and to keep information in a centralized location. Pay Estimate Timeline: 20th of the month/3rd week of the month Engineering determines and sets the due dates for Pay Estimates. Currently, Pay Estimates are scheduled to be paid on the Thursday of the week of the 20 th day of the month. This date/timeframe is listed in the project specification documents per E&CM. There is no governing document (i.e., code, Agency ordinance, regulation, policy) that supports why the 20 th of the month was selected to process Pay Estimates. According to the PCC code, contractors are required to be paid the monthly progress payment within 30 days of presenting an invoice. For IEUA, invoices are uploaded by the 20 th of the month are scheduled for payment on the 20 th of the following month. To process Pay Estimates, Contractor's upload the Schedule of Values (billable amounts)/invoice amounts on the 20 th day of each month in CIPO, then it is reviewed and approved by Inspector and Project Manager. After the PM's approval, the documentation is routed for approval via DocuSign to an additional 3-7 reviewers and approvers. After all signatures are obtained, the receiving is performed in SAP by admin staff. Once all the Pay Estimates for the month have been compiled, E&CM Admin staff will provide this information to AP via spreadsheets and an email during the week	reconciliation and monitoring of Pay Estimate payment information. The reports should include the needed information that both departments rely on. SAP report tools should be available and visible to all staff that need the information. Engineering and AP should discuss and work together to determine if Accounting requires more time to process Pay Estimates. If AP requires more time, then Engineering should reevaluate its internal processes and determine if they can provide more time to AP to process Pay Estimates. Additionally, Engineering should work with Finance staff to determine if the 20 th of the month is the most effective date to process and Pay Estimate or if changes and efficiencies can be achieved by reevaluating internal processes to ensure all information is provided timely to AP.	Estimate data is more efficient.
		approvers. After all signatures are obtained, the receiving is performed in SAP by admin staff. Once all the Pay Estimates for the month have been compiled, E&CM Admin staff will provide this information to AP via	ensure all information is provided timely	

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		Pay Estimate Signatur	es Criteria & Efficiency		
		IA selected 18 Pay Es	stimates for testing and		
		noted between 2-7 s	ignatures are obtained		
		on the Pay Estimate	using DocuSign		
		documentation, inclu	uding the contractor,		
		inspector, Project M	anager (PM), Principal		
		Engineer, Manager o	of Engineering, Director		
		of Engineering, and I			
		Manager. These app			
		• · ·	dy been obtained via		
		• •	ontractor, inspector,		
		and PM).	, , ,		
		,			
			ering's SOP, admin staff		
		obtain the approval			
			n Agency Policy A-50		
		(April 27, 2015).			
		Agency Policy A-50 is	s currently applied by AP	Engineering Management should take	
			id processing invoices.	the lead to evaluate internal controls for	
				requiring multiple signatures on Pay	
		For Pay Estimates, A			
		following: (see scree		Estimates. Engineering should follow	
		-	r invoices greater than	their own SOP requirements and Agency	Ensure staff and processes
		 \$250,000 One signature for 	invoices loss then or equal	Policy A-50 regarding approval authority	follow the requirements of
4.0		to \$250,000	invoices less than or equal	and ensure only required signatures are	the Agency Policy for Pay
19	Engineering	. ,	invoices less than or equal	obtained per the dollar threshold	Estimate approval
		to \$100,000		required. Evaluate the costs and benefits	authority.
				of requiring 3-7 reviewers and signatures	
		De littere	Construction	on each Pay Estimate and note that A-50	
		Positions	Project Progress	does not have a requirement for the	
			(pay	Agency's GM to approve Pay Estimates.	
		Department Manager and	estimates)		
		Executive Manager*	> \$250,000		
		Executive Manager	<u><</u> \$250,000		
		Department Manager	≤\$100,000		
		Deputy Manager Supervisor	<u><</u> \$75,000 <u><</u> \$50,000		
		Board Secretary			
		Executive Assistant			
		*Invoices greater than \$250,	000 require 2 signatures		
		There are several iss	ues with this policy, IA		
			ded recommendations		
		to make needed upd			
		1) policy is outdated			
			d in Agency Policy A-50		
		are outdated and ne	• • •		
		coincide with the cu	-		
		chart changes,			
		3) it is not clear if all	5 signatures are		
		required or only thos	-		
		highest level			
		3			

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20	Engineering	See observation #19 above for details	Engineering Management should take the lead to work with HR to update Agency Policy A-50 to ensure the required authority, reviews and approvals for Pay Estimates are documented in the policy. Ensure the Agency's practice meets the policy requirements to ensure internal controls are implemented and work as intended. The Policy requires updates to positions and threshold levels and dollar amounts.	Updating the policy provides clarity on the number of signatures on the Pay Estimates documentation.
21	Engineering and AP	 <u>Receiving function of Pay Estimates</u> Engineering <i>certifies</i> the work performed by the contractor when: providing their approval via workflows in CIPO, providing their electronic signature on the Pay Estimate documentation via DocuSign, and Admin staff perform the receiving function in SAP. IA observed there was a time delay between the PM's approval and when the receiving function was performed in SAP. In 8 of the 18 Pay Estimates tested, IA noted that receiving in SAP occurred over 10 days after the PM's approval. For the 18 items tested, the number of days between the PM's approval and the receiving in SAP ranged from 1 day to 26 days, with an average of 9 days. (<i>See attachment 1 for details</i>) 	Engineering Management must implement additional internal controls and provide staff training to ensure the receiving function is completed timely and accurately. Once additional recommendations and internal controls related to ensuring the accuracy of the information of Pay Estimates have been implemented, Engineering Management might want to evaluate implementing efficiencies and establishing the purpose for the receiving function in SAP. Because Pay Estimates and documentation are approved on multiple systems and by multiple approval levels, the receiving function may or may not be necessary to certify the payment is ready to be processed. At this time, the receiving function should be completed as soon as possible after the PM has approved to not delay the payment process.	Implement internal controls and evaluate efficiency processes to ensure the receiving process is completed timely and does not delay the payments.
22	Engineering and AP	Evaluate improving the Pay Estimate Document Finance Management noted that there are opportunities to improve the Pay Estimate cover sheet (<i>IEUA Construction Progress Pay</i> Estimate Periodic Estimate for Partial Payment). This is a one-page form that displays the information and costs for both the one- month period and the total contract amount (to-date). Due to the multiple pieces of information on the Pay Estimate, it can be confusing for staff that may need to review for processing and posting payments.	Engineering Management should take the lead to work with Finance to evaluate ways to improve the Pay Estimate form to ensure it serves as an effective communication tool for both departments about the payment information. AP relies on the information on the Pay Estimate to process accounting transactions, ensuring the information is available, reliable, visible, and complete will improve efficiencies in processing payments, retentions, escrows, etc.	Improve communications about the required accounting transactions and processes resulting from a Pay Estimate request.

		Delays due to the Contractor not uploading by		
23	Engineering	the 20 th of the month The Pay Estimate process begins once the Contractors upload the Schedule of Values (billable amounts). Ideally, this must be done by the 20 th day of each month. This enables the approval process to begin. In the 15 of the 18 Pay Estimates tested, IA noted that the Schedule of Values were uploaded by the contractor, after the 20 th day of each month, ranging between 2 days to 21 days after the required date, and an average of 8 days after the 20 th of each month. If information is delayed in being uploaded, the review, approval, receiving, and payment processes are also delayed.	Engineering should coordinate with the contractors to ensure the Schedule of Values are completed and uploaded into CIPO no later than the 20 th of each month.	If information is delayed in being uploaded, the review, approval, receiving and payment processes are also delayed. Ensuring the Schedule of Values is uploaded in a timely manner, allows Engineering sufficient time to review and approve for accuracy and resolve any issues or discrepancies.
24	Engineering	Net 30 & Public Contract Code (PCC) According to PCC §20104.5 (b), any local agency that fails to make a progress payment within 30 days after receipt of a payment request from a contractor on a construction contract shall pay the contractor interest. Therefore, for Pay Estimates, IEUA is required to pay the contractor within 30 days to comply with the Public Contract Code. IA selected a sample of 18 Pay Estimates and calculated the number of days it took to pay the Pay Estimate. The audit found that of the 18 Pay Estimates tested, 13 were paid late, between 8 and 35 days late, an average of 4 days late.	Engineering Management should take the lead to work with AP to tighten internal controls to ensure payments are made according to PCC rules, Net 30. See all recommendations provided in this report to improve processes and implement efficiencies to ensure the payments for the Pay Estimates are processed, reviewed, approved and received in SAP in a timely manner and provide AP sufficient time to reconcile and process payments, to ensure the Agency does not incur an interest and/or have to pay a contractor interest.	Improving the Agency's internal processes ensures compliance with the requirements of the PCC to ensure the Agency does not incur an interest and/or have to pay a contractor interest, E&CM should prioritize getting the documentation efficiently to AP and to provide AP enough time to process the payments in a timely manner.
25	Engineering	<u>Standard Operating Procedures (SOPs) for Stop</u> <u>Notices</u> Currently, Engineering has SOP ENGCM-07, effective date: 9/30/2022. The current SOP needs to be updated or additional SOPs should be considered. Specifically, the following should be addressed: guidance and processes for Stop Notices, currently there are no processes in case this event occurs.	Engineering should review their SOP and include processes (step-by-step procedures) related to Stop Notices.	SOPs should be reviewed and revised once all the recommendations and changes have been implemented, such as the invoice recognition system (Esker) has been implemented. SOPs provide value by documenting consistent procedures for employees to follow and be trained and evaluated on.

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26	Engineering	Standard Operating Procedures (SOPs) for the Receiving Function in SAP Currently, Engineering has SOP ENGCM-07, effective date: 9/30/2022. The current SOP needs to be updated to provide specific processes and detailed steps for the receiving in SAP. For example, there is no information about the gross vs. net amounts that need to be received because the retention/escrow are calculated based on these amounts. There are often errors and	Engineering should document guidelines about processing the receiving for Pay Estimates, specifically providing guidelines and information about the dollar amounts to be received (gross vs. net) and the retention/escrow withheld.	SOPs provide guidance to ensure procedures are consistent, are a training manual for employees and provide criteria to evaluate employee performance. SOPs should be documented once all the recommendations and
		delays caused related to receiving in SAP specifically related to the gross amount vs. the net amounts the AP identify and must be resolved by E&CM.	Engineering should provide on-going	changes have been implemented.
27	Engineering	On-going Training on Pay Estimates There is a need to provide on-going training to all Engineering staff to ensure the creating and processing of Pay Estimates is efficient to ensure all information is as accurate and complete and prepared to be processed for payment. Evaluate training available from CIPO and develop processes to accurately download Pay Estimate information, review information, receive in SAP, prior to submitting to AP for payment.	training to all staff on the various Pay Estimate requirements and responsibilities; including carefully reviewing and comparing information from the schedule of values to the Pay Estimate, and ensure the receiving is done correctly to ensure the processes are working as intended and minimize delays to the payment processes and minimize AP's review, reconciliation and involvement in verifying data.	Training should be done periodically after the SOPs have been documented and any new procedures that have been incorporated.

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Invoice Payment Processes for Pay Estimates:

IA attempted to confirm the process with Engineering & Construction Management, confirmation was not received. Below is a description of the process based on discussions and meetings.

Pay Estimates are monthly progress payments for construction work that has been completed on capital projects.

Engineering & Construction Management (E&CM)

- 1) Once a project has been awarded to a contractor, E&CM sets up and records all the information related to the contract/project in CIPO Cloud® (Capital Improvement Program Office), which is a cloud-based construction project management software.
- 2) E&CM provides the account access, log-in information, and password resets, as required to the contractor for CIPO Cloud®.
- 3) Contractor submits the monthly Pay Estimate (invoice) and schedule update in CIPO Cloud®.
- 4) Pay Estimates (invoices) are required to be uploaded by the 20th day of each month and is for construction work to be completed through the end of the month. For example, Pay Estimates (invoices) submitted on January 20th, 2023, are for construction work completed through January 31st, 2023.
- 5) After the Pay Estimates (invoices) have been upload into CIPO Cloud®, it goes through the review and approval process via workflow:
 - a. Pay Estimate (invoice) is first reviewed for accuracy by the inspector and should be conducted within 3 business days from the date of receipt. Agency has two (2) inspectors on staff and consultant inspectors, which review all information recorded in CIPO Cloud® and can approve or disagree/reject with the invoice. The following information is verified during the review process:
 - i. Invoice materials quantities matching the Daily Reports
 - ii. If the work is performed on times-and-materials basis, verify that the submitted level of effort matches the Daily Reports
 - iii. Invoice Unit Prices match the approved baseline Schedule of Values
 - iv. Review the updated redlines drawings in the field
 - b. If the inspector agrees with the Pay Estimate, then it is forwarded to the Project Manager (PM).
 - c. If the inspector disagrees and/or additional information/clarification is required on the invoice, then inspector communicates the rejection to the contractor and waits until the information has been corrected on the invoice and re-uploaded into CIPO Cloud®.
 - d. Once the invoice is approved by the inspector in CIPO Cloud®, a notification is generated via workflow.
- 6) PM reviews the invoice:
 - a. If PM disagrees and rejects the invoice, then is sent back to the inspector for further research and review with the contractor.
 - b. Once the PM agrees with the invoice, then it is approved, and the PM will notify E&CM admin staff that the Pay Estimate is ready for further processing.
- E&CM admin staff receive notification when a Pay Estimate (invoice) has been approved in CIPO Cloud®. Additionally, E&CM admin staff will log into CIPO Cloud®, to see what invoices have been approved for their assigned projects.
- 8) For approved Pay Estimates, E&CM admin staff will export and print *Construction Progress Pay Estimate Periodic Estimate for Partial Payment* form/checklist and any support documentation from CIPO Cloud®.
- 9) E&CM admin staff will circulate the *Construction Progress Pay Estimate Periodic Estimate for Partial Payment* form/checklist and supporting documentation for review and approval via DocuSign® to the designated approvers. The number of approvals required is based on the payment dollar amount as defined by the Agency Policy A-50 (effective: April 27, 2015) and Procurement Ordinance Number 110 (adopted September 21, 2022). Pay Estimates require between 2 to 6 signatures.

- 10) DocuSign® provides email notification after the documents have been signed.
- 11) After the approvals have been obtained, E&CM admin staff will save the *Construction Progress Pay Estimate Periodic Estimate for Partial Payment* form/checklist and supporting documentation in the corresponding project folder located on the department's internal shared drive.
- 12) E&CM admin staff perform the receiving in SAP (transaction code ML81N) and upload the attachment/backup in SAP (transaction code MIGO).
- 13) E&CM admin staff will update their excel spreadsheet with the Pay Estimate receiving information and upload the approved/signed Pay Estimate into CIPO Cloud®.
- 14) After all the Pay Estimates have been compiled and received, an email is sent to AP and Finance with the following information: a list of all the Pay Estimates that are scheduled to be paid for the month and a copy of each Pay Estimate with any supporting documentation (includes the receiving from SAP).

Release of Retention Withheld (to be paid after 35 calendar days and no-Stop Notices have been received)

- 15) After the project has been completed, the contractor files a Notice of Completion (NOC) with the County of San Bernardino. NOC is provided to the Agency.
- 16) E&CM Admin staff request from AP staff the spreadsheet (created and utilized to track Pay Estimate information) for the associated project.
- 17) E&CM Admin staff prepare the memo and obtain the approvals via DocuSign.
- 18) After the approved memo and supporting documentation have been compiled, E&CM Admin staff will forward this information to Accounting Management to process the check to release of the retention funds that have been withheld to back to the contractor.

Stop Notices

- 19) Vendor/Subcontractor of the General Contractor files the Stop Notice with the County of San Bernardino, which is provided to the Agency.
- 20) E&CM Admin staff coordinates and sends correspondence to the General Contractor to address the Stop Notice. If the issues are not resolved, then AP will hold onto the retention funds. If issues are resolved, then AP will process the release of the retention funds.

Accounts Payable (AP)

This narrative was shared with staff for review and confirmation, commends provided were incorporated. *For Capital Construction projects, the invoices are not sent to AP, and thus, these invoices are not included in AP's in-take processes.*

1) Starting point for processing the Pay Estimates is the monthly email that is sent by E&CM. The email includes a list/summary of the Pay Estimates to be processed for that month and copies of the Pay Estimates including any supporting documentation.

Email-Pay Estimate-Excel Spreadsheet

- 2) AP staff saves the Pay Estimate information that were provide via email to a folder on the department shared drive.
- 3) AP staff opens the Pay Estimate that they have been assigned to process, and then navigates to the Accounting department's shared drive to open the corresponding excel spreadsheet associated with that project number.
 - For each project number, AP has created an excel spreadsheet that contains information about the project, such as: contractor name and address, contract number, purchase order number, fund number, project number, project description, payment method, retention/escrow, contract amount, contract expiry date (number of contract days) and payment details.

- For each individual Pay Estimate payment, AP staff records the payment date, description of the pay estimate, gross invoice amount, net invoice amount (payment), balance of contact, and retention withheld.
- 4) AP staff inputs the pay estimate information into the excel spreadsheet, and performs the following when comparing both the excel spreadsheet and the Pay Estimate:
 - a. Verifies the payment/dollar amount and Pay Estimate number
 - b. Balances the pay estimate to the excel spreadsheet (which is used as the supporting documentation for Note 8 (Construction Commitments) in the Annual Financial Comprehensive Report
 - c. Reviews the contract time summary and ensures the contract is current
 - d. Reviews the totals, resolves any rounding differences, and ensures the dollar amounts agree to pay estimate information
 - e. Matches the dollar amounts to the contract and general ledger
 - f. Reviews if there are any change orders and ensures those are incorporated and recorded
- 5) Next, AP reviews the pay estimate information for appropriate approval levels.

SAP processing

- 6) AP staff will enter in the invoice into SAP (transaction code: MIRO Enter Incoming Invoice).
 - Pay Estimate invoices are not entered nor uploaded into the Invoice Held Feature (SAP transaction code: MIR6) in SAP because AP does not know the invoice exists until they receive the Pay Estimates from E&CM. Additionally, Pay Estimates do not have traditional invoice numbers assigned to them like other regular invoices that come into the Agency.
- 7) Types of information entered into the fields in the various tabs in SAP, include: invoice receipt date, invoice date, posting date, (dollar) amount, reference number, text (description), header text, payment method and PO number/invoice party number. SAP will generate any open line items whereby receiving has been performed.
- 8) Then, AP staff will select the transaction for processing, and the SAP system automatically verifies dollar amounts received with the pay estimate information inputted to ensure they are in balance. AP staff will research and resolve any issues identified as part of the 3-way matching process.
- 9) After the three-way match has been performed and the transaction is in balance, AP proceeds to finish processing and posting the transaction in SAP. Then, SAP will post the transaction to the general ledger accounts assigned in the financial system and issues a document number (Invoice Receipt number). Once all items have been posted, the GR/IR account (upon refresh) shows the transaction has been processed as indicated by the assigned Document Type.

<u>Note:</u> For the dollar amount to be withheld, the Contractor selects if the funds will be held via retention or escrow. Retention is a dollar amount that the Agency withholds and places in their account and releases the funds after the Notice of Completion has been posted for 35 days. Escrow is a dollar amount that the Agency places in an escrow account (with an external party) and earns interest for the contractor.

Retention

- 10) AP staff must process the retention dollar amount in SAP (transaction code: F-51 Pay Est Retention).
- 11) AP will enter in the information related to the retention into the corresponding fields in SAP. There are specific general ledger indicators to distinguish if it is a retention or escrow.
- 12) Then, SAP calculates the payment amount to the vendor and the retention amount to be withheld. Typically, the retention percentage is 5% of the dollar amount being paid on the invoice.
- 13) AP updates the payment terms field from net 30 to net 20 to ensure the payment will be captured to be paid by the 20th of the month and/or the Thursday on the 3rd week of the month.
- 14) AP staff verifies the accounting information (i.e., fund, general ledger account, description, amount, etc.)

- 15) AP staff records the document number and retention number on the Pay Estimate information and saves the PDF file to the Accounting department's shared drive.
- 16) AP staff uploads the Pay Estimate information as an attachment in two different modules (Accounts Payable and General Ledger side) in SAP; F-51 *Pay Est Retention* and MIRO *Enter Incoming Invoice*.

Escrow

- 17) AP staff must process the escrow amount in SAP (transaction code: F-51 Pay Est Retention).
- 18) AP will enter in information related to the escrow into the corresponding fields in SAP. There are specific general ledger indicators to distinguish if it is an escrow or retention.
- 19) Next, SAP generates the list of all the escrow amounts and AP selects the dollar amount to be paid to escrow.
- 20) AP staff verifies the accounting information assigned (i.e., fund, general ledger account, description, amount, etc.). After all the information and data has been entered into the different fields, then AP staff reviews the accounting entries, saves and posts in SAP.
- 21) AP verifies the bank information for the contractor. AP will only verify the bank information at the time of setup, not for each transaction.
- 22) AP staff uploads the Pay Estimate information as an attachment to the two different transaction codes in SAP; R-51 *Pay Est Retention* and MIRO *Enter Incoming Invoice*.

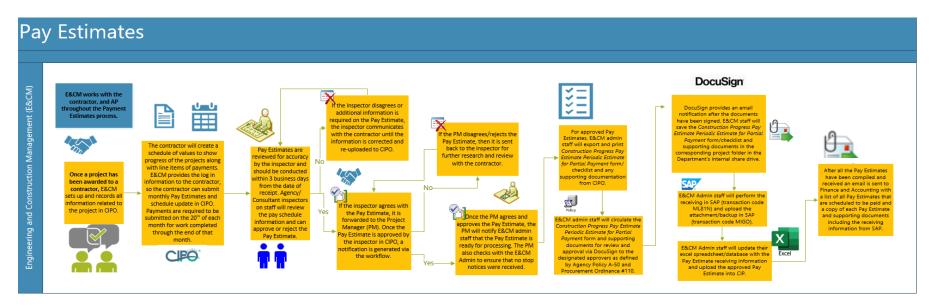
Payments

- 23) According to AP once an invoice has been set up, entered, and posted into the financial module SAP "flags" the items as "not due" or "overdue." For items "not due," SAP will leave the item as an open payable for scheduling of payment to be completed closer to the due date. For items "overdue," payment is automatically scheduled for the next payment cycle.
 - Note: The liability is recognized upon completion of the Receiving in SAP.
- 24) After all the Pay Estimates have been processed in SAP, AP determines what items will be paid in the SAP.
- 25) Accounting Management will run a "Prelist" on all the items that will be processed, and once the "Pre-list" has been reviewed, then a final list is generated.
 <u>Note:</u> The "Pre-list" is reviewed by Agency Management, and items that are not included will be researched and reviewed to determine if they should be included in the current payment cycle.
- 26) After the prelist is approved, then those transactions are pulled through for payment. With the update payment information, AP will generate the necessary information for the payment file.
- 27) Final list is submitted to Budget staff, who obtains the approvals and signatures via DocuSign. If the total dollar amount is greater than \$10 million, then Budget staff have to contact the bank (or vice versa) to provide additional information on the reasons the total amount being disbursed is greater than \$10 million.
- 28) Budget staff upload the electronic file to the bank for processing and payment, (if applicable) while physical checks are printed and mailed.

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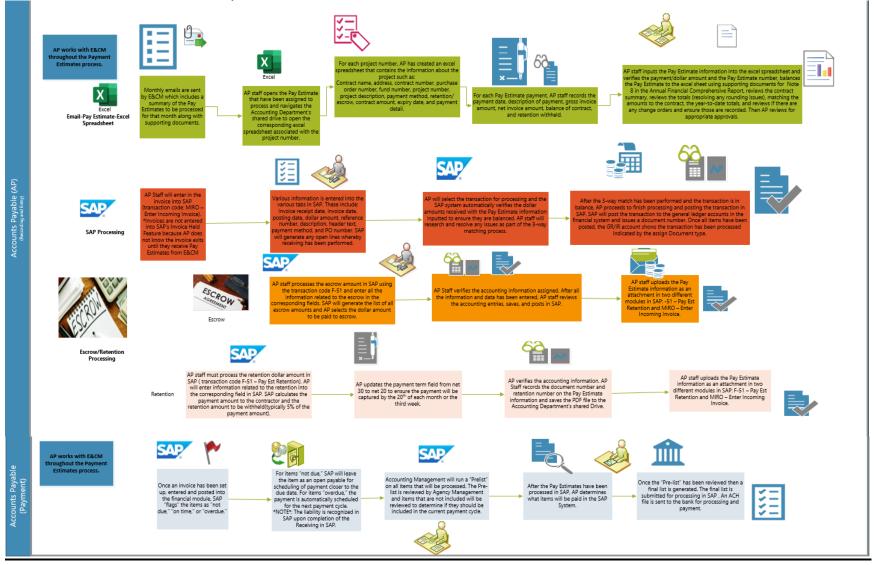
Process Flowchart – Pay Estimates

The diagram on this and the following pages provides the overview of the Pay Estimates process. This flowchart shows Engineering's processes.



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This flowchart shows Finance's processes.



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Detailed Audit Testing and Analysis

IA obtained the Pay Estimate Summary (excel spreadsheet), which was provided by E&CM to AP and recaps the Pay Estimates that are to be processed for the month, the excel file contained the information for Fiscal Year 2021-2022 and 2022-2023 (as of January 13th, 2023). IA judgmentally selected a total of 18 Pay Estimates from July 2021 up until December 2022. IA selected one Pay Estimate per month and selected different contractors and projects to measure the amount of time it takes to complete each step and process a payment for the Pay Estimate. IA applied testing procedures to evaluate the 18 items selected. IA reviewed the current processes used by E&CM and AP to determine the timeliness of receiving and payments. IA's review showed the following observations (findings and observation have been used to create the recommendations included in the matrix above:)

Details of IA Testing Findings are shown below – see Attachment 1 for details Late Contractor upload dates

The Contractor uploaded the Schedule of Values after the 20th day of each month in 15 of the 18 Pay Estimates selected, between 2 and 21 days, averaging about 8 days after the required 20th day.

Inspector Approvals

The inspector did not approve the Pay Estimate in a timely manner in 3 of the 18 Pay Estimates. After closer inspection, 2 of those 3 because of the weekend days. 1 (item no. 11) Pay Estimate was not approved in a timely manner, 13 days late.

Signatures (Pay Estimate back up documentation)

In 1 of the 18 (item no. 18), the documentation uploaded into SAP did not contain DocuSign signatures for any of the required approvals. Although the approvals took place in CIPO, the SAP documentation did not contain the appropriate signatures.

Delayed in the Receiving Process

In 8 (items no. 2, 3, 6, 7, 13, 14, 16, and 17) of the 18 samples, the Pay Estimates took over 10 days after the Project Manager's approval before receiving was performed in SAP ranging from 10 to 26 days, averaging 9 days total.

Receiving to AP

3 of the $1\overline{8}$ (items no. 2, 7, and 11) Pay Estimates took over 10 days, ranging from 12-19 days, after the receiving was performed before the Engineering Staff sent the Pay Estimate information to the Accounts Payable Unit for processing.

Late Processing

6 of the 18 (items no. 1, 9, 10, 11, 12, and 17) Pay Estimates or 33% of the sample selections were processed by Accounts Payable over 10 days, ranging from 10-15 days) after being received from E & CM.

Delayed Payments

The time the Pay Estimate was paid exceeded the net 30 date for 13 of 18 samples selected, averaging over 4 days.

Review of Pay Estimate Processes February 27, 2023 Page 24 of 28

Background Information

As stated in the FY 2021/2022 and FY 2022/2023 Operating and Capital Program Budget, E&CM (within the Engineering Department) provides design, administration, and construction management for water, wastewater, and energy projects that implement the Agency's Capital Improvement Program.

E&CM core focus is the administration of the Agency's capital construction projects. To aid with their goals, the uses a Project Management tool called Capital Improvement Program Office (CIPO) Cloud[®], which is the leading cloud-based construction management system. CIPO is an end-to-end platform that allows owners and Construction Management professionals to define the environment that will meet their business practices, track, manage, and control all documents, and display the progress of the projects in one place. CIPO enables the organizations and contractors to create schedules and detailed list of the work/tasks performed and completed, and provides workflows so approvals can be obtained efficiently, and to ensure that projects are finished in a timely manner while having a centralized location to view progress, status and provides dashboards.

For each construction project, the contractor's progress for the work completed is uploaded into CIPO and requires collaboration between the contractor and the E&CM about the work performed, and the monthly payments for those capital projects and any Professional/consulting services are handled through the Accounts Payable (AP) Group within the Accounting Unit.

Pay Estimates are "*monthly estimated progress payments*" for construction work that has been completed on construction/capital projects, subject to the Public Contract Code (PCC). According to the AP Group of the Accounting Unit, the amount of time required to process, post, pay, and reconcile payments for Pay Estimates is much longer than any other types of payments. Per discussion with the Accounting Unit staff, Pay Estimates are time-sensitive and required to be paid within thirty (30) days after an invoice has been received (per PPC § 20104.50). To ensure these invoices are paid timely, every month, the Accounting Unit Management dedicates all AP Group Staff for an entire week (approximately the 3rd week of the month) to process Pay Estimates. Payments for other types of goods and services are put on hold and postponed until all Pay Estimates have been processed.

Financial Information – Pay Estimates

The table that follows summarizes the quantity and dollar amount of the Pay Estimates that have been compiled by E&CM and processed and posted for payment by AP. Data is for an eighteen-month period:

Information about Pay Estimate Processed by AP (Dollar amounts listed below does not take into account Retentions/Escrow amounts that have been withheld)					
Fiscal Year	Number of Pay Estimates Processed	Dollar Amounts Received			
2021-2022	170	\$119,963,685.64			
2022-2023 (July to <i>December 2022only</i>)	72	51,677,485.93			
Total	242	\$171,641,171.57			
Source: Pay Estim	nate Schedule provided by Engineer	ng Department.			

Thus, AP processed an average of 13 Pay Estimates during this period, with 11 Pay Estimates being the minimum and 18 pay estimates the maximum per month.

Agency Policy

For each Pay Estimate, E&CM obtains between two to seven approval signatures via DocuSign on the Pay Estimate documentation. According to their department-specific Standard Operating Procedures, EC&M follows the Agency Policy A-50 for approval signatures.

A. The following A amount indicated	· · ·		to approve N	PO invoices up to
Table 1: Positions and th	resholds for NP	O invoice appro	val	
Positions	Construction Project Progress (pay estimates)	Frofessional services contracts/ agreements	Utilities and other recurring payments	All other invoices
Department Manager and Executive Manager*	> \$250,000	> \$250,000	> \$250,000	> \$100,000
Executive Manager	<\$250,000 ≤\$250,000	<\$250,000 ≤\$250,000	<\$250,000 ≤	≤\$100,000
Department Manager	≤ \$100,000	≤\$100,000	≤\$100,000	<u>≤</u> \$10,000
Deputy Manager	<u><</u> \$75,000	<u><</u> \$75,000	<u><</u> \$50,000	<u><</u> \$7,500
Supervisor	≤ \$50,000	≤ \$50,000	<u>≤</u> \$10,000	<u><</u> \$5,000
Board Secretary				≤ \$10,000
Executive Assistant				< \$5,000

Review of Pay Estimate Processes February 27, 2023 Page 26 of 28

IA reviewed the A-50 policy and noted the following:

- Policy has not been updated for at least seven (7) years; effective date is 2015
- Policy is titled for Non-Purchase Order Invoice Approval, but all professional services and Pay Estimates follow the Purchase Requisition/Purchase Order process in SAP, not non-PO process
- Positions and job titles listed in the table in this policy are outdated which are not consistent with the current organizational chart
- The policy may be confusing because it is not clear if invoices above a threshold requires all signatures below the amount and above the amount. For example for Pay Estimates above \$250,000, it is not clear if only the 2 signatures are required or if all 5 signatures are required.

Review of Pay Estimate Processes February 27, 2023 Page 27 of 28

Does the Number of Number Number Number of Number of Number of Number of Number of Pay of days Days between of days days between Days days between days days betweer Estimate Net 30 date between between the required Between required to eceiving and attached ir the Project Date Pay Samp and Payment Contractor Net 30 Date Receiving Contract the SAP have Payment Invoice Contractor Processing Date Paid upload date Inspector's Engineering process the Number of Manager's Estimate is Inspector Project No. Upload Date date Date in SAP Receipt Date or upload Name Amount Date Pay Estimate processing signed Approvals and the approval Source: approval and Staff Manager required Approval Source: ource: SAP S ource: SAF approvals? and the date and and the Source: SAP on the Pay Contractor submitting after Receiving Approval to be CIPO Date Inspector payment SAP Estimates upload date Project the PE receiving the Date performed in (Yes or No) Uploaded Source: Approval information Pay Estimate Source: Manager's SAP CIPO Source: date CIPO PDF in SAP to AP Group information Approval (A)-(C) (C)-(D) (D)-(E) (E)-(F) (F)-G) (G)-(H) (H)-(I) (H) - (B) (A) **(B)** (C) **(D**) (E) **(F)** (G (**H**) **(I**) 1 \$132,397 Cedro 7/20/21 8/19/21 8/12/21 8/16/21 8/12/21 7 21 14 0 7 8/10/21 8/11/21 8/26/21 8/26/21 1 1 4 -4 Yes 4,000.00 67,722.50 8/20/21 9/19/21 8/23/21 8/23/21 8/25/21 9/8/21 9/20/21 9/22/21 9/23/21 5 3 0 2 14 12 2 1 2 SCW Yes 4 165,700.02 3 WM Lyles 10/11/21 7 9/20/21 10/20/21 9/22/21 9/24/21 9/27/21 10/18/21 10/19/21 10/21/21 2 2 2 3 14 1 2 Yes 1 14,000.00 4 Charles King 684,775.14 10/20/21 11/19/21 11/2/21 11/2/21 11/2/21 11/10/21 11/11/21 11/18/21 11/18/21 7 13 0 0 8 1 7 0 Yes -1 180,077.00 11/20/21 12/20/21 11/22/21 11/22/21 12/1/21 12/7/21 12/13/21 12/15//21 12/15/21 7 2 0 9 6 2 0 5 6 Yes -5 MNR 261,250.00 12/20/21 1/19/21 12/17/21 12/20/21 12/20/21 1/11/22 1/17/21 1/19/21 1/20/22 7 -3 3 0 22 6 2 1 Yes 1 6 JF Shea 1/13/22 2/22/22 7 2 7 168,040.00 1/20/22 2/19/21 1/10/22 1/11/22 2/8/22 2/23/22 2/24/22 -10 1 26 14 1 1 Yes 5 Tharsos, Inc. New 3/22/21 0 0 9 5 8 3,987.00 2/20/22 3/2/22 3/2/22 3/2/22 3/11/22 3/16/22 3/24/22 3/24/22 4 10 0 2 8 Yes Millennium 4/19/21 4/6/22 4/12/22 7 0 0 41 108,772.00 3/20/22 4/6/22 4/6/22 4/12//22 5/23/22 5/24/22 17 6 0 35 9 1 Yes Norstar

Attachment 1

Review of Pay Estimate Processes February 27, 2023 Page 28 of 28

Sample No.	Contractor Name	Payment Amount	Date Pay Estimate is required to be Uploaded	Net 30 Date	Contractor Upload Date Source: CIPO	Inspector Approval Date Source: CIPO		Receiving Date in SAP Source: SAP	11110100	Processing Date Source: SAP	Date Paid Source: SAP		Number of days between the required upload date and the Contractor upload date	Number of days between Contractor upload date and Inspector Approval date	Number of Days Between Inspector's approval and the Project Manager's Approval	Number of days between the Project Manager's approval and Receiving performed in SAP	Number of days between receiving and Engineering Staff submitting the PE information to AP Group	after receiving the Pay	Number of days between the processing and the payment	Does the Pay Estimate attached in SAP have signed approvals? (Yes or No)	Number of Days between Net 30 date and Payment date
			(A)	(B)	(C)	(D)	(E)	(F)	(G	(H)	(I)		(A)-(C)	(C)-(D)	(D)-(E)	(E)-(F)	(F)-G)	(G)-(H)	(H)-(I)		(H) • (B)
10	Charles King	222,875.00	4/20/22	5/20/22	4/29/22	5/3/22	5/10/22	5/11/22	5/12/22	5/24/22	5/24/22	7	9	4	7	1	1	12	0	Yes	4
		93,859.50																			
11	W. A. Rasic	3,130.60	5/20/22	6/19/22	5/19/22	6/1/22	6/2/2022	6/1/22	6/20/22	6/30/22	6/30/22	6	-1	13	1	-1	19	10	0	Yes	11
12	Big Sky Electric	160,780.00	6/20/22	7/20/22	6/29/22	6/30/22	6/30/22	7/8/22	7/11/22	7/21/2022	7/21/22	7	9	1	0	8	3	10	0	Yes	1
13	Metro	86,000.00	7/20/22	8/19/22	7/25/22	7/26/22	8/3/22	8/15/22	8/22/22	8/24/22	8/25/22	4	5	1	8	12	7	2	1	Yes	6
14	Ferreira	(4,966.00)	8/20/22	9/19/22	9/2/22	9/6/22	9/6/2022	9/16/22	9/16/22	9/21/22	9/22/22	4	13	4	0	10	0	5	1	Yes	3
		37,973.00 433,054.74																			
15	MNR	,	9/20/22	10/20/22	10/10/22	10/10/22	10/10/22	10/11/22	10/13/22	10/18/22	10/20/22	7	20	0	0	1	2	5	2	Yes	0
		482,744.21 56,697.00																			
16	Doty Bros	7,553.11	10/20/22	11/19/22	11/10/22	11/10/22	11/10/22	11/21/22	11/22/22	12/1/22	12/1/22	5	21	0	0	11	1	9	0	Yes	12
17	Best Contracting	598,636.64	11/20/22	12/20/22	11/22/22	11/22/22	11/22/22	12/7/22	12/8/22	12/20/22	12/20/22	7	2	0	0	15	1	12	0	Yes	0
18	GCI Construction, Inc.	21,850.00	12/20/22	1/19/23	1/5/23	1/5/23	1/5/23	1/9/23	1/13/23	1/18/23	1/19/23	0	16	0	0	4	4	5	1	No	0

Inland Empire Utilities Agency

Review of Procure to Pay Processes for Pay Estimates

Teresa Velarde Manager of Internal Audit March 15, 2023

Accounts Payable Operational and Internal Control Audit

Interim Audit Report: Accounts Payable Operational and Internal Control Audit					
Date Issued	Recommendations				
August 20, 2021	Interim Audit Report				

Review of Procure to Pay Processes for Chemicals					
Date Issued	Recommendations				
November 24, 2021	35				

Review of Procure to Pay Processes for Professional Services –					
Engineering & Construction Management (E&CM)					
Date Issued	Recommendations				
February 24, 2022	21				

Review of Procure to Pay Processes for Professional Services – Planning and Resources					
Date Issued	Recommendations				
May 24, 2022	11				

Review of Procure to Pay Processes for Home Depot Credit Cards						
Date Issued Recommendations						
September 1, 2022 7 (no longer applicable)						
The Agency has taken steps to phase out the Home Depot Credit Card program and absorb the purchases through the expanded Procurement Card						
program, as originally proposed by IA through the Procurement Card Audit in 2	018. IA will not follow up on the 7 recommendations.					

Review of Procure to Pay Processes for Materials and Supplies					
Date Issued	Recommendations				
December 2, 2022	19				

Review of Procure to Pay Processes for Pay Estimates						
Date Issued	Recommendations					
February 27, 2023	07					
reblualy 27, 2023	27					

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Pay Estimate Audit Objectives

- Evaluate the Pay Estimate processes, including:
 - Pay Estimate review and submission,
 - Receiving function
 - Processing payments
- Evaluate internal controls
- Evaluate the timeliness and efficiency of processes
- Evaluate the use of technology and reporting tools
- Determine if Agency Policies and Standard Operating Procedures (SOPs) are working as intended and align with current practices
- Identify opportunities and opportunities for improvement

Pay Estimate Payments and the Process

Pay Estimates

 Pay Estimates are payments for progress completed for construction projects. Pay Estimate payments are time-sensitive and governed by Public Contract Code §20104.50. (must be paid Net30)

Engineering & Construction Management Department

-With the use of the software system CIPO Cloud, the contractor and E&CM team set up project schedules, upload invoices and workflow items for review and signature

• CIPO – DocuSign - AP Excel Spreadsheets – SAP – Esker (5 systems)

- -Pay Estimates are uploaded and reviewed by Engineering using CIPO
- -Review and approval is done in CIPO and using DocuSign
- Information is reviewed and verified by AP and Engineering using various excel spreadsheets
- -Receiving function and processing payments is done by AP in SAP.
- -AP allocates all resources for an entire week
- -Pay Estimates currently do not go through Esker



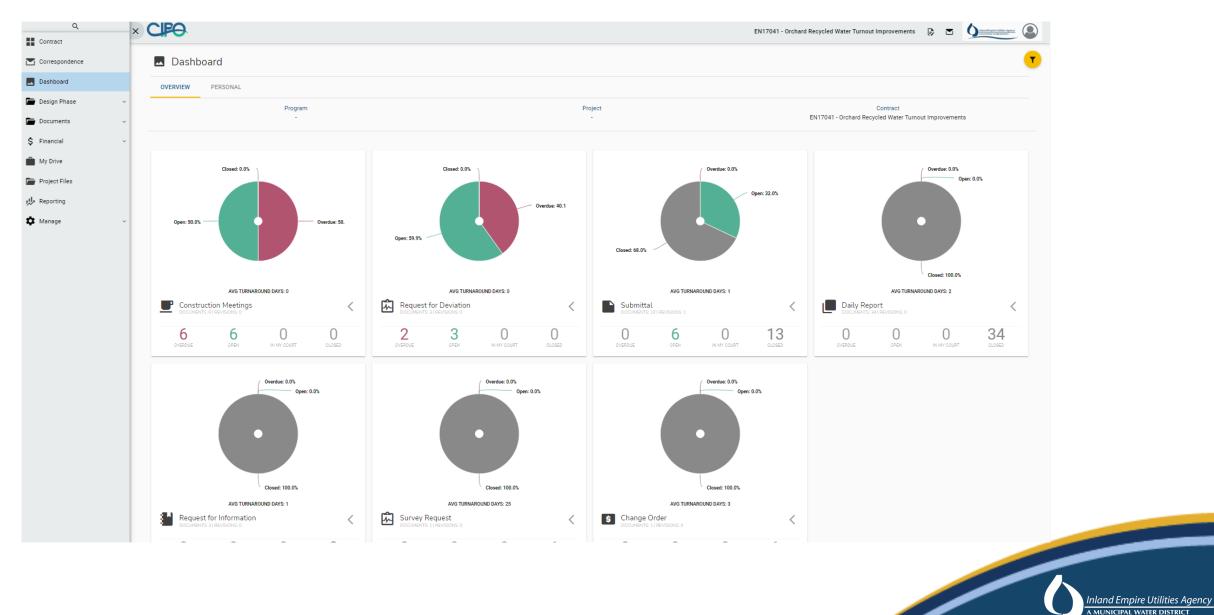
Scope of Audit

Pay Estimates processed during Audit Period of 18 Months: July 2021 through December 2022

	Total Number of Pay Estimates Paid	Amount Paid			
FY 2021-2022	170	\$119,963,686			
FY 2022-2023 (through December 2022)	72	51,677,486			
Total	242	\$171,641,172			
	Average Per Month 13	Average Per Pay Estimate 709,261			

Inland Empire Utilities Agency A MUNICIPAL WATER DISTRICT

CIPO Dashboards



6

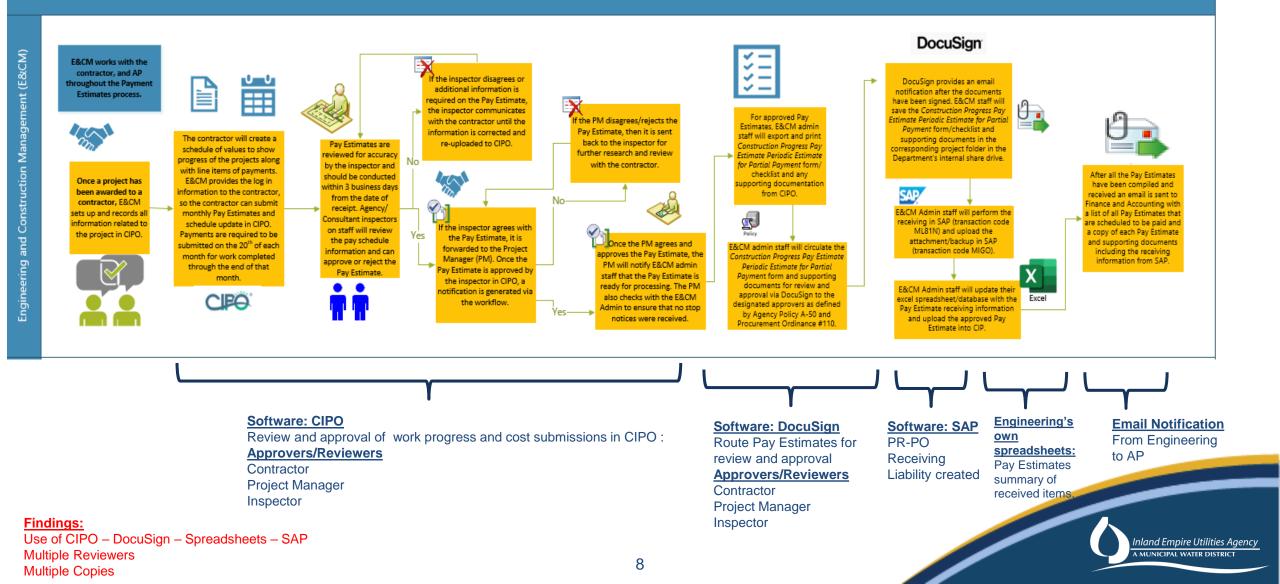
CIPO - Pay Estimate Management

Q	×CPO							EN20022	- 1299 Reservoir Byp	ass Pipeline 🕞		Impère Utilities Agency
tract												
orrespondence	. Pay Estimate											
Dashboard	PP-003 APPROVED								C Searc	- -	05/01/2022 - 05/3	1/2022
Design Phase	×								Ŭ	. .		4 9
Documents v	Selected Amount			\$39,905.86								
Financial	Retained Charges This Period:			-\$1,995.29						Final a	amount: \$37	,910.57
Change Order												
Request for Deviation	Adjustments (1)										\$0.00 Tota	l: \$0.00 <
Pay Estimate	Schedule of Values Iter	ms (4)								\$35.241.0) Total: \$118,3	241.00 ~
Schedule of Values		MBER (A) ITEM DESCRIPTION	UNIT TYPE	QTY	UNIT PRICE	PAYMENT TOTAL	PAYMENT \$	PAYMENT %	PREVIOUS \$	PREVIOUS %	PAID \$	PAID %
My Drive	5 5	INSTALL IEUA FURNISHESD 30" CMLC	LF	157.00	\$613.00	\$96,241.00	\$13,241.00	13.76%	\$83,000.00	86.24%	\$96,241.00	100.00%
	9 9	TRENCH REPAIR	LS	1.00	\$14,000.00	\$14,000.00	\$14,000.00	100.00%	\$0.00	0.00%	\$14,000.00	100.00%
Project Files	10 10	PUNCH LIST AND CLEANUP	LS	1.00	\$5,000.00	\$5,000.00	\$5,000.00	100.00%	\$0.00	0.00%	\$5,000.00	100.00%
Reporting	11 11	DEMOBILIZATION	LS	1.00	\$3,000.00	\$3,000.00	\$3,000.00	100.00%	\$0.00	0.00%	\$3,000.00	100.00%
lanage 🗸	~					\$118,241.00	\$35,241.00		\$83,000.00		\$118,241.00	
	Items 1 - 4 of 4 Page 1 of 1 Change Order (1)									\$4,66	4.86 Total: \$4	,664.86 <
	CIPO Admin 10/25/2022 06:49 PM Changed Assignment Pending (Proof of Appr.)	Document was assigned to James Spea	wars (PM) from 05/17/2022 11:48 AM to 06/20/2022 03:0	02 PM								
	CIPO Admin 10/25/2022 06:49 PM Changed Assignment	Document was assigned to Sandra Sala:	azar (PM) from 05/17/2022 11:46 AM to 05/17/2022 11:	:48 AM								

d Empire Utilities Agency

Process Flowchart – Engineering & Construction Management

Pay Estimates



Findings

Use of multiple systems that may contain the same information:

- CIPO
- DocuSign
- Excel Spreadsheets
- SAP
- Email

Multiple Reviewers review and sign the same information

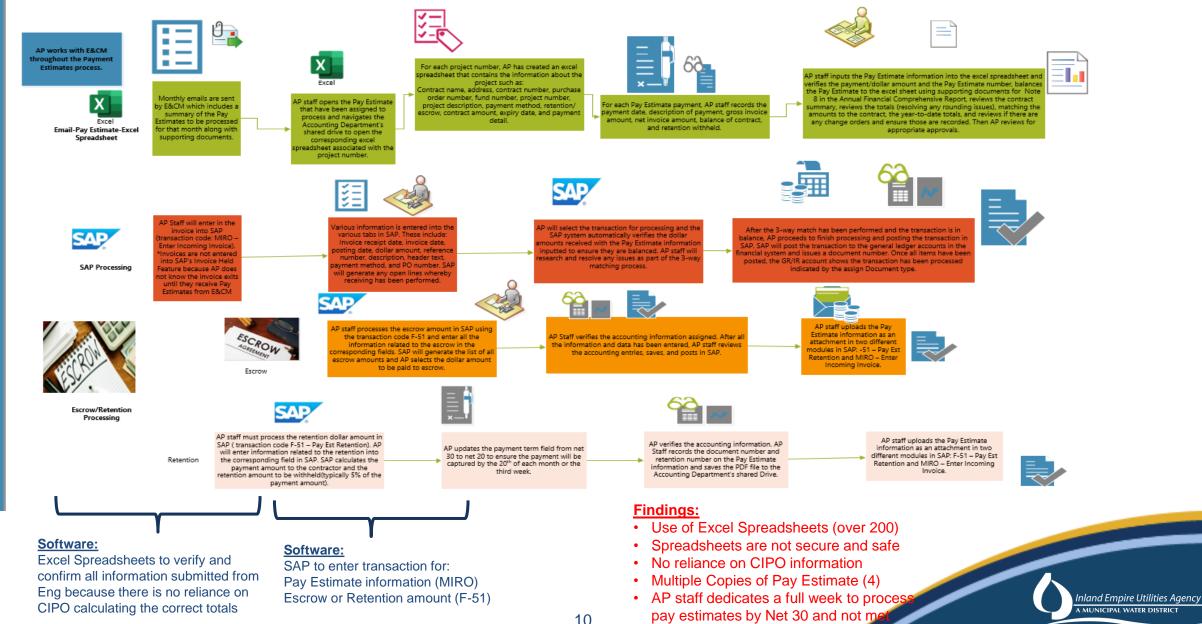
- CIPO (3)
- DocuSign (3-7 total)
- Spreadsheets (reviewed by Admin)
- SAP Receiving (approval to receive services 1)

Multiple Copies of Pay Estimates (4-40 Pages each)

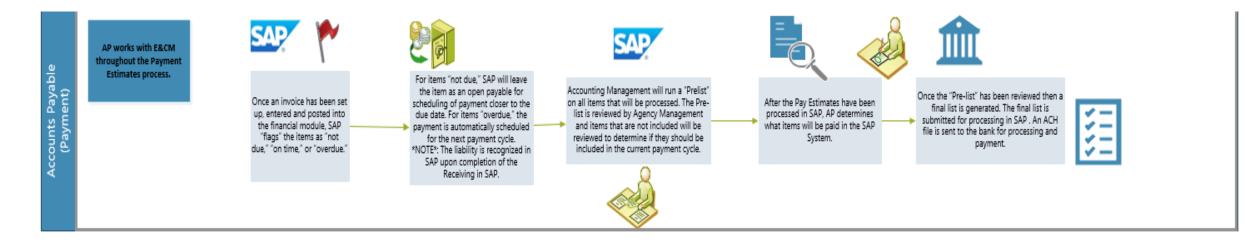
- Engineering 5
- Accounting 4

hland Empire Utilities

Process Flowchart - Accounts Payable



Process Flowchart - Accounts Payable ACH Payment



ACH Payment is processed after all information is logged into SAP



Findings

Various Systems with the same information to compile information

- CIPO
- DocuSign
- Excel Spreadsheets
- SAP
- Email

No reliance on CIPO information due possible errors with updates and patches

- CIPO (3)
- DocuSign (3-7 total)
- Spreadsheets (reviewed by Admin)
- SAP Receiving (approval to receive services 1)

Multiple Copies of Pay Estimates (4-40 Pages each)

- Engineering 5
- Accounting 4

AP staff dedicates a full week to process pay estimates by Net 30 and sometimes it is not met

- Engineering 5
- Accounting 4

Audit Results & Additional Findings

Late Contractor upload dates into CIPO

- The contract or project specification requires the Contractor upload Schedule of Values in CIPO by the 20th
- 15 of the 18 Pay Estimates showed the contractor uploaded, between 2 and 21 days after the required date, averaging about 8 days after the 20th which is the required date.

Inspector Approvals

- The Inspector is required to approve the Pay Estimate within 3 business days
- 1 Pay Estimates was approved 13 days late

IEUA Approval Signatures

- All items are reviewed and approved in CIPO by the Contractor, Inspector and the PM
- All items should be reviewed and approved again using DocuSign with 3-7 signatures
- 1 of the 18 Pay Estimates did not have any DocuSign approvals (per SAP)
- The other 17 pay estimates had between 2 and 7 DocuSign approvals



Agency Policy A-50 Approvals and approval authority

Effective April 27, 2015

- 5.3 Approval thresholds
 - A. The following Agency positions are authorized to approve NPO invoices up to the amount indicated in the table below:

Table 1: Positions and thresholds for NPO invoice approval



Positions	Construction Project Progress (pay estimates)	Professional services contracts/ agreements	Utilities and other recurring payments	All other invoices		
Department Manager and Executive Manager*	> \$250,000	> \$250,000	> \$250,000	> \$100,000		
Executive Manager	<u><</u> \$250,000	< <u></u> \$250,000	<u><</u> \$250,000	<u>≤</u> \$100,000		
Department Manager	<u>≤</u> \$100,000	≤ \$100,000	<u><</u> \$100,000	<u>≤</u> \$10,000		
Deputy Manager	<u><</u> \$75,000	<u><</u> \$75,000	<u><</u> \$50,000	<u>≤</u> \$7,500		
Supervisor	<u>≤</u> \$50,000	<u>≤</u> \$50,000	<u>≤</u> \$10,000	<u>≤</u> \$5,000		
Board Secretary				<u><</u> \$10,000		
Executive Assistant				<u>≤</u> \$5,000		

* All invoices above the thresholds indicated in this line require signature of both Department Manager and Executive Manager

Delayed in the Receiving Process

- SAP Receiving is performed by Engineering staff once the Pay Estimate is ready to be processed for payment
- It takes an average of 9.44 days for receiving to be completed
- In 8 of the 18 items tested, it took between 10-26 days to complete receiving

Delayed Payments

- In 3 of the 18 items reviewed, it took between <u>12-19</u> days, after the receiving was performed before Engineering sent the Pay Estimate to AP for processing
- In 6 of the 18 items reviewed, it took AP between over 10 days after items were received from Engineering to process for payment
- Noted that some of the 18 items tested were paid late, exceeded the Net30
- Non-compliance with PCC and the contract



Multiple Excel Spreadsheets to process Pay Estimate Payments

- Used as a monitoring and reconciliation tool to process payments
- Track the same information already entered in CIPO and SAP
- Currently there are over 200 spreadsheets, some dating as far back as 2004
- Data Integrity there are over 50 authorized users that can access & modify spreadsheets
- No evidence of supervisor review to ensure accuracy of the spreadsheets
- Engineering would like to have access to the spreadsheets but they have the information in CIPO
- CIPO & SAP have the same information as the spreadsheets
- Need to use and rely on monitoring and report tools from CIPO and SAP



Staff Training & Standard Operating Procedures

- SOPs need to be documented and/or updated for all processes
 - AP does not have SOPs
 - AP does not have a back up AP person to process Pay Estimates
 - Engineering SOP needs to be updated
- There are no back ups in AP to process Pay Estimates
- Additional controls and adequate review of the accuracy of Pay Estimate data sent from CIPO (Engineering) to Accounts Payable
 - There are often errors and incorrect information calculated that transfers from CIPO to AP and AP must review and correct



CIPO – upgrades, patches and accuracy of information

- The audit found there were 8 support tickets in an 6-month period
- It is unclear if support tickets are an additional cost to the Agency
- Staff stated CIPO updates and patches create errors in formula calculations
 - Errors go undetected by Engineering staff and incorrect information may be submitted to AP
- DocuSign signatures indicate that 3-7 different staff review and approve Pay Estimates
- Inaccurate information is submitted to AP creates additional review and verification for AP after Pay Estimates have been approved by 3-7 individuals
- Request CIPO to verify formulas when updates are rolled out



CIPO – SAP – Excel Spreadsheets - Esker

- There are various systems that do not interface or communicate
 - This creates duplication of information
- The information is identical or very similar in each
- CIPO is a project management tool used by Engineering and contains all payment information
- SAP is the Agency's ERP system which contains all payment information
- All receiving and payment is processed in SAP
- Accounts Payable maintains over 200 Excel spreadsheets as a monitoring and reconciliation tool for all construction projects and contracts
- Currently, Esker is not used to track and route Pay Estimates,



Pay Estimates Review Audit Recommendations

Internal Audit provides:

- Recommendations for Accounting
- Recommendations for Engineering







The Review of Pay Estimate Processes is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that IA's evaluations provide recommendations that foster a strong control environment, safeguard assets, promote a safe work environment and assist management in achieving organizational goals and objectives.

Questions?

Audit Committee

INFORMATION ITEM **2B**



Date: March 15, 2023To: The Honorable Board of DirectorsCommittee: Audit

From: Teresa Velarde, Manager of Internal Audit 03/15/23

Manager Contact: Teresa Velarde, Manager of Internal Audit

Subject: Progress Update for all Procure to Pay Audit Recommendations - Fifth Update

Executive Summary:

Internal Audit (IA) completed a follow up review of the audit recommendations provided through the various Procure to Pay (P2P) audits under the comprehensive Accounts Payable Operational and Internal Control audit. The scope of these audits was to evaluate the payment processes for the Agency's goods and services and to determine if internal controls and processes are efficient to ensure vendor invoices are paid timely. This is the fifth progress update.

To-date, IA has provided 93 recommendations through six comprehensive P2P audits. Of the 93 audit recommendations provided, 41 are now implemented, 27 are in progress of being implemented and 25 are considered no longer applicable because alternate controls have been implemented to address the risks and observations identified. The attached report provides details of the results and responses provided by the departments. IA will continue to provide quarterly progress updates for all outstanding recommendations, including new recommendations through additional P2P audits.

Staff's Recommendation:

This is an information item.

Budget Impact Budgeted (Y/N): N Amendment (Y/N): Y Amount for Requested Approval: Account/Project Name: N/A

Fiscal Impact (explain if not budgeted): N/A

Prior Board Action:

On June 15, 2022, the Board of Directors approved the Fiscal Year 2022/23 Annual Audit Plan. The Plan proposed the various Procure to Pay Audits under the Accounts Payable Operational and Internal Control Audit.

Environmental Determination: Not Applicable

Business Goal:

The Progress Update for all Procure to Pay Audit Recommendations - Fifth Update is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that IA's evaluations provide recommendations that foster a strong control environment, safeguard assets, promote a safe work environment and assist management in achieving organizational goals and objectives.

Attachments:

Attachment 1 - Progress Update for all Procure to Pay Audit Recommendations - Fifth Update Attachment 2 - Progress Update List of all outstanding P2P audits Attachment 3 - PowerPoint



6075 Kimball Avenue • Chino, CA 91708 P.O. Box 9020 • Chino Hills, CA 91709 TEL (909) 993-1600 • FAX (909) 993-1985 www.ieua.org

DATE: February 23, 2023

TO: Shivaji Deshmukh General Manager

Tereja Da

FROM: Teresa V. Velarde Manager of Internal Audit

SUBJECT: Progress Update for all Procure to Pay Audit Recommendations – Fifth Update

Audit Authority

The Inland Empire Utilities Agency (IEUA or Agency) Internal Audit Unit (IA) is providing a progress update of the ninety-three (93) audit recommendations provided in the previous six (6) Procure to Pay (P2P) audits completed under the comprehensive Accounts Payable Operational and Internal Controls Audit. The progress update is provided under the authority given by the Board of Directors in the approved Fiscal Year (FY) 2022/2023 Annual Audit Plan and IA's Charter.

Audit Objective

The scope of the original audits was to evaluate the ordering, receiving, and payment processes for the Agency's goods and services and to identify observations and recommendations for improvements to the processes to ensure the vendor invoices are paid on time. The purpose of the quarterly progress reports is to provide a status of each original audit recommendation from the P2P audits, including the corrective action plans, and planned dates for implementation.

Background

As detailed in the original audit reports, goods and services purchased by the Agency are considered critical to the wastewater treatment process because of public health regulatory requirements and are critical to the business initiatives of the Agency. The original audits evaluated the internal controls and business processes in place to ensure goods and services are ordered, delivered, received, and paid for in a timely manner, while following approved procurement guidelines. Good internal controls and sound business practices ensure the Agency can operate according to regulatory requirements and maintain healthy business relationships and a good business image with its vendors.

Water Smart - Thinking in Terms of Tomorrow

Michael Camacho Director

Progress Update for all Procure to Pay Audit Recommendations – Fifth Update February 23, 2023 Page 2 of 8

To date, IA has completed the following audits related to the comprehensive Accounts Payable Operational and Internal Controls Audit:

Interim Audit Report: Accounts Payable Operational and Internal Control Audit					
Date Issued	Recommendations				
August 20, 2021	Interim Audit Report				

Review of Procure to Pay Processes for Chemicals						
Date Issued Recommendations						
November 24, 2021	35					

Review of Procure to Pay Processes for Professional Services – Engineering & Construction Management (E&CM)					
Date Issued Recommendations					
February 24, 2022	21				

Review of Procure to Pay Processes for Professional Services – Planning and Resources					
Date Issued	Recommendations				
May 24, 2022	11				

Review of Procure to Pay Processes for Home Depot Credit Cards						
Date Issued Recommendations						
September 1, 2022	7 (no longer applicable)					
The Agency has taken steps to phase out the Home Depot Credit Card program and absorb the purchases through the expanded Procurement Card program, as originally proposed by IA through the Procurement Card Audit in 2018. IA will not follow up on the 7 recommendations.						

Review of Procure to Pay Processes for Materials and Supplies						
Date Issued Recommendations						
December 2, 2022	19					

Review of Pay Estimate Processes					
Date Issued Recommendations					
February 27, 2023	27				

The dashboard that follows provides a breakdown of the audit recommendations provided to each department and unit through the P2P audits with the status for each. The attached report, provides a detailed list of each outstanding recommendation, noting the departments' current responses, planned date for implementation and IA comments and

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the final disposition for each recommendation. The list attached provides a list of items that were still outstanding as of February 23, 2023. Audit recommendations resolved are not included. For additional information about prior audit recommendations, resolutions and final disposition of each, IA refers readers to the original final P2P Audits and prior Progress Update Reports submitted through scheduled Audit Committee Meetings. Reports are also available on IA's website on AIM or can be requested by contacting any member of IA.

		Status			
Unit	Implemented	In Progress	Not Implemented	No Longer Applicable	Total Original Audit Recommendations
Operations – Materials & Supplies	-	2	0	-	2
Maintenance – Materials & Supplies	-	2	0	-	2
Warehouse – Materials & Supplies	-	2	0	-	2
Water Quality Laboratory – Materials & Supplies	-	4	0	-	4
Facilities and Water System Programs – Materials & Supplies	-	2	0	-	2
Procurement Card Program	2	1	0	-	3
Contracts and Procurement	7	3	0	1	11
Accounting	10	11	0	10	31
Operations – Chemicals	12	0	0	4	16
Engineering & Construction Management	6	0	0	1	7
Planning	4	0	0	2	6
Home Depot Credit Cards	0	0	0	7	7
Total Recommendations	41	27	0	25	93
Percentages	44%	29%	0%	27%	100%

Of the 93 audit recommendations:

- 41 are now implemented
- 27 are in progress of being implemented
- 25 are considered no longer applicable because alternate controls were implemented (includes 7 related to Home Depot Credit Cards). These recommendations are considered closed.

Of the 27 recommendations in progress:

 1 recommendation is in progress of being implemented by the Procurement Card Administrator. The recommendation relates to finalizing and implementing an Agency PCard policy that provides clear guidelines for the use of the Procurement Card. The Pilot PCard Policy is currently in draft form, IA has provided comments, the policy is being evaluated by Human Resources before it is finalized and implemented. According to the PCard Administrator, the draft pilot PCard policy is discussed with all Agency employees who are issued a new PCard. This policy requires it be finalized and issued to all employees.

- 3 recommendations are in progress of being implemented by CAP. One recommendation relates to making updates to Agency Policy A-50 related to non-POs and approval authorities. The policy updates will be made once Esker, the Agency's new invoice recognition software system is fully implemented. The remaining two recommendations relate to working closely with IT to make processes more efficient in SAP, the Agency's ERP system. CAP continues to meet with Information Technology (IT) to discuss the needed updates.
- 12 recommendations are in progress of being implemented by the following departments or units: Operations, Maintenance, the Warehouse, the Water Quality Laboratory and Facilities & Water Systems Programs. The recommendations relate to tightening controls related to the receiving function. These recommendations will be considered in progress until all staff is fully trained on Esker and departments evaluate process changes because processes will require updates as a result of the implementation. IA will follow up on these processes during the next quarterly progress update.
- 11 recommendations are in progress of being implemented by Finance. The recommendations are broken down as follows:
 - 6 relate to documenting Standard Operating Procedures (SOPs) for the many accounting activities and processes
 - 2 relate to establishing Key Performance Indicators (KPIs) for the various processes completed by the department to ensure activities and staff can be measured and evaluated
 - 1 recommends making email communication more efficient
 - 1 recommends training is provided to staff after SOPs and KPIs are adopted
 - 1 recommends the continuation of periodic and on-going meetings with administrative staff and others that perform receiving functions to discuss items that require immediate attention

The following chart provides a summary of the 18 audit recommendations provided to Finance and the proposed implementation plan for each (refer to the attached matrix of all recommendations for the complete recommendation).

P2P Report	Recommendation Number	Accounting's proposed method for implementation:
Chemicals	26	SOP: Develop SOP that documents the processes specific to how and what items AP selects for the 3-way match and payment processing.
Chemicals	27	Training: Develop SOP on the current processes and provide training to staff on any new processes established.

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Chemicals	29	KPI's: Develop Key Performance Indicators (KPIs) after the invoice					
enemicals	29	recognition software system has been implemented.					
	20	SOP: Develop SOP that documents the 3-way match and methodology for					
Chemicals	30	what and when matching is performed.					
		SOP: Develop SOP that documents the methodology for receiving, matching					
Chemicals	31	and processing payments.					
Chemicals	32	SOP: Develop SOP that documents regarding data entry and supporting					
		documentation (i.e. bill of lading, etc.).					
		SOP & KPIs: Develop SOP that addresses accuracy of data entry, KPI's for					
Chemicals	33	the matching and payment processes, monitoring of invoices, and					
		communication of delayed items.					
	25	SOP: Develop SOP that documents and addresses accuracy of data entry					
Chemicals	35	and back posting of items.					
		SOP: Develop SOP and document the timeframe for monitoring and					
E&CM	10	handling delays.					
P&R	11						
PQR	11	Email: Procure an invoice recognition software solution. Discuss and					
		determine the best communication method with Agency staff.					
M&S	19	Coordination Meetings: Accounting should continue to lead periodic					
		meetings with the administrative assistants or staff responsible for SAP					
		receiving and if needed include CAP staff or others to discuss open items,					
		invoices, receiving responsibilities and items that require attention.					

<u>Highlights</u>

IA participates in various meetings with all Agency departments related to the implementation of the audit recommendations and the many Agency initiatives related to the P2P audit recommendations. IA is readily available to assist with special requests and audit projects, when requested, and in accordance with the Internal Audit Unit Charter and the Annual Audit Plan.

Highlights of the recommendations that have been implemented in the recent months include the following:

- <u>Esker Implementation</u>: With the implementation of Esker, Accounting has been able to clear 7 recommendations that were previously In Progress. Esker provides visibility of pending invoice items and staff can take follow-up action immediately. Esker also provides several dashboards and reports to quantify various metrics and activities and keep track of the processes.
- <u>Staffing changes:</u> Accounting continues to make needed updates and changes.
- <u>Software system</u>: Accounting is working closely with IT on the implementation of the Agency's new invoice recognition software (Esker). The purpose of the software is to automate the upload and routing of invoices, this system will ensure all invoices are accounted for, tracked, monitored and sent to the appropriate approver for signature and proper receiving in SAP. Esker was launched in January 2023.

- <u>IT Reports</u>: IT has been working closely with Accounting to develop monitoring reports that can be used to have greater visibility of all payable items. IT is also working closely with all Agency departments to develop additional monitoring and review reports. The reports will assist with sorting items, planning, prioritizing, and scheduling various activities with the end goal of ensuring payments are made on time.
- Expanded Procurement Card (P-card) program: In September 2022, the Agency expanded the P-card program to consolidate the various credit programs used by the Agency and to make small dollar purchases more efficient. A dedicated P-Card Administrator was assigned to implement and oversee the program, provide training and assistance to end-users, and implement US Bank Online system process. As of the date of this report, the Agency has expanded the use of the program and has issued 135 P-cards for both IEUA and IERCA as of February 9, 2023 (from 20 cards in 2018).
- <u>P-Card policy/guidelines</u>: Agency Management drafted the P-Card policy in August 2022. IA reviewed the draft policy and provided comments and suggestions for consideration. The updated and revised draft P-Card policy has not been finalized. Policy A-89 (Procurement Card, effective: 01/26/2016) continues to be available on the Agency's intranet as the guidelines for the P-Card use.

In August of 2022, the new P-card Pilot Program Policy was drafted to update the existing Pcard Policy. This is currently under review and pending full implementation. The new P-card Pilot Program Policy is provided to all new users of a P-card. It provides guidelines for the proper use of the P-cards and employees are required to adhere by the draft policy.

- <u>Procurement Ordinance</u>: The Board of Directors approved the new Procurement Ordinance No. 110 on September 21st, 2022. The most significant changes to the Ordinance include:
 - Increase the dollar threshold from \$3,500 to \$10,000 for procurements, before two or more quotes are required. Thus, any purchases under \$10,000 require only one quote and/or can be procured from any vendor. (*Previously, procurements less than \$3,500 required one quote, while procurements greater than \$3,500 required multiple quotes from the different vendors*)
 - Increase the dollar threshold from \$5,000 to \$10,000 for the single-transaction limit on the Procurement card
 - Increase the dollar threshold from \$ 40,000 to \$150,000 for the single change order or amendment
 - Increase the dollar threshold from \$100,000 to \$150,000, before Board approval and action is required, which usually impacts purchases and contracts

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- <u>Agency Policy A-50</u>: Contracts and Procurement (CAP) has addressed the original P2P recommendations provided. In June 2022, a new recommendation was provided related to taking the lead to make updates to Agency Policy A-50 (Non-Purchase Order Invoice Approval, effective 4/27/2015) regarding procurements for Purchase Orders and Non-Purchase Orders. After the Esker software system has been implemented, CAP will be taking the lead to clarify Agency guidelines related to procurements.
- <u>CAP Café:</u> Other recommendations, already implemented, suggested that CAP reach out to the departments to work closely with them to gain a clear understanding of their unique procurement requirements and to provide additional training, guidance, and assistance to ensure the transactions follow the Agency's P2P process. CAP initiated a virtual Q&A session each month "CAP Café" where attendees can ask questions, request guidance, assistance, and discuss any unique issues. The additional outreach efforts have provided valuable information for all users.
- <u>Standard Operating Procedures:</u> The E&CM Department has documented, finalized, and signed their SOP for processing invoices and pay estimates (*Owner: Manager of Engineering, Doc Name: Pay Estimate/Invoice Processing, Doc Number: ENGCM-07, Revision No. 1 and Effective: September 1, 2022*). IA suggests E&CM ensure the SOP is readily available and accessible by all department staff, and can serve as a guide and/or training tool for staff.

The next progress update will report on the 34 remaining recommendations. Additional progress updates will be submitted until all recommendations are addressed.

The attached matrix provides a status for each of the outstanding audit recommendations. For additional details, IA refers readers to the original audit reports, received and filed by the Board of Directors. The reports can be accessed through the Agency's intranet website or requested from the Manager of Internal Audit. IA will provide additional progress updates until all P2P audit recommendations have been addressed.

Acknowledgements

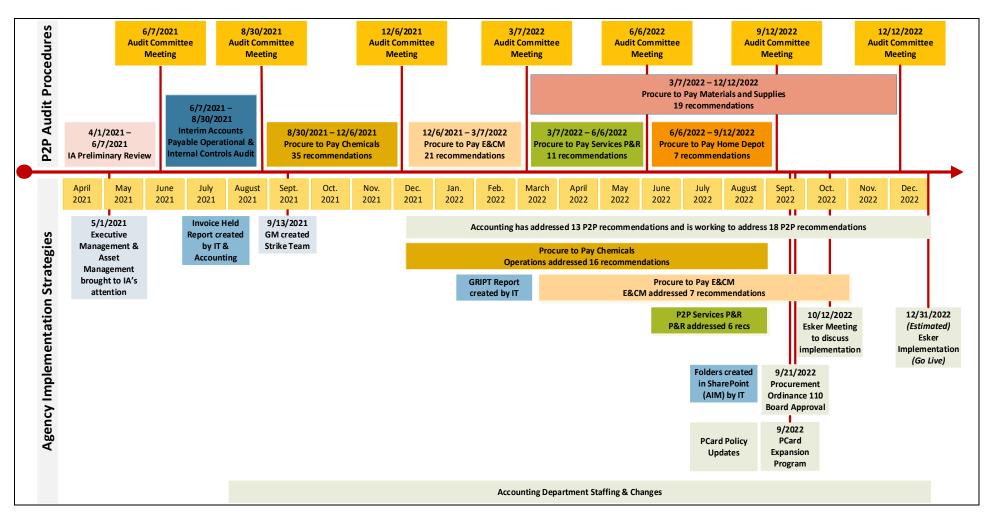
IA would like to extend our appreciation to staff for their cooperation and assistance during this progress update and look forward to the continued collaboration.

Discussions with Management

IA met with each of the respective department managers and representatives to discuss the observations, the status of each recommendation, and corrective action plans. Where possible, their comments have been incorporated.

The Progress Update for all Procure to Pay Audit Recommendations – Fifth Update is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that IA's evaluations provide recommendations that foster a strong control environment, safeguard assets, promote a safe work environment and assist management in achieving organizational goals and objectives.

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Procure to Pay Timeline:

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				Status					
P2P	Rec #	Unit(s) Taking the Lead	Recommendation	Implemented	In Progress	Not Implemented	No Longer Applicable	Department's Response, Corrective Action Plan and Proposed Date for Implementation	IA Notes
M&S	8	Ops M&S	Operations should establish and document clear procedures, KPI's, metrics and/or goals for the timely processing of all receiving. This includes ensuring that anyone who physically receive shipments of goods, promptly forward the shipping documents to the appropriate person that will perform the receiving in SAP. Ensure the procedures include details of the expectation of all involved in the receiving process, from the person who physically receives items, to the individual who does the receiving in SAP, including procedures to use current/existing or other technology when feasible and if it makes the process more efficient and quicker. Ensure procedures contain metrics, goals and KPIs for the timeliness of the items.		X				
M&S	9	Ops M&S	Periodically review the Open PO Report as an additional monitoring control to check for any items that require receiving in SAP. Also, refer to closing information/instructions provided by Accounting each month for the SAP code to run the report and for additional closing instructions or seek assistance from Accounting or CAP to run report or identify items that still require receiving in SAP.		X				
M&S	10	Mnt	Maintenance should establish and document clear procedures, KPI's, metrics and/or goals for the timely processing of all receiving. This includes ensuring that anyone who physically receive shipments of goods, promptly forward the shipping documents to the appropriate person that will perform the receiving in SAP. Ensure the planners forward any information about items ordered or received promptly to the administrative assistants for receiving into SAP. Ensure the procedures include details of the expectation of all involved in the		X				

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M&S	11	Mnt	receiving process, from the person who physically receives items, to the individual who does the receiving in SAP, including procedures to use current/existing or other technology when feasible and if it makes the process more efficient and quicker. Ensure procedures contain metrics, goals and KPIs for the timeliness of the items. Periodically review the Open PO Report as an additional monitoring control to check for any items that require receiving in SAP. Also, refer to closing information/instructions provided by Accounting each month for the SAP code to run the report and for additional closing instructions or seek assistance from Accounting or CAP to run report or identify items that still require receiving in SAP.	x		
M&S	12	WHS	Warehouse should establish and document clear procedures, KPI's, metrics and/or goals for the timely processing of all receiving, similar to the new procedures established to ensure receiving for chemicals within 5-7 days. Warehouse indicated that they currently complete the receiving in SAP within 3-5 days and rely on the Open PO Report to monitor the timeliness of receiving. Additionally, Warehouse staff indicated that they perform the receiving for anything that comes through the warehouse and sometimes items that do not come through the warehouse, whether it is inventory or not.	X		
M&S	13	WHS	Warehouse staff should take the lead to frequently communicate with all administrative assistants about the responsibilities for completing the receiving function in SAP for inventory and non- inventory items and for items that are physically delivered to the warehouse and those delivered to other Agency locations. Warehouse staff may want to periodically send out email messages or use other forms of disseminating information about the responsibilities for SAP receivers. Warehouse should use the Open PO report	X		

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			as tool to swide the discussion shout the			
			as tool to guide the discussion about the			
			items needing receiving.			
M&S	14	Lab	Lab should work closely with Accounting and CAP to establish and document clear procedures, KPI's, metrics and/or goals for the timely processing of all receiving into SAP, for both goods and services. (Similar to the new procedures established to ensure receiving for chemicals is completed within 5-7 days).	X		
M&S	15	Lab	Lab should incorporate the use of existing or new technologies (such as iPhones) to upload delivery documentation directly into SharePoint/OneDrive for their administrative staff. (Lab agrees to use technology and mentioned that they currently have 2 shared Lab iPhones that can be used for the uploading of documents to make the process more efficient.)	X		
M&S	16	Lab	Periodically review the Open PO Report as an additional monitoring control to check for any items that require receiving in SAP. Also, refer to closing information/instructions provided by Accounting each month for the SAP code to run the report and for additional closing instructions or seek assistance from Accounting or CAP to run report or identify items that still require receiving in SAP.	X		
M&S	17	Lab	Lab staff should take the lead to periodically meet with staff completing SAP receiving (currently Engineering administrative staff or other administrative assistant) to discuss and coordinate receiving responsibilities, including: • Create a list to indicate which Lab staff to send invoices to for approval via DocuSign (provide list to Accounting or administrative assistance as a guide). • Discuss items that always need invoices sent for signature approval (i.e., Airgas rentals).	X		

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M&S	6	Facilities	Facilities and Water System Programs should establish and document clear procedures, KPI's, metrics and/or goals for the timely processing of all receiving. (May consider using as an example similar new procedures established for chemical receiving is done within 5-7 days).		X	
M&S	7		Periodically review the Open PO Report as an additional monitoring control to check for any items that require receiving in SAP. Also, refer to closing information/instructions provided by Accounting each month for the SAP code to run the report and for additional closing instructions or seek assistance from Accounting or CAP to run report or identify items that still require receiving in SAP.		X	
M&S	1	PCard Admin	The PCard Administrator should establish a strategy to continuously review the program and the related policies and reinforce the guidelines and requirements of the Procurement Ordinance, Procurement Card Policy and other related Agency Policies that provide guidelines and policies for the use of PCards. Additionally, to take the lead to make necessary updates to policies and processes and ensure employees are aware of the required policies, to ensure the PCard program is working as intended.		X	 On 2/7/2023 Pcard Administrator responded: The PCard Admin continues to review all recommendation is specific to your current process which you have addressed and also related to reinforcing the current guidelines and policies, IA has the following follow up questions: Depending on the items requiring attention there are individual emails that are sent to different users pertaining to their issues. PCard Admin reviews all charges to ensure that it aligns with the Procurement Ordinance 110. This is done through perusing the card portal and spot checking. Provides an additional level of review prior to Have you noticed anything that requires posting for any missing required documentation? Is there anything IA can assist with?
M&S	2		Perform periodic spend analysis to provide an added level of oversight and to identify potential maverick or unauthorized spending, splitting or duplicate purchases, etc., or other errors or misuse. Ensure any misuse is reported to the appropriate level and reinforce Agency policies.	x		On 2/7/2023 Pcard Administrator responded: 2/7/2023. Thank you for your response. This PCard Admin reviews spend daily to ensure that recommendation is specific to the process you staff is abiding by the Procurement Ordinance have described in the above recommendation 110. 2/7/2023. Thank you for your response. This Typical authorization limit is set at 5K per transaction and 10K monthly (below Procurement Ordinance threshold). What limits are set on users? Do they all have the same limits or different? When we meet or during a separate/follow-up meeting, can you please walk IA through a Staff will need to request additional one time

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M&S	3	Continuously work directly with users to provide needed training and guidance on processes related to the PCard to ensure users understand the intent and requirements of the program.	X			increase for additional funding per purchases pass the allotted threshold amount and approved and reviewed by their management before increase is provided. On 2/7/2023 Pcard Administrator responded: PCard Admin, Jeanina Romero and Kristine Day continuously provide training to end-users daily to ensure that the Procurement Ordinance 110 is followed. In the future we are looking at doing PCard refresher training or questionnaires for end- users and will have a back-up PCard authorizer when Administrator is out of office.	typical "spend analysis/review" for our understanding? (this will be done during the actual Pcard audit – planned for April or June) IA would like to request view access for the account so that we can begin gathering preliminary data for our planned audit. Have you noticed anything that requires attention? Do you have any proposed ideas to improve this spend analysist or review? Is there anything IA can assist with? 2/7/2023. Thank you for your response. As a quick follow up question, do you currently provide users with any materials, policies, procedures? If so, please share. Do you have any proposed ideas? Is there anything IA can assist with?
M&S	4	CAP should consider working with IT to set up an automated purchase order processing system. The new system should include a system of checks and balances for purchase order approval. Upon approval, the Agency's financial system, SAP, should automatically generate the purchase order and email it to the vendor, requestor, and CAP staff.		X		On 2/7/2023P CAP stated they have had several meetings with IT in support of having the automation of the PR to PO established. IT continues to research and evaluate the process requirements to support this automation. We have not received a status update from IT as to the potential implementation timeline.	
M&S	5	CAP take the lead to work with IT to ensure there is a designated line item/area in SAP where users can add contact information about the PR/PO to facilitate follow up questions from either staff or vendors. It		X		On 2/7/2023, CAP stated they have been working closely with IT to identify the work order number associated with PO's. There are some challenges in pulling the requestor contact information. While IT continues to explore the functionality, CAP is	

	-	there is a designated line item/area in SAP where users can add contact information about the PR/PO to facilitate follow up questions from either staff or vendors. It would be beneficial to have the contact information for the person that initiated the requisition. For vendor follow up.	^	closely with IT to identify the work order number associated with PO's. There are some challenges in pulling the requestor contact information. While IT continues to explore the functionality, CAP is evaluating the manual process of entering the contact information for the requestor in the body of the PO. This will allow for the full name, email and phone number to be included and visible in the PO.
		CAP indicated that SAP can populate the information with the SAP user information and they are already working with IT to have this information populate on the PO.		

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P&R	8	САР	CAP should take the lead to make needed updates to Agency Policy A-50 and the Procurement Ordinance, to ensure they provide policy requirements for both PO and Non-PO items and addresses the changes resulting from the recent Agency reorganization to establish the most current and applicable controls for the Agency's procurement activities.		X		On 11/28/2022 It was discussed that updates to the policy will be made after the implementation of Esker - the new invoice upload system. On 8/22/22 Received update from CAP: Yes, we had a meeting with a lot of great discussion. The meeting included CAP and Accounting. The policy is under review, CAP is taking the lead on the review with track changes. Areas of discussion included updating the definition in 4.1 to identify that invoices for NPO aren't tied to a contract or PO routed through the formal P2P process. Update the workflow to remove the reference to the Procurement Ordinance. This is because the ordinance is not the governing document for invoice approvals. Update the table in 5.3A for correct titles and thresholds. Update details in 5.4 Processing to include AP related information and where the new Invoice processing software will be applied. CAP stated they would take the lead to evaluate A-50 and provide recommendations to update.	October/November. IA is also available to review the updates. 8/17/2022. CAP is meeting with Accounting to discuss and review the required policy updates. November 2022 - CAP indicated they continue to work on this item.
M&S	18	Invoice Routing	Accounting should consider routing all invoices to all Agency staff and place the responsibility on department staff to perform receiving with shipping documents when those are available and use the invoices when delivery/shipping documents are not available. As an example, Maintenance indicated that the vendors Superior and Royal are a couple examples of vendors that include labor on the invoices and therefore, staff require the invoice for the receiving process. The Lab indicated that Fisher Scientific sends orders in partial shipments and does not include shipping documents therefore staff require the actual invoice from staff to perform the receiving.	X				2/23/2023 Due to the implementation of Esker, the invoice recognition software system, this recommendation is considered Implemented. Invoices are now uploaded to Esker and there is visibility by all. The responsibility will fall on the department to ensure the receiving is completed timely and AP will follow up on open items.

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M&S	19	Acct	Accounting should continue to lead		Х	
			periodic meetings with the		Λ	
		Meetings	administrative assistants or staff			
		wiedunge	responsible for SAP receiving and if			
			needed include CAP staff or others to			
			discuss open items, invoices, receiving			
			responsibilities and anything requiring			
			attention to ensure vendor payments			
			are made timely.			
CHEM	23	Acct	Accounting should work with BIS to	Х		On 8/2/22 the department responded the 2/23/2023 2/23/2023 Due to the
-	-		develop an Aging Report or a report			following: CHEM # 23 – SAP already has an AP implementation of Esker, the invoice
		Software	that shows all outstanding invoice			aging report; but as discussed in Strike Team recognition software system, this
		Conward	information, including total days			meetings, the aging report does not address recommendation is considered
						invoices that are not yet in SAP and/or on hold. Implemented. Esker provides
			held and outstanding or overdue so			Until we have visibility of all incoming invoices dashboards and metrics. There is an there is no report that BIS can develop that would Aging report and metric.
			that Accounting can take prompt action.			address the observation noted. As such, the
			OR Accounting should work with BIS to			Agency is looking into the implementation of an 8/3/2022 Accounting has determined
			export and fully utilize the Held			AP automation solution. Pending that solution, that placing all invoices in the "held"
			Invoice Report to review all items			Accounting has worked with IT to develop feature is the most efficient method to
			and ensure any outstanding items			dashboards using SAP data downloaded into an process AP items. There is currently a
			are reviewed promptly.			Excel pivots/charts. This new tool has been desk procedure on the uploading/intake
						helpful to understand the historical invoice of invoices using the "held" feature.
			AND Accounting should formalize and			payment volume and rate of on-time payments. Accounting stated that a final SOP will
			document specific procedures for how			These dashboard charts are also now being used be formalized and finalized upon the
			items are selected for matching and			by the Strike Team Lead (Ryan Ward) to evaluate implementation of all new/updated progress and have been presented to Agency accounting processes. This will be
			processing for payment before the due			Senior Leadership. Regarding the invoices on addressed through #26 below. It
			date.			hold, IT has provided instructions on how to should also be noted that in this
						download that data into Excel, and staff can use it recommendation IA also suggested
						to help sort through the data as needed. there be a process for staff to monitor
						Accounting has informal desk manuals for how to items to frequently review and evaluate
						match and process payments in SAP; however, the outstanding items and past due
						any updated written procedures or formal SOPs items and elevate them for additional
						are pending the potential implementation of an AP attention and prompt processing. IA
						automation solution. We consider this provided this second part of the
						recommendation implemented as only the SOP is recommendation related to outstanding which is addressed under documenting how the Held Invoice
						recommendation CHEM #26. database is used to track, monitor and
						prioritize payments, in the new
						Prior Progress Update Responses: As of January recommendation under ENG #11. To
						2022, the Accounting Department continues to have streamline and simplify the
						staff vacancies, specifically replacement of an recommendations, this
						Accounting Technician who retired as of June 2021. recommendation will be considered
						The lack of staff has created a "triage" situation within Implemented since AP determines
						the department, and when end-user's department stafflogging in the invoice held feature is a
						or vendor representatives inquire about an good control. The part regarding SOPs
						outstanding invoice, that invoice will demand AP staff's attention and be processed as quickly as is in progress in Reco #26 and Eng #11 re utilizing the date in the invoice held
						possible. Given the volume of vendor payments to be feature continues to be in Progress.
						processed vs the current staff workload capacity, it's 8/3/2022
						difficult for AP staff to proactively identify invoices that

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					are overdue. However, we disagree that staff are waiting to process payments until someone inquires. Instead, AP staff process payments based on: product/service being purchased (for example, priory is given to chemical vendors since the product is critical to plant operations), and if the goods receipt has been performed (i.e., ability to perform the 3-way match.) Accounting management agrees it would be very helpful to be able to extract data from the SAP Held Screen (code MIR6 in SAP) and has advised BIS of our request. We will continue to work with BIS to create a report, or data extraction capabilities (i.e., export to Excel), of invoices pending on hold. We additionally agree documented SOPs for vendor payment processing is needed (see also recommendation 26.) Further, management is considering updating the criteria used by SAP to select which payments to process, so that payments will be picked up by the system for processing prior to the due date (see also recommendation 25.) Additionally, the Accounting Supervisor is working closely with AP staff to help prioritize which payments to process, especially given the current workload and need to triage which invoices get processed first. Accounting management has reviewed with the IT Department what the Controller is calling the "P2P monitoring report" (not sure what the official name is?) that the IT Unit has developed. We believe the report will be useful to proactively identify items that are pending and will potentially delay payment, as well as be more helpful than a traditional "aging" report for this purpose. As a reminder, SAP does already have an AP aping report, but it jony captures the
					be more helpful than a traditional "aging" report for this purpose. As a reminder, SAP does already have an AP aging report, but it only captures the transactions once received as that's when the liability is booked to the balance sheet. See also recommendation #21 regarding extracting held invoice data, as well as #26 regarding SOPs.
CHEM	26	Acct	Formalize and document specific procedures to specify how and what items should be selected by AP staff to perform the 3-way match AND processing of payments, also specify the frequency of when this process should be completed. SOPs establish consistent procedures for employees to follow and be trained and evaluated on.	x	 Response on 8/2/2022: CHEM # 26 – Updated formal SOPs remain outstanding. At this time, dedicating AP staff to revising the SOPs will only slow down invoice processing. Even if an outside consultant is retained to document AP processes, staff will need to be interviewed, verify accuracy of documentation, and test the new SOPs. Further, adopted. This recommendation will be the Agency is in process of obtaining AP automation software which will change the SOPs. While Accounting management agrees that updated SOPs are best practice, the existence of SOPs does not necessarily increase efficiency or on-time vendor payments. Additionally, Accounting already has many informal "desk manuals" that are used by new staff to guide then on the steps for processing; while not in standard 8/5/2022: this recommendation is specific to how and what items AP staff select to perform the 3-way match and process payments. Accounting has committed to completing all SOPs after all processes have been finalized and adopted. This recommendation will be considered In Progress until the SOPs for IA's review or provide an approximate timeline for implementation to consider this In Progress.IA considers the recommendation In Progress until the SOP is fully documented, finalized, distributed

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				 _	
					Agency SOP format, these desk manuals are to staff for training. A Draft SOP was
					effective in providing new and temporary staff forwarded. IA will provide review
					instruction on how to process payments. In regard comments and recommendation to
					to a timeline of completion, we will align to and consider in finalizing the SOP. This
					incorporate this task as part of implementation of recommendation suggests an SOP for the
					any new AP automation software - TBD. Staff 3-way match, other recommendations
					also stated that while we continue to make suggest SOPs for other processes and
					changes to payment processes, we believe it procedures within Accounting.
					would be a better use of staff time to wait until we
					finish other payment solutions. Prior Progress
					Update Response: Accounting Management agrees
					there is a need for documented SOPs for payment
					processing in order to establish consistence
					procedures and strengthen the internal control
					environment. We will complete a draft of SOPs for
					Executive Management review no later than January
					31, 2022, and/or once all recommendations and
					changes affecting AP processes have been
					implement.Response on 2/17/2022: SOPs are in
					process; however, they are taking much longer than
					anticipated, particularly given the unresolved lack of
					personnel capacity in the Accounting Unit. As noted at
					the Strike Team meeting, the AP Process Overview
					SOP was not ready for any sort of review but was
					forwarded only as evidence of the progress being
					made. The plan is for the Controller to continue to
					work on the AP Process Overview SOP, while the AP
					staff formalize and review all the various desk
					manuals, guides, cheat sheets, and other various
					references that are provided to staff. By February
					24th, we will have the Mail / Invoice Intake desk
					manual completed which will be used to assist in
					training the new Interns onboarding the week of
					February 28th. By March 24th, the Accounting Unit
					will submit a draft of the Process Overview SOP that
					is ready for review by the IA team, which will include
					the references (names) of the other desk manuals.
					We might combine some of the desk manuals or turn
					others into a full separate SOP? The new (more
					realistic) goal for this entire project is the end of the
					fiscal year, June 30.
	07	Acet	Training aboutd be previded periodically	14	Response on 8/2/2022: CHEM # 27 – Training on 8/5/2022: This recommendation will be
CHEM	27		Training should be provided periodically	Х	
			to reinforce the documented SOPs to		new SOPs is outstanding since updated SOPs considered In Progress - there are no
			ensure employees are following		aren't completed. Note that training of AP staff is final SOPs to provide staff training on
					provided on an ongoing basis as needed. Existing current process. However, the
			consistent procedures.		SOPs and desk procedures are provided to new department processes are evolving,
					AP staff as part of the onboarding and on-the-job and new staff have been hired and
					training process. training is on-going. IA requests a
					Accounting Management agrees AP staff should be "plan for on-going and future training" ,
					provided training on any new processed established for example, types of training, timeline
					as the result of this review. The Accounting and plans, etc. Accounting staff have
					Supervisor will be responsible for ensuring the not provided an anticipated date for
					existing staff as well as new AP staff are trained on documentation of SOPs or planned
					the SOPs, on an ongoing basis. In addition to training training. Once all SOPs are formalized
					ine our s, on an ongoing basis. In addition to training maining. Once an SOFS are formalized

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					 sessions, the Accounting Supervisor regularly meets with the AP team and will use those meetings to reinforce best practices as well as any updates to the SOPs. Response on 2/17/2022: See recommendation # 26 regarding timeline of SOP creation. As previously noted, training will be provided to new staff as they onboard, as well as on an ongoing basis. The SOPs will be distributed to all AP team members, and evidence of the distribution will be provided to IA as it occurs. While the SOPs are mostly documenting processes that are already occurring, any new or changed procedures will be communicated to the AP team via their weekly meetings with the Accounting Supervisor over AP.
СНЕМ	29	KPIs	Accounting should establish and document performance metrics and KPI's, goals and objectives and a method to measure how timely invoices are paid. Work with BIS to establish any reports that can provide measurements and metrics.	X	Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: CHEM # 29 – The primary AP Response on 8/2/2022: The response indicates that the department will explore KPIs after the AP automated solution will continue to In Progress as with the prior progress report until KPIs have been established. Prior Progress Update disposition: IA considers this trecommendation not implemented at this time. Does Accounting have a timeline for establishing KPIs, goals and objectives and a method to measure performance, and if any additional KPIs should be tracked. Prior Progress Update Response: Accounting Management agrees performance metrics and goals for on-time payments should be established. We will work with BIS to create any reports needed to monitor urdepartment's adherence with the performance metrics. Accounting department management will use the established metrics to continue to monitor timeliness of vendor payments, identify the cause of transactions not meeting these goals, and how to prevent such delays. The Accounting Supervisor will further consider these metrics as part of their probationary or annual evaluation of AP staff's job performance.
CHEM	30		Document and formalize an Agency Policy or Department SOP about the requirement for completing receiving, matching, and processing payments. -Specify the types of documents that	X	 8/2/2022 response provided: CHEM # 30 – This recommendation is to update SOPs which is addressed under CHEM # 26. Prior Progress Update Responses: The Strike Team responded that the recommendation will also be addressed in recommendation six (6) with the creation

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			should be included and verified in SAP or other required reports, before payments are processed. -Specify if the Bill of Lading provided by the delivery drivers to the operators should be uploaded into SAP at the time SAP Receiving is completed or be retained in hard- copy and where specifically.			information on the invoice doesn't align with the information on the purchase order and/or to resolve errors in the receiving that may prevent payment processing. Hard copies of documents do not need to be forwarded to the Accounting Department.	to document the process for when and how the matching is completed and when payments are processed only. This recommendation, CHEM #30 steamed from the audit finding where 35% of the Bill of Lading items were missing. If these documents were missing, how was accounting able to complete the 3-way match? While Chem #26 suggests the SOPs, CHEM #30 suggests incorporating details of the information that should be obtained and used to complete the matching. If accounting has a desk procedure, please provide for IA review. Both #26 and #30 will be considered In Progress. Per responses provided on 2/17/22, the provided draft SOP and the timeline to finalize SOPs, IA will consider this recommendation In Progress.
CHEM	31	Acct	Document and formalize in an Agency Policy or Department SOP about the requirement for completing receiving, matching, and processing payments. -Specify the types of documents that should be included and verified in SAP or other required reports, before payments are processed. -Specify that the invoice received by Accounts Payable should be documented with a date received and uploaded into SAP and accurately matched to the corresponding transaction. Accounting should work with BIS to develop an Aging Report or a report that shows all outstanding invoice information, including total days held and outstanding or overdue so that Accounting can take prompt action.	X			 8/5/2022: This is a 4-part recommendation re SOP: SOP re receiving, matching and processing pmts. This first item is being addressed under CHEM #26 Specify the types of documents that should be included and verified in SAP or other required reports. Specify that the invoice received by AP should be documented with a date received and uploaded into SAP and accurately matched to the corresponding transaction. develop a report that shows all outstanding invoices - this portion of the recommendation is being addressed under CHEM #23 re Aging or other tracking report. Reco #31 is related to the findings noted in the report: 8% of items tested did not include an invoice in SAP. How did AP staff complete the matching and the payment? In 3% of items tested AP staff did not document the date the invoice was received (no date-stamp on invoice). In 13% of items tested there was a

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							difference in the amounts paid when compared to the amount of the vendor's invoice. A policy or SOP should incorporate the requirements for the detailed items needed and the supporting documents that should be included. Recommendation Chem #26 is related to document the process for when and how the matching is completed and when payments are processed. This recommendation will be considered IP until all items are addressed in new SOP or alternate controls or department disagrees with the 2 remaining items. Per responses provided on 2/17/22, the provided draft SOP and the timeline to finalize SOPs, IA will consider this recommendation In Progress.
CHEM	32	SOP	Document and formalize in an Agency Policy or Department SOP about the requirement and expectation for the accuracy of data entry. -Emphasize the importance that staff is expected to make every attempt to ensure the data entered in SAP for receiving and invoice processing needs to be accurate and accurately match the corresponding supporting documentation. -Specify when it is allowable and when it is not allowable to back-post or post-date information.	X		 8/2/2022 Response provided: CHEM # 32 – Accounting staff communicate with Agency receivers on a daily basis. Accounting staff additionally participate in the CAP Café and other trainings, such as the Fiscal Year End Training, to advise receivers on best practices. We consider this recommendation implemented as only the SOP is outstanding which is addressed under recommendation CHEM # 26. Prior Progress Update Response: The Strike Team responded that the recommendation will also be addressed in recommendation six (6) with the creation of a SOP. Accounting management agrees a formal Agency Policy regarding appropriate use of data fields within SAP is needed. For AP processes, the data field usage will be defined withing the AP SOPs (see also recommendation 26.) Accounting management will further consult with other Agency departments regarding suggested best practices to incorporate within SOPs over SAP receiving or other P2P processes. Additionally, the Accounting Supervisor will provide feedback and training to receivers on the use of SAP data fields as part of the ongoing bi- weekly coordination meetings with Administrative Assistants (see also recommendation 28.) 	8/5/2021: The intent of the recommendation is meant to have accounting take the lead to clarify, inform and emphasize the importance of data entry accuracy with regards to dating information. The finding related to this recommendation noted that 15% of items tested had incorrect/inaccurate dates or data resulting from either data- entry errors or back-posting information. This recommendation will remain In Progress if accounting will address this in an SOP or if there is any communication re these. CHEM #26 is specific to an SOP for procedures related to matching and processing payments. Prior Progress Update disposition: Per responses provided on 2/17/22, the provided draft SOP and the timeline to finalize SOPs, IA will consider this recommendation In Progress.
CHEM	33	SOP	Document and formalize in an Agency Policy or Department SOP about the requirement and expectation for the accuracy of data entry.	X		8/2/2022 Accounting response: CHEM # 33 – This recommendation is to update SOPs which is addressed under CHEM # 26. Prior Progress Update Responses: The Strike Team	8/5/2022: Recommendation #26 specifically relates to documenting the methodology for performing the matching and processing payments. This reco #33 is a 4-part

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	respor	nded that the recommendation will also be	recommendation:
-Specify what is an acceptable best	addres	ssed in recommendation six (6) with the creation	
practice and approximate time frame	of a So	OP.	1. to document a procedure for the
for processing the invoice, complete	Cimila	r to recommendation thirty-three (33),	expectation of accuracy of data - this is going to be addressed with CHEM #32
the 3-way match, and process for		inting management agrees a formal Agency	above.
			2. to specify the expected time frame
payment.		s needed. For AP processes, the data field	for processing the invoice - uploading it
		0	in the database, when 3way match
-Specify how invoices uploaded are		mendation twenty-six (26).) Accounting	should be completed and process for
monitored to ensure that items are		gement will further consult with other Agency	payment. These would provide the
processed by the payment terms.		tments regarding suggested best practices to orate within SOPs over SAP receiving or other	metrics needed to track the performance of AP duties and track the
		rocesses. Additionally, the Accounting	progress of invoices. This part of the
-Specify how delayed items should		visor will provide feedback and training to	recommendation is In Progress,
be handled and communicated with			pending completion of all SOPs and
the goal of issuing payment by the		ng bi-weekly coordination meetings with	KPIs established as well as training.
payment terms or that items are		•	3. to specify how invoices are monitored to
processed by the payment terms.	iwenty	<i>y</i> -eight (28)).	ensure they are paid on time. This is being addressed through the
proceeded by the payment terms.			recommendation related to creating an
			aging or other tracking report that provides
			visibility of all invoices received and
			through the implementation of the software
			system. 4.to specify how delayed items should
			be handled and communicated. This
			part of the recommendation requires 2
			above be completed so there is a
			monitoring tool then there needs to be
			some communication or procedure on
			what is done when items are delayed.
			This recommendation was also
			provided as a result of the audit
			findings in the report:
			20% of items tested were paid after the
			invoice due date even when the receiving was completed within less
			than 15 days. What measures can AP
			put in place to prevent late payments
			when receiving is done timely?
			80% of items tested were paid late
			because receiving was completed date.
			However, the payment was issued between 1-180 days after the receiving
			was completed and they invoices were
			already overdue. What tool/method
			does AP have to monitor late
			invoices/late receiving?
			There does not appear to be any
			procedures for handling delayed items
			and there does not appear to be a

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							systematic method to select items that have been received for timely payment. Prior Progress Update disposition: Per responses provided on 2/17/22, the provided draft SOP and the timeline to finalize SOPs, IA will consider this recommendation In Progress.
CHEM	35	SOP	Document and formalize in an Agency Policy or Department SOP about the requirements and expectations for AP staff to open/download invoices, date, upload, match and process invoices in SAP and process payments. Consider establishing KPI's and/or benchmarks to determine a reasonable amount for invoice retrieving, uploading, matching, and posting to be performed and processing the Invoices for payment.	×		addressed under CHEM # 26. Prior Progress Update Response: Accounting Management agrees there is a need for documented SOPs for payment processing in order to establish consistence procedures and strengthen the internal control environment. We will complete a draft of SOPs for Executive Management review no later than January 31, 2022, and/or once all recommendations and changes affecting AP processes have been implement (see also recommendation twenty-six (26)). Accounting Management agrees performance metrics and goals for on-time payments should be established (see also recommendation twenty-nine (29)).	specifically relates to the method for when and how the 3-way match process is selected and how invoices are selected and processed for payments. This reco #35 is specifically related to: 1. the requirements of AP staff to open/download, date, upload and match and process invoices in SAP and process payments on time. What is the acceptable timeframe for AP staff to acknowledge the invoices and upload

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ENG 11 Accounting management should X As of January 2023, the Agency has implemented a software program, Esker, which has changed the the implementation of Esker and the	well as continuous communication wi vendors to specify instructions for submitting invoices. Accounting management track the professional/consulting services invoices in the Invoice Held databat or other tracking database to monitor when they are received by the Agenc and when they are due for payment.
	Accoun profess invoice or other when th
professional/consulting services invoices in the Invoice Held data or other tracking database to moni when they are received by the Age	well as continuous communication vendors to specify instructions for submitting invoices.
communication with the Departme well as continuous communication vendors to specify instructions for submitting invoices. Accounting management track t professional/consulting services invoices in the Invoice Held data or other tracking database to moni when they are received by the Age	
vendors to specify instructions for submitting invoices. Accounting management track th professional/consulting services invoices in the Invoice Held data or other tracking database to monit when they are received by the Age	Departments and keep a reference of the professional/consulting services vendors that each Department is managing, to ensu proper reference and routing of the invoices is done immediately upor receipt. This will require continuou

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take the lead to work with the IT Department to develop useful monitoring report from SAP to assist with the review, tracking, and monitoring invoice due dates, open invoices, and prioritizing payments. (Note: This similar recommendation was provided in the Procure to Pay Chemicals audit report as Recommendation twenty-one (21). As of February 15, 2022, the IT Department has developed a way to export the data into excel to create reports).

New Recommendation:

The Accounting management should determine how this new reporting/monitoring tool (information from the Held Invoices) will be used and implement a procedure to assist with tracking. monitoring and prioritizing making timely payments.

way incoming invoices are processed. The discussion regarding the use of MIR6 screen in SAP is no longer relevant.

Response on 8/2/2022: ENG # 11 – The recommendation is to create monitoring reports, specifically to review invoices that are pending in MIR6. Accounting does not believe that is necessary, as AP staff and management can look at and review the items on hold using the existing SAP screens. Working with IT, staff now know how to download this data into Excel to view/sort more easily as needed; see also CHEM recommendation #21. As such. Accounting management disagrees with the recommendation and instead suggest that purchase and implementation of an AP automated software solution that includes monitoring reporting capability a better solution; see ENG recommendation # 12. Accounting doesn't agree with this recommendation.

Prior Progress Update Response: Accounting now has the ability to export data on held invoices in SAP (via the MIR6 transaction) into Excel. This has been helpful when researching the status of a payment. Additionally, the Interns that joined Accounting as of 2/28/22 are now trained on mail processing / invoice in-take process, and have been maintaining the invoice log. This log records all invoices that come into efficient. Accounting, either by email or post mail. However, we continue to struggle with visibility of all incoming invoices, and are looking into additional technology solutions as noted above (see recommendation number 10.) Pending the Agency possibility purchasing an external solution, we have held off on creating any additional reports. Further, any reports derived from the data in SAP will not capture the non-PO invoices. Accounting many times is not aware that wait until the software solution is a non-PO purchase has been made, and therefore has no way of knowing there is an invoice outstanding **continue to be in In Progress.** until it arrives in Accounting. We would like to see adherence to the Agency's Purchasing Ordinance by all Agency staff, so that the vast majority of all purchases are made using a PO (note this is not specific to services, but is an issue with various types the MIR6 export into excel and determine of purchases.)

feaures for processing invoices, indicates there is no longer a need to review MIR6 in SAP. IA considers this recommendation No Longer Applicable.

8/5/2022:

This recommendation may be similar to CHEM #21 but it is not the same. As noted, the recommendation was Updated for this report only.

The "new recommendation" suggests for accounting, as a best practice, to implement a method/report for viewing, tracking, monitoring and prioritizing all invoices to plan to make all payments is timely, specifically to monitor all payments in one report with greater visibility. Based on the response provided by Accounting - The department will not be using the invoice held information to assist with tracking, monitoring and prioritizing making payments, the department believes navigating through the various screens for view items on hold. One single report would perhaps be more

The department now disagrees with the recommendation, does the department have an alternate control that is in place to track, monitor, view and prioritize invoices for payment? If so, please provide a copy to clear the recommendation. If the department will implemented, this recommendation will

Prior Progress Update Disposition: The recommendation states that Accounting should determine how to use how it will be used for tracking, monitoring, prioritizing and making timely payments. The recommendation suggests to document this into a procedure to assist with consistency of this process.

The recommendation was not addressed. This recommendation is considered Not Implemented.

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ENG	12	Acct	The Accounting management should take the lead to work with the IT Department and determine if an invoice recognition software or other technology tools could assist with the uploading of invoices.	X		The response provides information on: 1. the mail processing/invoice in-take process, 2. invoice log (in addition to the linvoice Held screen), 3. evaluation of technology solutions to assist with visibility of all incoming invoices, 4. Non-PO invoices and transactions, 5. Procurement Ordinance adherence. However, the recommendation is suggesting Accounting document a methodology/procedure for how it intends to use the MIR6 information to review, track, and monitor invoice due dates and open invoices and prioritize payments. Since this step was not addressed, the recommendation is considered Not Implemented. If Accounting does agree with this recommendation and implementation is in progress. Prior Progress Update Response: Accounting concurs with this recommendation and is currently working with 1T staff to determine feasibility. (See also recommendation 10 above.) Note too that if such as solution is purchased, we will need to revies any relevant SOP related to vendor payment processing. 8/5/2022 Recommendation is In Progress Update disposition: IA has participated in some of the meetings and demonstrations recognition. This recommendation is considered IP.
ENG	13	Acct	It is recommended that the Accounting management: • establish a procedure to track all open invoice issues, • open invoice issues are reviewed by the Accounts Payable <u>supervisor</u> at the end of each month to ensure <u>open items are cleared</u> , • work with the IT Department to determine a more streamlined/efficient process in SAP to verify that receiving was completed and expedite the three- way match, and • utilize software tools such as SAP Concur for invoice process and	X		Response on 8/2/2022: ENG # 13 – This recommendation is to update SOPs which is addressed under CHEM # 26. Prior Progress Update Response: Accounting does not believe that the variability in the time it takes to process one vendor payment vs another is an indication of poor internal controls, but instead is the nature of processing a variety of types and complexity of invoices, as well as other factors that determine the time it takes to perform the 3-way match. An external technology solution may assist in the efficiency of the matching process, as well as AP's ability to more quickly follow-up on issue or outstanding items preventing payment processing. Accounting is currently working with IT to explore options. (See recommendation 12 above.) While the statistics noted in the observation do not

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directly from SAP (using the FBL1N transaction), it is that is known that vendor payments aren't being processed timely. However, there are many factors, as track	tten/documented SOP is needed as t is addressed separately. The cesses recommended are: 1) to ck all open invoice issues 2) open
directly from SAP (using the FBL1N transaction), it is that is known that vendor payments aren't being processed proceed timely. However, there are many factors, as track	cesses recommended are: 1) to
timely. However, there are many factors, as track	,
	k all open invoice issues 2) open
evidenced by the recommendations in this report to invoi	
	oice issues are reviewed by a
	ervisor to ensure these are cleared
	esearch a more efficient process to
	edite the 3-way match 4) utilize a
directly (again, via FBL1N), after each payment run (at softw	
	all responses 3 is being addressed
	ler prior recommendation, 4 is also
significantly late (over 60+ days) to analyze the cause it's s	
	. Accounting needs to address 1
	2 and demonstrate there is a
	trol or process in place for these
	demonstrate how. These are
	vided as a recommendation
	ause the findings under this audit
payment processing. Instead, on an ongoing basis, as were	0
	u .
	fessional services invoices were date in FYs2019 and 2020. The
	ow up question is: what alternate
invoice issues on a daily basis through monitoring the cont	-
	ounting demonstrate to show that
	se findings/recommendations are
	ng addressed? This recommendation
	be considered in progress because 2
	ne 4 bullet points are being addressed
	er other recommendations and
	cipating accounting has adopted
	erent processes to address the first 2.
	or Progress Update disposition: The
	ommendation is suggesting controls to
	rove how invoices are selected to be
	ched and processed for payment.
	ntrols" include anything related to a
	cess/procedure. IA has not been
	vided with any documented procedures
	how the department selects and
	cesses matching and payments. The
	ommendation is encouraging and
	gesting that the department work to *
	nalize a procedure/process to track all
	n invoices, *formalize a
	cedure/process to review open invoice
	les by a supervisor at the end of each
	nth to ensure that anything that is due
	was not processed for payment is
	ressed and follow up on, *work with IT
to de	etermine a more efficient process
within	in SAP to verify that any items pending
	eiving are addressed/resolved so that
they	/ are paid timely, and to *utilize SAP to
	hage invoices, which includes

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ENG	14	The Accounting management work with the IT Department to evaluate the feasibility of implementing a centralized SharePoint portal (like the one developed for E&CM) and determine if it would be of value to have for all Professional Services invoices where they can be stored for further processing. In addition, Share Point can assist AP staff in sorting and identifying invoices for their staff and ensure they track the approvals needed.Accounting management should work with IT to determine the feasibility of utilizing SAPs workflow process to route invoices for approval while keeping track of where they are in the approval process and ensuring timely payments.Additionally, establish formal, documented procedures for Accounting and other departments using SharePoint to ensure there is consistency in using SharePoint and timely processing invoices for approval and payment.			8/2/2022 response provided: ENG # 14 – The solution suggested is purchase and implementation of AP automation software, as outlined under recommendation ENG # 12. Accounting requests this recommendation be changed to "NA" and/or combined with ENG # 12.Prior Progress Update Response: Accounting concurs with the recommendation and is currently working with IT to evaluate possible technology-based solutions to assist with the routing of invoices. (See recommendation 10 and 12 above.)	recommendation - the original finding was related to making the routing of service invoices more efficient and eliminating the lack of visibility of the invoices when routed. The 3 parts are: 1- work with IT re SharePoint - this part has been addressed, per emails and correspondence related to new improvements. 2-utilizing workflows to route invoices - this part is In Progress pending the implementation of a software tool. 3-formal, <u>documented</u> procedures specific for Accounting and department staff <u>using SharePoint</u> - this is being addressed through - based on recent review of email correspondence, this is being drafted for email distribution. IA considers this recommendation In Progress pending finalizing the process for the various SharePoint folders and the instructions on using such. Prior Progress Update Disposition: Per Accounting's response, Accounting plans to move forward with implementing a new technology solution to improve uploading invoices received. This will be an on-going, long-term project to address the recommendation.This recommendation will be considered In Progress.
P&R	10	To minimize delays in routing invoices for approval and paying on time, IA recommends Accounting take the lead to work closely with the IT and respective departments involved to:	X		8/2/2022 Response received: P&R # 10 – Recommendations implemented under other audit observation; see recommendation ENG # 10. Accounting considers this recommendation implemented.	2/23/2023 2/23/2023 Due to the implementation of Esker, the invoice recognition software system, this recommendation is considered Implemented. With the implementation of Esker, all items are uploaded and are visible by all, workflow is on Esker.

P2P Audit Recommendations - 5th Progress Update Report Page 20 of 21

				 determine if having an updated list of current vendors and related projects per department would be a good reference to rely on for timely/properly routing invoices, determine if a SharePoint Document Library (similar to the one developed for Engineering & Construction Management) will assist with routing, implement other technologies and solutions (new and/or existing) or workflow to implement a more efficient tool to manage and route invoices that are shared amongst various Agency departments, and\ work directly with vendors to request they add additional identifying information directly on the invoices (project/contract, PM, etc.). 				This recommendation is considered In Progress per the updates provided and discussed with Planning. 8/5/2022: In Reco ENG #10, currently In Progress, accounting stated that they believe there will be a significant benefit to implementing an AP automation software solution with the ability to capture and make visible within the system all incoming invoices as well as provide a workflow capability which will be more efficient than the current process. This response indicates that AP is supportive and pending the implementation of the new AP software tool and will rely on this tool to establish a consistent system and best practice for uploading and routing vendor invoices to the correct department. In the response provided AP did not address the fourth item which states that the department work with vendors to request they add additional identifying information on the invoices go. IA determines this recommendation as In Progress until Accounting can provide a final disposition for item #4 to determine if this is something they will work on. All other items of this recommendation will be considered No Longer Applicable since the software solution will be addressed under ENG #12. And the routing of professional service invoices is
F	P&R	11	Acct	Accounting management should take the lead to work directly with P&R department to determine the most efficient/effective way to communicate that the receiving function in SAP has been performed. Both departments should discuss and agree if there is a need to use email communication for invoice management.	X		of an AP automation software will allow for AP	being addressed through ENG #10. 8/5/2022: The intent of the recommendation is to eliminate the many emails that come to accounting from internal and external sources. It is unclear what the consistent message and process will be. It is unclear what the process will be. When reviewing the response in ENG #16 re the new internal email address and this response and our discussion with Planning, it is unclear what the communication to staff is and what Accounting will do. Accounting is choosing to keep the same process in place and not make any changes or modification to the current communication process. Accounting believes that the implementation of the software solution will be a benefit to this process. IA considers this recommendation In Progress until there is one consistent method across the Agency to simplify the process and to assist with eliminating the email traffic.

		Sta	tus		
Unit	Implemented	In Progress	Not Implemented	No Longer Applicable	Total Original Audit Recommendations
Operations – Materials & Supplies	-	2	0	-	2
Maintenance – Materials & Supplies	-	2	0	-	2
Warehouse – Materials & Supplies	-	2	0	-	2
Water Quality Laboratory – Materials & Supplies	-	4	0	-	4
Facilities and Water System Programs – Materials & Supplies	-	2	0	-	2
Procurement Card Program	2	1	0	-	3
Contracts and Procurement	7	3	0	1	11
Accounting	10	11	0	10	31
Operations – Chemicals	12	0	0	4	16
Engineering & Construction Management	6	0	0	1	7
Planning	4	0	0	2	6
Home Depot Credit Cards	0	0	0	7	7
Total Recommendations	41	27	0	25	93
Percentages	44%	29%	0%	27%	100%

Inland Empire Utilities Agency

for all P2P Audit Recommendations Fifth Update

Teresa Velarde Manager of Internal Audit March 15, 2023

Accounts Payable Operational and Internal Control Audit

Interim Audit Report: Accounts Payable Operational and Internal Control Audit					
Date Issued	Recommendations				
August 20, 2021	Interim Audit Report				

Review of Procure to Pay Processes for Chemicals						
Date Issued	Recommendations					
November 24, 2021	35					

Review of Procure to Pay Processes for Professional Services –						
Engineering & Construction Management (E&CM)						
Date Issued	Recommendations					
February 24, 2022	21					

Review of Procure to Pay Processes for Professional Services – Planning and Resources						
Date Issued	Recommendations					
May 24, 2022	11					

Review of Procure to Pay Processes for Home Depot Credit Cards					
Date Issued Recommendations					
September 1, 2022	7 (no longer applicable)				
The Agency has taken steps to phase out the Home Depot Credit Card program and absorb the purchases through the expanded Procurement Card					
program, as originally proposed by IA through the Procurement Card Audit in 2018. IA will not follow up on the 7 recommendations.					

Review of Procure to Pay Processes for Materials and Supplies				
Date Issued	Recommendations			
December 2, 2022	19			

Review of Procure to Pay F		
Date Issued	Recommendations	
February 27, 2023	07	
1 obraary 27, 2020	27	

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Audit Recommendations related to the P2P Audits

	Status				
Unit	Implemented	In Progress	Not Implemented	No Longer Applicable	Total Original Audit Recommendations
Operations – Materials & Supplies	-	2	0	-	2
Maintenance – Materials & Supplies	-	2	0	-	2
Warehouse – Materials & Supplies	-	2	0	-	2
Water Quality Laboratory – Materials & Supplies	-	4	0	-	4
Facilities and Water System Programs – Materials & Supplies	-	2	0	-	2
Procurement Card Program	2	1	0	-	3
Contracts and Procurement	7	3	0	1	11
Accounting	10	11	0	10	31
Operations – Chemicals	12	0	0	4	16
Engineering & Construction Management	6	0	0	1	7
Planning	4	0	0	2	6
Home Depot Credit Cards	0	0	0	7	7
Total Recommendations	41	27	0	25	93
Percentages	44%	29%	0%	27%	100%

Of the 93 recommendations:

- 41 are now implemented (44% of all recommendations)
- 27 are in progress of being implemented (29% of all recommendations)
- 25 are considered no longer applicable because alternate controls were implemented
 - 7 of the 24 are related to the Home Depot Credit Cards and no longer applicable.



Of the 27 recommendations in Progress: 11 recommendations are in progress of being implemented by the Finance Department

- 6 relate to documenting Standard Operating Procedures (SOPs) for the many processes
- 2 relate to establishing **Key Performance Indicators** (KPIs) for the various processes completed by the department to implement measurable metrics
- 1 relates to making email communication more efficient
- 1 relates to providing staff with on-going training after SOPs and KPIs are adopted
- 1 relates to having periodic and on-going meetings with administrative staff and others to discuss receiving functions and other items that require attention



Of the 27 recommendations in Progress:

3 recommendations are in progress of being implemented by Contracts and Procurement (CAP)

- One relates to Agency Policy A-50 and needed updates. Policy documents the approval authorities for Non-PO items. The policy updates will be made once Esker, is fully implemented.
- One relates to making processes more efficient in SAP by setting up an automated purchase order processing system where upon approval, small dollar POs automatically generate the purchase order.
- One suggests to include an area in SAP where users can add requestor contact information in case there are follow up questions.



Of the 27 recommendations in Progress:

12 recommendations are in progress of being implemented by various units:

Operations, Maintenance, Warehouse, Water Quality Laboratory and Facilities & Water Systems Programs

- The 12 recommendations relate to tightening internal controls related to the receiving function to ensure receiving is completed timely and as soon as possible to allow Accounting sufficient time to process payments.
 - Recommended SOPs for the timely completion of receiving
 - Recommended staff rely on other SAP reports to manage and track open items
 - Recommended improving communications among the departments and timely follow up of items



Of the 27 recommendations in Progress:

1 recommendation is in progress of being implemented by the Procurement Card Administrator

 The recommendation relates to finalizing and implementing clear guidelines for the use of the Procurement Card. The policy is currently in draft form, IA has provided comments, the policy is being evaluated by Human Resources before it is finalized and implemented. Currently, the draft policy is provided to all Agency employees who are issued a new P-Card.

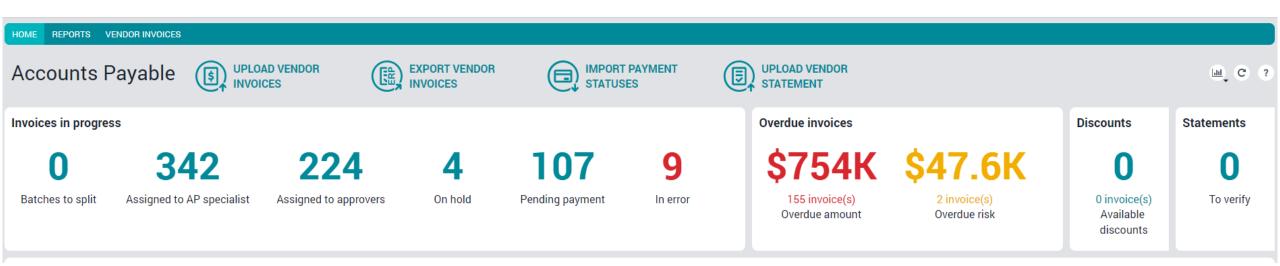


Agencywide Highlights & Implementation Strategies to address P2P recommendations

- Implementation of Esker
- Accounting Department Staff Changes
- · Continuous review and update of processes to ensure vendor payments are efficient and timely
- On-going staff training on Esker and SAP processes
- IT continues to develop additional monitoring reports and tools and provide training
- Updated Procurement Ordinance No. 110
- Expanded the Agency's Procurement Card (P-card) program
- Drafted updated P-card policy/guidelines, and in progress of being finalized and implemented
- Standard Operating Procedures are planned for completion

Esker -

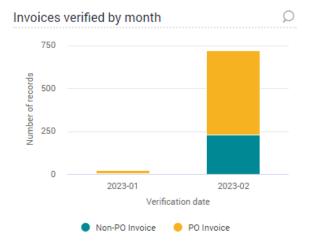
The following slides provide an example of metrics derived from Esker, the Agency's invoice recognition software system. During the Audit Committee Meeting, staff will be providing a live demonstration of the information the system captures and how the information is used. The information on the attached dashboards will change because Esker captures live updates.

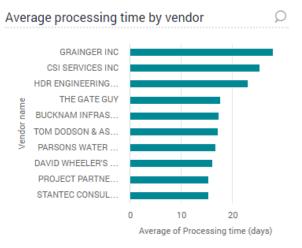




Esker - Dashboards

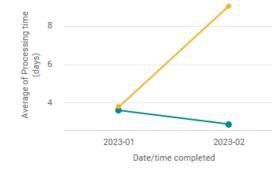
Process efficiency





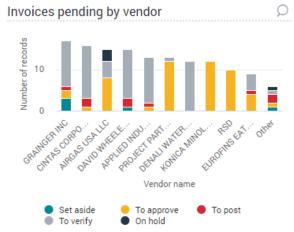


0



Average processing time by month







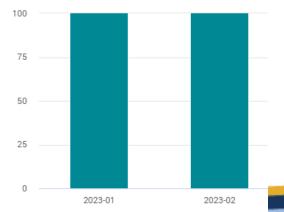


50

Average of Approval time (days)

100

Invoices previously on hold

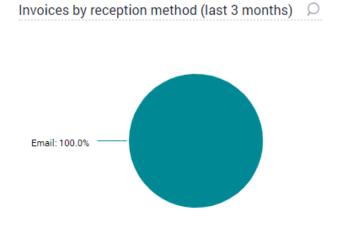


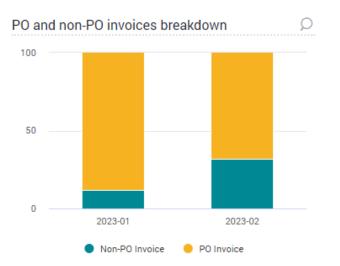
Inland Empire Utilities Agency A MUNICIPAL WATER DISTRICT

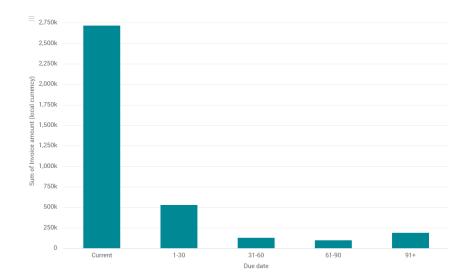


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Esker - Dashboards











Questions?

The Progress Update for all Procure to Pay Audit Recommendations – Fifth Update is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that IA's evaluations provide recommendations that foster a strong control environment, safeguard assets, promote a safe work environment and assist management in achieving organizational goals and objectives.

Audit Committee

INFORMATION ITEM 2C



Date: March 15, 2023To: The Honorable Board of DirectorsCommittee: Audit

From: Teresa Velarde, Manager of Internal Audit 03/15/23

Manager Contact: Teresa Velarde, Manager of Internal Audit

Subject: Internal Audit Quality Control Review of the Annual Comprehensive Financial Report

Executive Summary:

IA completed a quality control review of the Agency's audited Annual Comprehensive Financial Report (ACFR) for Fiscal Year (FY) 2021-2022. Each year, IA coordinates with Accounting to review draft versions of Agency's ACFR before it is finalized and published. IA's review is one of additional quality control. The review includes a review to ensure financial information transferred accurately and correctly between financial schedules and narratives and to ensure a professional presentation of the ACFR. Additionally, IA reviewed the financial reports for the Single Audit and Inland Empire Regional Composting Authority, and provide comments prior to finalization.

In the past, this report has been submitted to the Audit Committee through the IA Quarterly Status Report in a memo issued to the Department. Going forward, IA will document this review in audit report format.

The report attached, provides details of IA's review.

Staff's Recommendation:

This is an information item.

Budget Impact Budgeted (Y/N): N Amendment (Y/N): Y Amount for Requested Approval: Account/Project Name: N/A

Fiscal Impact (explain if not budgeted): N/A

Prior Board Action:

On June 15, 2022, the Board of Directors approved the Fiscal Year 2022/23 Annual Audit Plan. The Plan proposed the quality control review of the ACFR.

Environmental Determination: Not Applicable

Business Goal:

The Quality Control Review of the ACFR is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that IA's evaluations provide recommendations that foster a strong control environment, safeguard assets, promote a safe work environment and assist management in achieving organizational goals and objectives.

Attachments:

Attachment 1 - IA Quality Control Review of the Annual Comprehensive Financial Report



6075 Kimball Avenue • Chino, CA 91708 P.O. Box 9020 • Chino Hills, CA 91709 TEL (909) 993-1600 • FAX (909) 993-1985 www.ieua.org

DATE: February 23, 2023

TO: Shivaji Deshmukh General Manager

Teresa Delanda

- Teresa V. Velarde FROM: Manager of Internal Audit
- **SUBJECT:** Internal Audit's Quality Control Review: Fiscal Year 2022 Annual Comprehensive Financial Report (ACFR)

The Internal Audit Unit (IA) performed a quality control review of the Agency's Annual Comprehensive Financial Report (ACFR) prepared by the Finance Department. IA's review was performed on "draft" versions of the ACFR, prior to Finance finalizing the ACFR. On December 19th, 2022, IA completed our review of the draft ACFR with the information provided as of this date. Additionally, IA completed a quality control review of the financial statements for the Inland Empire Regional Composting Authority (IERCA) prior to finalizing. Finance provided the following draft documents used by IA to complete the Quality Control Review:

Date	Type of Information	
November 1, 2022	Trial Balances	
November 1, 2022	GFOA Comments on FY 2021 ACFR	
November 10, 2022	Management's Discussion and Analysis (MD&A), Basic Financial Statements, and Notes to the Basic Financial Statements	
November 22, 2022	Required Supplementary Information (RSI)	
November 23, 2022	Individual Fund Statements and Schedules	
December 1, 2022	MD&A, Notes, Financials, and RSI	
December 19, 2022	Statistical Section	
January 30, 2023	2022 Annual Financial Report for Inland Empire Regional Composting Authority	

Water Smart - Thinking in Terms of Tomorrow

Results of Internal Audit's Quality Control Review: Fiscal Year 2022 Annual Comprehensive Financial Report February 23, 2023 Page 2 of 5

During the progress of the review, IA provided Finance with comments, edits, and recommendations for their consideration prior to finalizing the ACFR. This report documents IA's Quality Control Review of the sections provided and lists a general summary of the results of the review.

Assistance with IA Quality Control Review – Audit Committee Advisor

This year, IA engaged the Audit Committee Financial Advisor to assist with the review. The Audit Committee Financial Advisor provided a review of the IEUA Financial Statements and Notes to the Financial Statements. All comments, edits, feedback, and suggestions provided by the Audit Committee Financial Advisor were submitted to Finance for their review and consideration.

Quality Control Review of the ACFR

IA applied the following procedures:

- Reviewed for math accuracy and consistency in the referencing of dollar amounts and totals among the narratives, notes and statements, and for overall professional presentation.
- Verified the consistency of the amounts between the Basic Combining Financial Statements and Combining Non-Major Financial Statements as compared to the Individual Fund financial statements, except for the Statement of Cash Flows.
- Recalculated for mathematical accuracy the Fiscal Year (FY) 2022 totals on the financial statements.
- Checked titles and years to ensure updates were made for the years they correspond to.
- Reviewed narratives for consistency, completeness, spelling, and grammatical accuracy.
- Reviewed numerical values in narratives for consistency with corresponding tables.
- Reviewed table percentages to ensure the math was accurate and totals were consistent with corresponding pie charts or narrative information.
- Reviewed formatting throughout the report (narratives, tables, charts, graphs, etc.) for consistency, legibility, and clarity.
- Reviewed Management's Discussion and Analysis and verified that prior year and current year totals matched either the prior year published ACFR or current year totals.

Results of Internal Audit's Quality Control Review: Fiscal Year 2022 Annual Comprehensive Financial Report February 23, 2023 Page **3** of **5**

Scope of Review

IA did not perform tests of financial transactions, nor audit the accounts or any financial information and did not assess the reliability or accuracy of the financial information reported in the financial statements. The Agency relies on the professional work of the External Auditors, Clifton Larson Allen, LLP (CLA), who are the Agency's Certified Public Accountants, contracted to provide reasonable assurance that the financial statements are free of material misstatement. The External Auditors and IA rely on Agency's management for the completeness and reliability of the information presented in the ACFR and reliability of the internal controls. Consistent with the requirements of the IA Charter and the Audit Committee Charter requirements, IA's review is intended to provide an additional level of quality control.

Observations

During IA's quality control review, observations that IA noted were promptly communicated to Finance staff for appropriate corrective action. In some instances, IA did not verify that all recommendations were addressed or incorporated because staff continued to finalize the ACFR. The observations IA considered most significant and requiring attention prior to finalizing and publishing the ACFR are listed in the bullet point items below, details have been provided to Accounting under separate correspondence:

- Noted spelling errors and inconsistences in the line-item presentations between and among the schedules and in the narratives.
- Noted errors in sentence structure, sentence completeness, spacing, and punctuation.
- Noted errors in formatting consistency of narratives, tables, and graphics.
- Noted errors in table percentages and mathematical accuracy.
- Noted errors in category names and percentages in tables that were not consistent with corresponding pie charts.
- Noted errors in numerical values in the narrative that were not consistent with corresponding tables or the financials.
- Provided comments and recommendations related to mathematical accuracy, grammar, formatting, completeness, etc.
- Noted instances where there were differences in amounts between different sections of the ACFR, for example among the schedules.

Results of Internal Audit's Quality Control Review: Fiscal Year 2022 Annual Comprehensive Financial Report February 23, 2023 Page **4** of **5**

Bond Disclosure Compliance Review

For the FY 2021/22 ACFR, IA was provided with the draft ACFR document for review. Any information related to the Continuing Disclosure Compliance was reviewed as part of the ACFR review, no additional information was provided related to bond disclosure requirements, such as additional separate reports.

Chino Basin Regional Financing Authority (CBRFA)

Finance did not provide the draft financial statements for the CBRFA for FY 2022 to IA for review and comments prior to finalizing the published version. IA did not complete a quality control review of the CBRFA financial statements, and therefore no comments and/or suggestions could be provided for consideration prior to CLA finalizing the report. This is consistent with past practice, as IA has historically focused only on the IEUA ACFR. IA is available to assist with the review of all financial statements.

Inland Empire Regional Composting Authority (IERCA)

IA reviewed the financial statements for the Inland Empire Regional Composting Authority (IERCA) for FY 2022. IA noted similar observations as with the IEUA ACFR, including the following observations.

- Provided comments and recommendations for mathematical accuracy.
- Provided recommendations related to grammar, punctuation, and formatting.
- There were various discussions about CLA's finding and recommendation. CLA noted a finding in the financial report and is providing a recommendation. The finding relates to accrual of liabilities and expenses. Finance Management has documented a comprehensive corrective action plan to mitigate the risk of the same finding in the future.

IEUA Single Audit

As of the date of this report, the Single Audit is in progress of being completed by CLA. It should be noted that in early to mid-February, the Single Audit work had been completed by CLA. Subsequently, during the final review of the Single Audit report, the Agency received information from the State that funding for one program came from State funds and not Federal funds. This required the project to be removed from the Single Audit report. With this information, the audit needed to reflect audit procedures on a Federal Program not a State Program. Agency Management authorized additional work for the Single Audit to ensure only the correct federal programs are reported. Staff is working closely with CLA to ensure the Federal awards and programs are reported accurately on the Single Audit report and completed by the March 31st deadline. This additional audit work will materialize in a change order of possibly up to \$5,000. IA will continue to stay involved in the review and finalization of the Single Audit.

Results of Internal Audit's Quality Control Review: Fiscal Year 2022 Annual Comprehensive Financial Report February 23, 2023 Page **5** of **5**

Single Audit Reporting Package to be completed by IA

IA will be submitting the required reports for regulatory reporting and filing by the required date of March 31 with the following organizations:

County of San Bernardino State Controller's Office State Water Resources Control Board

During the June 2023 Audit Committee Meeting, IA will update the Audit Committee that all required filings have been completed.

Conclusion

Due to Finance staff challenges, there were delays with the work of the ACFR. A change order of \$6,000 was submitted and approved for additional work that CLA auditors performed during the Financial Audit. Additionally, it should be noted that it has been IA's practice to complete and report to the Audit Committee the results of IAs Quality Control Review by the scheduled Audit Committee Meeting in December. This year has been an exception to this timeline because most items were provided later than planned. The delays were largely due to challenges and staff vacancies within the Finance Department. Going forward, Finance is developing plans to ensure all audit deliverables are completed by established goal dates.

IA appreciates the opportunity to provide the quality control review of the FY 2022 ACFR. and appreciates staffs support and assistance during this review. Please contact any member of the Internal Audit Unit if you have questions.

Audit Committee

INFORMATION ITEM 2D



Date: March 15, 2023To: The Honorable Board of DirectorsCommittee: Audit

From: Teresa Velarde, Manager of Internal Audit 03/15/23

Manager Contact: Teresa Velarde, Manager of Internal Audit Subject: Internal Audit Quarterly Status Report for March 2023

Executive Summary:

The Audit Committee Charter requires that a written status report be prepared and submitted each quarter. The Internal Audit (IA) Quarterly Status Report includes a summary of significant audit activities for the reporting period.

During this quarter, along with additional routine audit projects and administrative tasks, IA staff completed the Review of Pay Estimate Processes. Additionally, IA completed the Quality Control Review of the Agency's financial reports and the fifth Progress Update for all P2P audit recommendations which evaluated the status of 34 outstanding recommendations. Other audit projects are also discussed in this status report. IA continues to participate in various committees and discussions and assists with requests for review of Agency policies and procedures, and provides recommendations to improve internal controls.

For additional information and insight, attached is, Occupational Fraud 2022: A Report to the Nations a comprehensive report on occupational fraud published every two years by the Association of Certified Fraud Examiners, also at https://legacy.acfe.com/report-to-the-nations/2022/

Staff's Recommendation:

This is an information item.

Budget Impact Budgeted (Y/N): N Amendment (Y/N): Y Amount for Requested Approval: Account/Project Name: N/A

Fiscal Impact (explain if not budgeted): N/A

Prior Board Action:

On June 15, 2022, the Board of Directors approved the Fiscal Year 2022/23 Annual Audit Plan.

On December 21, 2022, the Board of Directors reconfirmed the approved Audit Committee and IA Unit Charters. The Charters require a Quarterly Status Report.

Environmental Determination:

Not Applicable

Business Goal:

The IA Status Report is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by describing IAs progress in providing independent evaluations and audit services of Agency financial and operational activities and making recommendations for improvement, to promote a strong, ethical internal control environment, safeguarding Agency's assets and fiscal health, providing recommendations to improve processes and to assist management in achieving organizational goals and objectives.

Attachments:

Attachment 1 - Internal Audit Quarterly Status Report for March 2023 Attachment 2 - Occupational Fraud 2022: Report to the Nations

Projects Completed This Quarter

Project:

Review of Pay Estimate Processes

Scope:

The scope of the Pay Estimate review was to evaluate the various steps and processes to process Pay Estimate payments, and to propose recommendations to make the process overall more efficient. Specifically, the objectives included evaluating internal controls, reviewing compliance with Public Contract Code, policies and procedures, identifying operating efficiencies and areas for improvement related to the compilation and review of Pay Estimate documentation, and analyzing the invoice payment processes to ensure contractors are paid timely.

Status: Complete

Internal Audit (IA) worked closely with the Engineering and Finance (Accounts Payable) groups to evaluate the Pay Estimate processes. The Pay Estimate Processes audit included reviewing Engineering's responsibilities and processes for compiling, reviewing and verifying the pay estimate financial information. Additionally, reviewing Accounts Payable responsibilities and processes for reviewing and processing the payment. The audit noted several observations and provides recommendations to Engineering and Finance to implement efficiencies to improve the overall operational payment processes.

The report attached under separate cover provides details of the audit procedures, detailed flowcharts and narratives for each of the processes and a summary of the audit procedures applied and the results of audit work.

Project:

Accounts Payable Operational and Internal Control Audit: Quarterly Progress Update for all P2P Audit Recommendations – 5th Progress Update

Scope:

The purpose of the Progress Update for all Procure to Pay (P2P) Audit Recommendations is to provide a status related to the 93 audit recommendations provided through the P2P audits.

Status: On-going

As of February 23, 2023, of the 93 audit recommendations provided through the P2P audits, 41 are now considered implemented, 27 are in progress of being implemented and 25 are considered no longer applicable because alternate controls were implemented. Of the 27 recommendations in progress, 11 are in progress of being implemented by Finance, 3 are in progress of being implemented by Contracts and Procurement, 1 is in progress of being implemented by the Procurement Card Program Administrator, and the remaining 12 are in progress of being implemented by various Agency units/departments. IA will continue to provide quarterly progress reports until all audit recommendations have been addressed.

The report is included under a separate cover and provides details of the follow up review results.

Project:

IA Quality Control Review of the FY 2021/22 Annual Comprehensive Financial Report (ACFR)

Scope:

Annually, prior to the Board approval of the ACFR, IA completes a quality control review of the various schedules and sections of the ACFR. The role of IA is one of an added quality control review to ensure a professional presentation of the financial information. IA reviews to ensure financial information transfers accurately between the financial schedules and narratives including from prior year to current year, and check for recommendations made by Government Finance Officers Association (GFOA).

Status: Complete

Specifically, IA's review includes the following audit procedures:

- Verified that the FY 2022 amounts and totals on the financial statements were transferred accurately from the FY 2022 Trial Balance.
- Recalculated the FY 2022 totals on all financial statements for mathematical accuracy.
- Checked titles and years to ensure updates were made for the years they correspond to.
- Reviewed narratives for completeness, spelling and grammatical accuracy.
- Reviewed all sections of the ACFR to ensure consistency and a professional presentation.
- Reviewed the Single Audit Report and IERCA financial report.

IA's report is included under a separate cover and provides details of the review.

Projects In Progress

Project:

Audit Software Review Project: Workpaper and Data Analytics Software Tools

Scope:

IA is evaluating the costs and benefits of implementing automated audit tools to enhance audit processes. The Institute of Internal Auditors (IIA) Audit Standard 1220.A2 provides guidance for exercising due professional care for internal auditors. IIA 1220.A2 states that internal auditors must consider the use of technology-based audit and other data analysis techniques.

The use of technology, including, an automated working paper system as well the use of data analytics would enhance the audit capabilities and efficiency of the audit process. Currently, IA is using Microsoft Office products. SharePoint is not geared toward auditing tools and creating audit workpapers. Resources, including costs and staff time, will be necessary for implementation and maintenance. IA is carefully evaluating costs/benefits as well as risks and opportunities. Benefits and opportunities include time saving; quicker, more robust and larger scale analysis of transactions; sustainability; efficiencies; report production; dashboards; continuous monitoring; storage; workpaper documentation and review administration.

Status: In Progress

To date, IA has met with the three audit workpaper software vendors: AuditBoard, TeamMate and Workiva. Each vendor has provided a quick version of a demo and preliminary information. AuditBoard provided a three-day sandbox opportunity. Additional meetings will be scheduled to obtain additional information for further research and evaluation with all vendors.

IA has met with both the IT and CAP departments to discuss requirements before moving forward. Both departments have provided helpful insight and guidance to consider for a successful process, project implementation and considerations. IA will continue to work with internal departments before moving forward. In January 2023, the Agency implemented Esker, a new invoice recognition software system. This system will assist the Agency with improviding visibility of routing and tracking all invoices. IA plans to explore the features available within Esker to determine if there are any analytical reports and tools for audit procedures. For this reason, IA has delayed further evaluation of audit software tools.

Any proposed plans to move forward with the audit workpaper software tool will be discussed in detail with the GM and any affected Agency departments. IA will bring updates to the Audit Committee every quarter for review/discussion. Any proposed changes will be carefully evaluated, budgeted, and planned with sufficient advanced time and notice.

Project: On-going Committees & Meetings

Scope:

IA is asked to participate in various meetings to gain an understanding of the Agency's priorities, risks, and be a resource to provide feedback and recommendations.

Status: On-going

During this quarter, IA participated in meetings related to the Agency's Budget, various Finance Meetings related to Esker and improvements in efficiencies, Safety Committee and other programs. The meetings provide an opportunity for IA to gain an understanding of the Agency's priorities and identify potential risks that assist in audit planning. During the meetings, IA provides input and suggestions related to the initiatives underway. During this quarter, IA spent approximately 40 hours of staff time participating in these types of meetings.

Project:

Follow-Up IT Equipment Audit – Information Technology Department & Cybersecurity Assessment

Scope:

To evaluate the status of the two open audit recommendations from the original IT Equipment audit completed in 2012. The recommendations are:

- Original Recommendation # 3 (dated August 2012): ISS implement appropriate tracking systems that include relevant information on IT purchases (i.e., serial numbers, etc.), are updated timely and are complete and accurate. ISS should establish procedures to enter, modify, and delete information in the tracking systems that address areas such as timeliness for updates, responsibilities for maintaining the systems, and the types of items included in the tracking system.
- Original Recommendation # 1 (dated November 2012): ISS should ensure that any services procured with P-Cards are expressly authorized by the Manager of CAP, CFO, AGM, or GM prior to committing to services.

Additionally, to evaluate additional areas that require review and evaluation including processes for the inventory and accountability of computer equipment issued for remote work. Lastly to perform a cybersecurity assessment including evaluating that the Agency has plans for the mitigation and resolution of any potential cyber attack, or a disaster preparedness plan.

Status: In Progress

IA has met several times with Information Technology staff to discuss audit plans. IA is working closely with IT staff to assess cybersecurity controls, determine future internal audit assessments and evaluate the audit recommendations. During the meetings it has been discussed the approach for technology assets inventory, capitalization policy, cybersecurity controls, incident response plans and IT initiatives. The outstanding recommendations may no longer be applicable. IA is working closely with IT staff to finalize and determine the scope of an audit and propose the project under the IA Annual Audit Plan in June.

Project: Final Report: Review of Agency COVID-19 Expenses

Scope:

The original evaluation reviewed the expenses incurred by the Agency in response to the ongoing global pandemic (COVID-19). Expenses include costs incurred to comply with health guidelines, prevent the spread of COVID-19, transition employees to work from home, ensure proper on-site precautions and protect Agency personnel and the public. The objectives of the review were to evaluate if the expenses follow proper internal controls, contain the required supporting documentation, and meet compliance requirements according to Agency policies and procedures

Status: In Progress

IA will contact the Grants Unit to evaluate reportable updates. This coordination/report will be scheduled through the Annual Audit Plan as required. A final report will be presented to the Audit Committee when final financial information is available.

Report of Open Audit Recommendations

Scope:

To evaluate the implementation status of the outstanding recommendations.

The Internal Audit Unit (IA) Charter requires IA to follow up on the status of outstanding audit recommendations to determine if corrective actions have been implemented. A recommendation is considered "outstanding" if it requires corrective action to address the finding and risk identified. IA performs follow-up reviews to ensure that risks have been addressed and the recommendation is cleared/satisfied when corrective actions are implemented. Follow-up reviews are scheduled through the Board-approved Annual Audit Plan. Agency Management supports the implementation efforts of the recommendations previously provided and/or the development of alternative controls to address the original risks identified.

Status: On-going

As of March 2023, there are 118 outstanding audit recommendations. Details about each of the outstanding recommendations are submitted with the Annual Audit Plan each June. This summary provides an updated count of the outstanding recommendations. This summary includes new recommendations provided during this fiscal year and considers any recommendations cleared during the year (up to the prior quarter). A follow-up review is typically scheduled between 12–24 months from the date of the original audit, to allow time for full implementation. If a recommendation is deemed not implemented, the recommendation remains outstanding or alternate controls to mitigate any risks are evaluated to determine if the risk has been addressed and the recommendation is no longer applicable. A follow-up review is also scheduled sooner, if requested by the Audit Committee or Executive Management and/or the department audited. The audited business units are encouraged to submit additional information for IA review if they determine the recommendation has been satisfied.

Area Audited	Report Issued Date	No. of Recs. Remaining to be Verified by IA*
Accounts Payable Follow-Up (Deferred Recommendations related to Agency Policies)	August 29, 2013	2
Follow-Up – IT Equipment Audit – ISS	February 29, 2016	2
Follow-Up – IT Equipment Audit – FAD	December 5, 2016	6
2017 Petty Cash Audit & Follow-Up Review	June 5, 2017	7
Payroll Operations Audit	August 30, 2017	5
Procurement Card Audit	March 1, 2018	7
Wire Transfers Audit	March 1, 2018	4
Inter-fund Transactions Audit	August 30, 2018	1

Accounts Payable Follow-Up Audit	May 30, 2019	4
Voyager Fuel Card Audit	May 30, 2019	4
Human Resources Audit: Hiring and Promotions Operations Review	December 2, 2019	7
Recycled Water Revenues Audit	May 28, 2020	3
Human Resources: Workload Indicators Review	May 29, 2020	2
Human Resources Operational Audit: Administration of Employee Training and Development Programs	August 31, 2020	5
Agency Vehicle Operational Follow-up audit: Review of Vehicle Inventory Procedures	May 27, 2021	1
Accounts Payable Operational and Internal Controls Audit Report Review of Procure to Pay Processes for: Chemicals (November 24, 2021) Engineering & Construction Management (February 24, 2022) Planning & Resources (May 26, 2022) Materials & Supplies (December 2022) (Open recommendations as of March 1, 2023)	See dates each audit was completed under column called Area Audited	27
Regional Contract Review – Final Audit Report (planned for full implementation with the renegotiation of the Regional Contract)	December 16, 2015	31
Total Outstanding Audit Recommend	118	

* Items/changes resulting from projects completed during this quarter are not updated on this chart. This Outstanding Recommendations Table is updated only when audit reports are have been received and filed by the Audit Committee and the Board of Directors.

Summary

As of March 2023, 118 recommendations remain outstanding:

- o 27 relate to the Procure to Pay audits completed; these are reviewed quarterly
- o 31 relate to the renegotiation of the Regional Contract (to be evaluated next quarter)
- o 20 relate to required Agency policy updates; HR is working with a consultant to make changes
- 40 recommendations are eligible for follow-up evaluation

Special Projects

Purpose:

IA perform special reviews and projects including analyzing transactions, evaluating documents and policies, verifying information, assisting with interpretation of Agency Policies or other required procedures, and providing recommendations and feedback on results of the analysis, engaging necessary assistance if and/or when necessary, reporting to the General Manager and the Audit Committee. These services are provided according to the IA Charter and the Audit Committee Charter, the Annual Audit Plan, and audit guidelines. Special Projects can be short or long-term projects, typically requiring approximately more or less 80 hours of staff time and requiring setting aside or delaying work on scheduled audit projects.

Scope:

The scope of the review is not generally known, the scope of the work is planned in response to the special project requirements and the work must be handled with the highest degree of confidentiality, sensitivey, and care, as with all audit projects. Special Projects are usually considered highly confidential.

Status: On-going and Complete

During this quarter, the Manager of Internal Audit performed a review of an allegation brought forward through Human Resources. The allegation related to the use of Agency credit cards. IA gathered information and documentation and performed interviews with the required staff. The Audit Committee Advisor assisted with an

interview and provided feedback related to the fidnings of the allegation. It should be known that during our review, the original allegation was modified to clarifty that there are no known instances of wrongdoing or violations at the Agency. IA found that the Agency has implemented Agency policies and a Procurement Ordinance to provide guidelines for using Agency credit cards. Additionally, the Agency is in the process of finalizing an updated Procurement Card Policy with updated guidelines and requirements. Based on the results of IAs review, there is no warranted need for additional review and no concerns requiring further attention. The Agency's GM was provided with IAs final disposition of the review. This review took approximately 50 hours.

During this quarter, the Manager of Internal Audit has also been involved with additional projects that are on-going. IA will report once items have been fully evaluated and closed out.

Management Requests

Purpose:

IA assists Agency Management with analysis requests, evaluations, and information verification; assists with the interpretation of Agency policies and procedures; and/or provides review and feedback on new policies or procedures. Additionally, staff assists with interviews, document evaluations and discussions when asked and time permits. These services are provided according to the IA Unit Charter, the Audit Committee Charter, the Annual Audit Plan, and best practices. Management requests are short-term projects, typically lasting no more than 80 hours where IA determines it has the necessary staff, skills, and resources to provide the requested assistance without having to delay/defer scheduled audits and priority projects.

Scope:

The scope of each review is agreed upon between the department manager requesting the evaluation, review, analysis, or assistance; the Manager of IA; and when deemed appropriate by the Leadership Team and department Managers. The scope of the review is planned according to the requirements of the request.

Status: On-going

During this quarter, IA provided assistance, attended meetings and responses to requests to evaluate Safety related policies, continued engagement and assistance with Esker implementation questions, and discussions related to the Agency's tax filing responsibilities and continued discussions related to the implementation of schedules and plans related to the financial audit of IERCA and the IEUA Single Audit.

Audit News and Trends

The Association of Certified Fraud Examiners (ACFE) published it's 2022 Report to the Nations on Occupational Fraud. This is a report issued every two years and provides the results of data compiled from fraud cases from around the world. This is an excellent compilation of frauds investigated by professional Certified Fraud Examiners around the world. This is a good resource of information related to the types of frauds that most organizations are at risk of, detection methods that can be adopted and other data and resources provided.

https://legacy.acfe.com/report-to-the-nations/2022/

Internal Audit Staffing and Professional Development

Staffing

The Internal Audit Department is staffed as follows:

- 1 Full-time Manager of Internal Audit
- 1 Full-time Senior Internal Auditor
- 1 Full-time Internal Auditor

Professional Development

As required by the International Standards for the Professional Practice of Internal Auditing, and the IA Unit Charter, auditors must regularly enhance their knowledge, skills, and other competencies through continuing professional development. Audit standards require practicing internal auditors attain, a minimum of 40 continuing professional education credits every 2 years. During the past quarter, IA staff have continued to stay abreast of industry developments through review of industry literature and participation in on-line webinars. Most training is obtained through the Institute of Internal Auditors (IIA), the global association for the Profession of Internal Auditing, and virtual trainings, most of which have been complimentary.

All training hours met the requirements for Continuing Professional Education (CPE) and earned CPE credits. These highlighted trainings are in addition to mandatory IEUA Safety Trainings and other Agency training related to finance, procurements, etc. During this quarter, staff attended the following trainings:

- IIA -3 chapter collaboration Data Analytics, Automation, Articial Intelligence, and CAE Roundtable
- IIA Inland Empire Chapter (Webinar) Cybersecurity Fraud
- IIA National (Webinar) The Internal Audit Action Plan: How to Increase Your Value as an Internal Auditor
- CSMFO Introduction to Governmental Accounting

Two members of the IA team participate in the local chapters of the IIA in an officer/board capacity. All members volunteer in IIA activities. All members of the IA team have various certifications and higher degrees as required by the IIA standards and the IA Charter.

Future Audit Committee Meeting Dates

- Monday, June 12, 2023 Regularly Scheduled Audit Committee Meeting
- Monday, September 11, 2023 Regularly Scheduled Audit Committee Meeting
- Monday, December 11, 2023 Regularly Scheduled Audit Committee Meeting
- Monday, March 11, 2024 Regularly Scheduled Audit Committee Meeting

Occupational Fraud 2022: A REPORT TO THE NATIONS®



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FOREWORD

On behalf of the ACFE and the greater anti-fraud community, I am pleased to present *Occupational Fraud 2022: A Report to the Nations*, the latest exploration by the ACFE into the factors and toll of occupational fraud. While this is our 12th edition of the report, this particular study is unique in that it explores frauds that were investigated largely during a global pandemic—a time when anti-fraud professionals, like so many others, were challenged to find new, innovative ways to conduct much of their work.

And yet, our research shows how successfully Certified Fraud Examiners around the world were able to adapt. Even during this time of disruption, occupational frauds were detected more quickly and losses were limited when compared to prior years. While we always appreciate the participation and dedication of CFEs, this year we are especially grateful for their contributions to this study, which highlights the work they have collectively undertaken during such a challenging time.

Thanks to these anti-fraud experts, our research provides valuable information about the costs, methods, perpetrators, and outcomes of occupational fraud schemes derived from more than 2.000 real cases of fraud affecting organizations in 133 countries and 23 industries. We know that to effectively confront any problem—but certainly one this immense and pervasive—we must first thoroughly understand it. The inaugural *Report to the Nation* was launched in 1996 by ACFE Founder, Dr. Joseph T. Wells, CFE, CPA, because he recognized the need to provide this type of foundational information about occupational fraud. In the decades that followed, we have continued this important line of study to improve our profession's ability to prevent, detect, and respond to fraud.

It is my hope that this report not only honors the CFEs who pushed through the challenges of the pandemic and shared their experiences in investigating fraud during that time, but also provides actionable insight for business leaders, the public, and the anti-fraud community as a whole on how to effectively protect organizations from the harms of occupational fraud.

Bruce Dorris, J.D., CFE, CPA President and CEO, Association of Certified Fraud Examiners

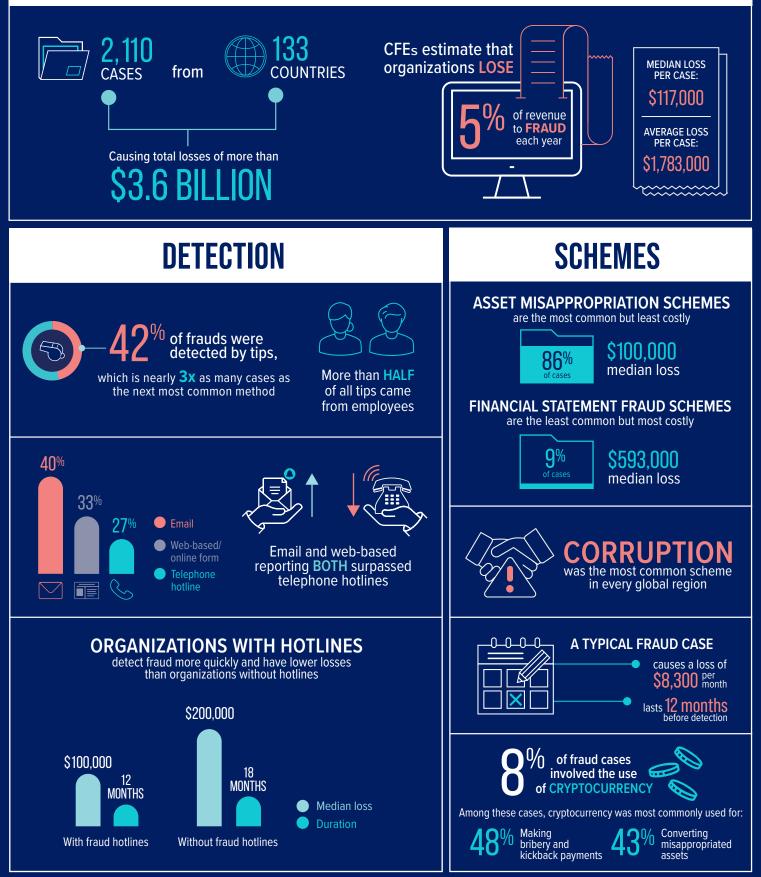
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KEY FINDINGS

OUR STUDY COVERED:



KEY FINDINGS

VICTIM ORGANIZATIONS

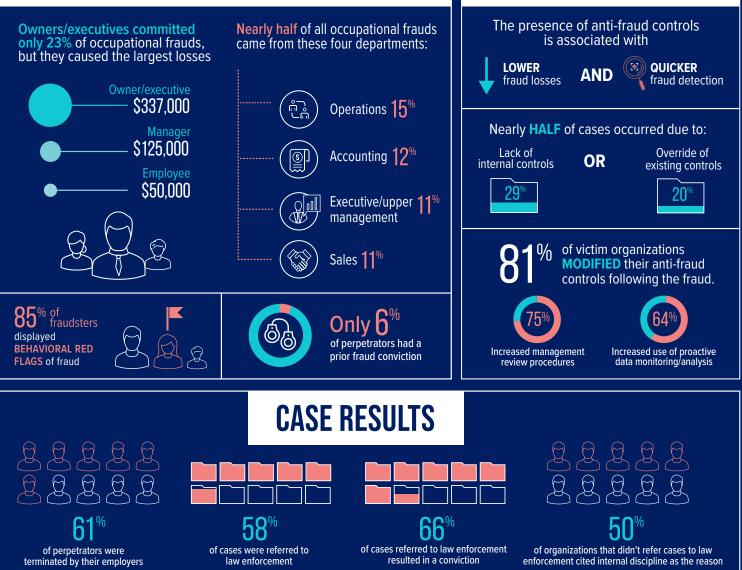




ORGANIZATIONS WITH THE FEWEST EMPLOYEES HAD THE HIGHEST MEDIAN LOSS (\$150,000)

ANTI-FRAUD CONTROLS

PERPETRATORS



INTRODUCTION

This study represents the most comprehensive examination available of the costs, methods, victims, and perpetrators of occupational fraud.

Occupational fraud is very likely the most costly and most common form of financial crime in the world. The term *occupational fraud* refers to frauds that are committed by individuals against the organizations that employ them.¹

There are two key reasons why this type of crime is so prevalent. The first is that any organization with employees must, to some extent, entrust those employees with access to or control over its assets, whether that means keeping its books, managing its bank accounts, safeguarding its inventory, etc. It is this very trust that can make organizations vulnerable to occupational fraud. Because all frauds, at their heart, are based upon breaches of trust. The second reason occupational fraud is so costly and common is simply that there are so many people in a position to commit these crimes. The global labor force consists of more than 3.3 billion people², a large majority of whom will never steal or abuse the trust of their employers. But if even a tiny percentage of these individuals cross the line, the result is millions of occupational fraud schemes being committed annually.

We do not know precisely how many people engage in occupational fraud each year, but we know that the collective harm these criminals inflict is enormous. As you will see in this report, global losses are likely measured in trillions of dollars. This represents money that could have been spent creating jobs, producing goods and services, or providing public services. Instead, it went into the pockets of fraudsters. The data contained in *Occupational Fraud 2022: A Report to the Nations* represents our best effort to understand and measure the impact of occupational fraud. Based on 2,110 cases of occupational fraud that were investigated between January 2020 and September 2021, we have compiled statistics on the methods used to commit these crimes, the means by which they were detected, the characteristics of both the victims and the perpetrators, and the ways in which victim organizations responded after the frauds were detected.

This report is based on data that was supplied to us by Certified Fraud Examiners (CFEs) throughout the world who took part in the 2021 *Global Fraud Survey*. Each CFE who participated in the study was presented with an online questionnaire consisting of 77 detailed questions about a fraud case the CFE had personally investigated. We are deeply grateful to the CFEs who took part in this survey and shared information so that others could benefit from their experiences. This report is, in many ways, a testament to the dedication and generosity of those CFEs.

The frauds represented in this study were committed in 133 countries, and they targeted organizations in 23 distinct industry categories. They attacked large multinational businesses, small private companies, government agencies, nonprofits, and every other size or type of organization imaginable. This report truly is a global study of occupational fraud, and as its results make clear, no organization is immune from these crimes.

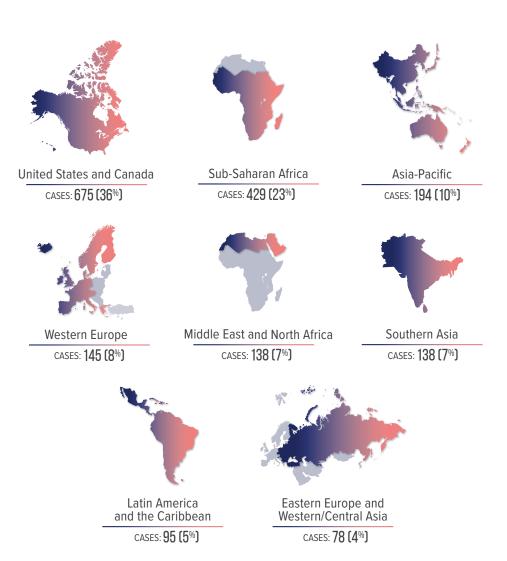
¹ Occupational fraud is formally defined as the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets.

² The World Bank DataBank, "Labor Force, Total (1990–2020)," https://data.worldbank.org/indicator/SL.TLF.TOTL.IN.

THE GOAL OF *occupational fraud 2022: A report to the nations* is to compile detailed information about occupational fraud cases in five critical areas:

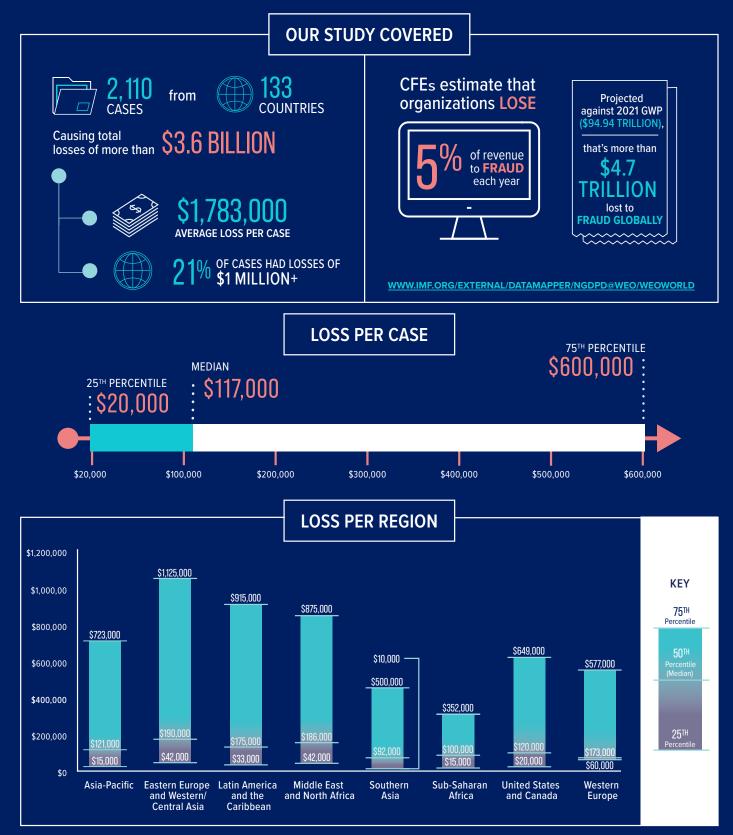
- The methods by which occupational fraud is committed
- The means by which occupational frauds
 are detected
- The characteristics of the organizations that are victimized by occupational fraud
- The characteristics of the people who commit occupational fraud
- The results of the cases after the frauds have been detected and the perpetrators identified

FIG. 1 REPORTED CASES BY REGION



THE GLOBAL COST OF FRAUD

Fraud is a truly global problem, affecting organizations in every region and in every industry worldwide. Measuring the true extent of the damage caused by occupational fraud can be challenging due to the inherent nature of concealment and deception involved in most schemes. However, our study provides some valuable insight into the scope of this issue and how it affects organizations everywhere.



HOW IS OCCUPATIONAL FRAUD COMMITTED?



Since the release of the first *Report to the Nation* in 1996, we have analyzed more than 20,000 cases of occupational fraud reported to us by CFEs. In each study, we have explored the mechanisms used by the fraud perpetrators to defraud their employers. Even with the shift toward digital payments, remote work environments, and technology-based organizations, the schemes and methods fraudsters use to commit occupational fraud remain consistent over time. A taxonomy of these schemes is provided in the *Occupational Fraud and Abuse Classification System*, also commonly referred to as the *Fraud Tree* (see Figure 3).

CATEGORIES OF OCCUPATIONAL FRAUD

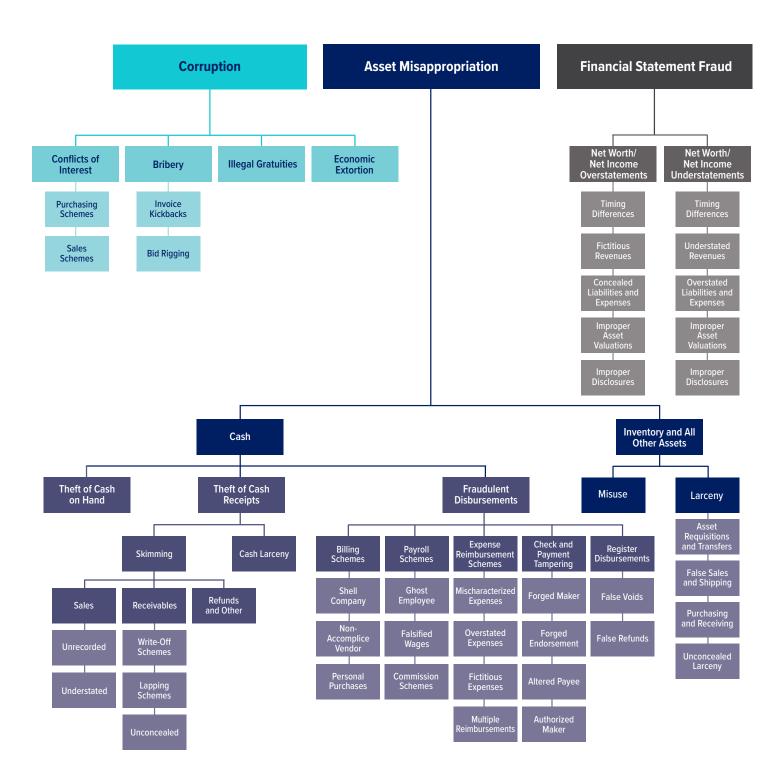
At the top level, there are three primary categories of occupational fraud. Asset misappropriation, which involves an employee stealing or misusing the employer's resources, is the most common, with 86% of cases falling under this category. These schemes, however, tend to cause the lowest median loss at USD 100,000 per case (see Figure 2). In contrast, financial statement fraud schemes, in which the perpetrator intentionally causes a material misstatement or omission in the organization's financial statements, are the least common (9% of schemes) but costliest (USD 593,000) category. The third category, corruption—which includes offenses such as bribery, conflicts of interest, and extortion—falls in the middle in terms of both frequency and losses. These schemes occur in 50% of cases and cause a median loss of USD 150,000.



FIG. 2 HOW IS OCCUPATIONAL FRAUD COMMITTED?



FIG. 3 OCCUPATIONAL FRAUD AND ABUSE CLASSIFICATION SYSTEM (THE FRAUD TREE)³



³ The definitions for many of the categories of fraud schemes in the Fraud Tree are found in the Glossary of Terminology on page 94.

Fraudsters do not necessarily limit themselves to one method of stealing. Of the cases in our study, 40% involved more than one of the three primary categories of occupational fraud. As noted in Figure 4, 32% of fraudsters committed both asset misappropriation and corruption schemes as part of their crime, 2% misappropriated assets and committed financial statement fraud, 1% engaged in both corruption and financial statement fraud, and 5% included all three categories in their schemes.

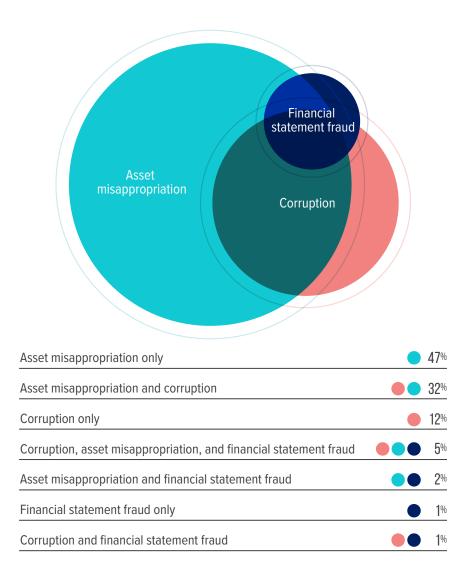


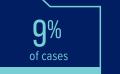
FIG. 4 HOW OFTEN DO FRAUDSTERS COMMIT MORE THAN ONE TYPE OF OCCUPATIONAL FRAUD?

ASSET MISAPPROPRIATION SCHEMES are the most common but least costly



FINANCIAL STATEMENT FRAUD SCHEMES

are the least common but most costly

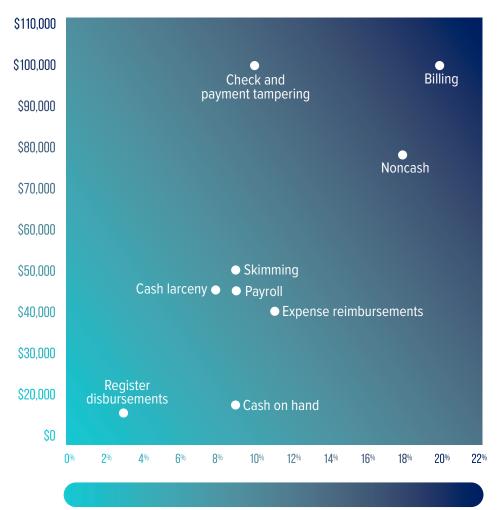




ASSET MISAPPROPRIATION SUB-SCHEMES

Because asset misappropriations make up such a large percentage of occupational fraud cases, we divide these frauds into nine distinct categories to better illustrate how they affect organizations. Figure 5 is a heat map that shows the frequency and median loss of each asset misappropriation sub-scheme (see Glossary on page 94 for definitions of each sub-scheme). Billing schemes present a significant risk given that they are the most common form of asset misappropriation and also cause the highest median loss. Other high risks based on the combination of frequency and financial impact are check and payment tampering, as well as noncash schemes (such as theft of physical assets, investments, or proprietary information).





Less risk	Less	risk
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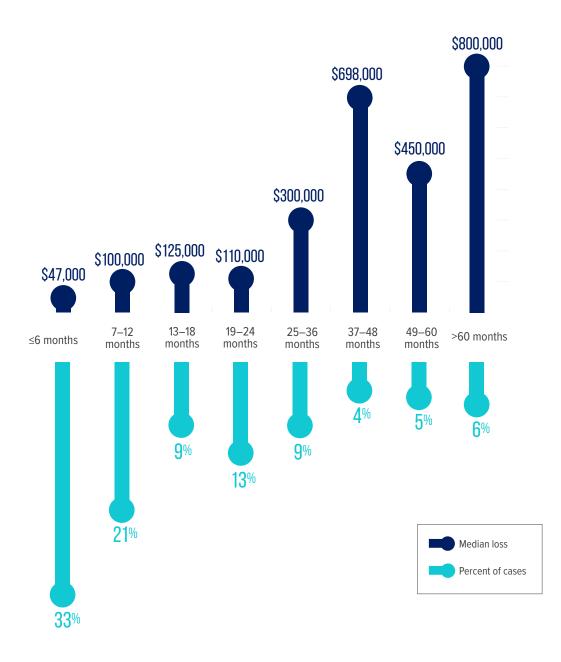
More risk

Category	Number of cases	Percent of all cases	Median loss
Billing	416	20%	\$100,000
Noncash	385	18%	\$78,000
Expense reimbursements	232	11%	\$40,000
Check and payment tampering	208	10%	\$100,000
Cash on hand	199	9%	\$15,000
Skimming	198	9%	\$50,000
Payroll	198	9%	\$45,000
Cash larceny	169	8%	\$45,000
Register disbursements	58	3%	\$10,000

DURATION OF FRAUD SCHEMES

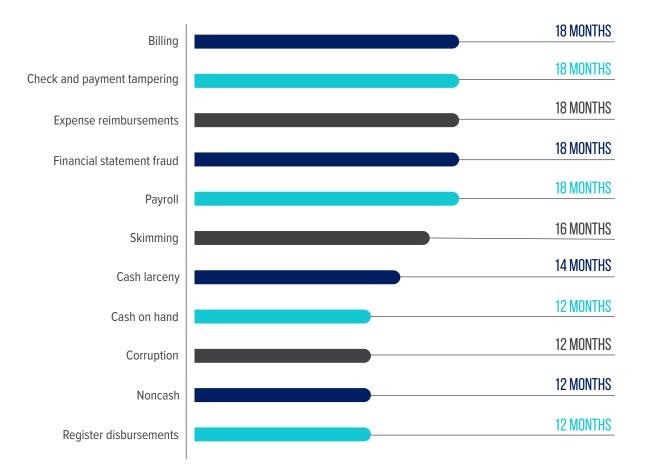
Try as they might, organizations cannot prevent all fraud; if an organization is operational long enough, eventually an employee will commit fraud. Consequently, the ability to quickly detect fraud is crucial. Our research indicates that the median duration of fraud—that is, the typical time between when a fraud begins and when it is detected—is 12 months. Additionally, Figure 6 shows that the longer a fraud remains undetected, the greater the financial loss.

FIG. 6 HOW DOES THE DURATION OF A FRAUD RELATE TO MEDIAN LOSS?



When designing anti-fraud controls, assessing fraud risks, and implementing proactive detection measures, it is helpful to understand the potential impact of different types of fraud schemes. In addition to analyzing the frequency and median loss of the categories of occupational fraud (see Figures 2 and 5), we also examined the duration of cases (in months) in each category. As noted in Figure 7, companies tend to catch register disbursements, noncash, corruption, and cash on hand schemes the quickest (12 months). Other schemes such as billing, check and payment tampering, expense reimbursements, financial statement fraud, and payroll typically last a year and a half before being uncovered.

FIG. 7 HOW LONG DO DIFFERENT OCCUPATIONAL FRAUD SCHEMES LAST?



VELOCITY OF FRAUD SCHEMES

Fraud schemes affect companies differently, and organizations must make decisions about how and where to direct their anti-fraud efforts. Therefore, we analyzed how quickly occupational fraud tends to cause harm, as well as the variation in this speed among different scheme types.

To determine the velocity for different types of fraud, we divided the loss amount by the number of months the scheme lasted before detection. The median velocity for all cases reported was a loss of USD 8,300 per month. Analyzing the velocity by scheme type, however, reveals that certain types of occupational fraud cause damage much faster than others. As Figure 8 shows, financial statement fraud schemes have the greatest velocity of USD 32,900 per month, followed by corruption schemes, with a velocity of USD 12,500 per month. Organizations can use this data to prioritize their resources—for example, by investing more in measures aimed at protecting against high-velocity schemes.

FIG. 8 WHAT IS THE TYPICAL VELOCITY (MEDIAN LOSS PER MONTH) OF DIFFERENT OCCUPATIONAL FRAUD SCHEMES?

Financial statement fraud	
	\$32,900
Corruption	\$12,500
	\$12,000
Noncash	\$6,500
	Ş0,000
Check and payment tampering	ĊE 000
	\$5,600
Billing	ÅF 000
	\$5,600
Cash larceny	<u> </u>
	\$3,200
Skimming	ĆO 100
	\$3,100
Payroll	\$2,500
	\$2,000
Expense reimbursements	<u>Å0.000</u>
	\$2,200
Cash on hand	
	\$1,300
Register disbursements	
	\$800
-	

Our analysis also reveals differences in scheme velocity based on the number of perpetrators involved in a case, as well as what position the primary perpetrator holds. Schemes with three or more perpetrators escalate faster than those with just one or two perpetrators. Likewise, schemes committed by an owner/executive have a velocity nearly three times that of schemes committed by employees and manager-level individuals. These findings emphasize how those in the highest positions can damage the company much more quickly than those in lower-level positions.

	Median loss	Median duration	Scheme velocity (loss per month)
One perpetrator	\$57,000	12 months	\$4,800
Two perpetrators	\$145,000	12 months	\$12,100
Three or more perpetrators	\$219,000	12 months	\$18,300
Employee	\$50,000	8 months	\$6,300
Manager	\$125,000	16 months	\$7,800
Owner/executive	\$337,000	18 months	\$18,700
<100 employees	\$150,000	16 months	\$9,400
100+ employees	\$100,000	12 months	\$8,300

A TYPICAL FRAUD CASE

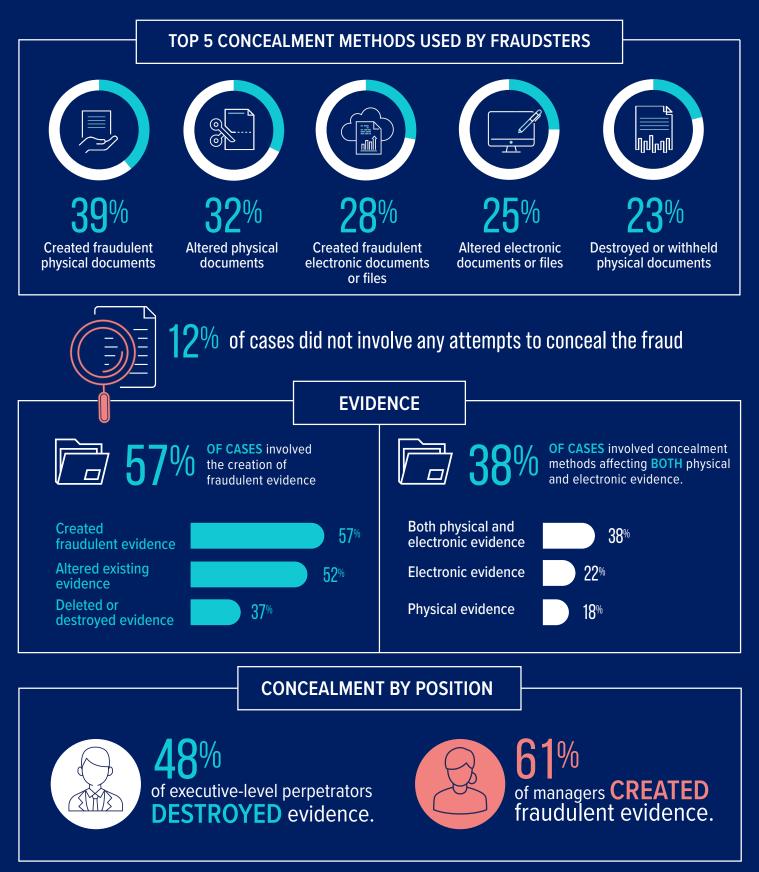




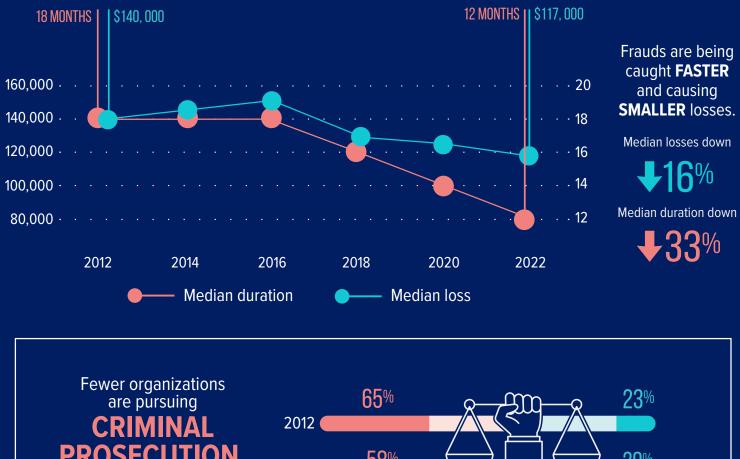


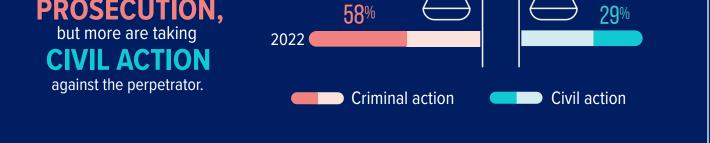
HOW DO PERPETRATORS CONCEAL THEIR FRAUDS?

Examining the methods fraudsters use to conceal their crimes can assist organizations in more effectively detecting and preventing similar schemes moving forward.



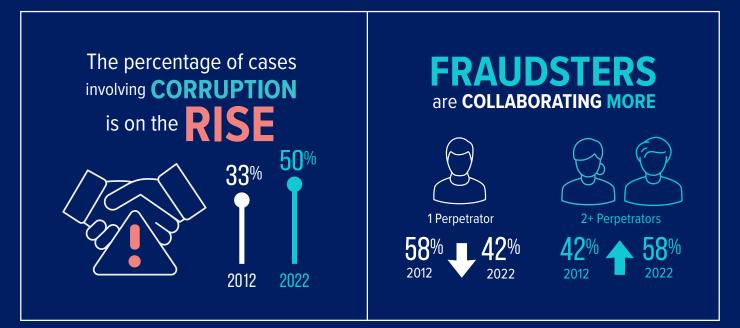
A DECADE OF OCCUPATIONAL FRAUD: TRENDS FROM 2012–2022

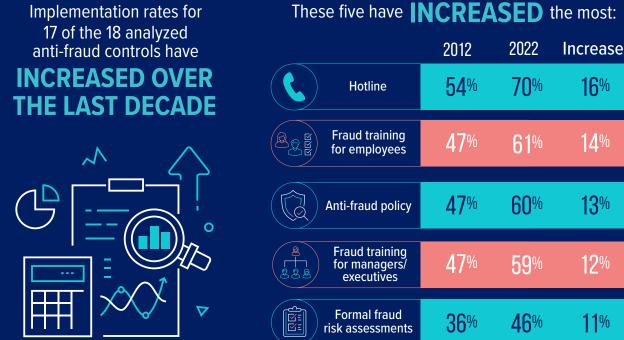












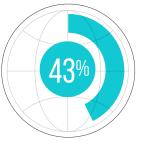
CRYPTOCURRENCY SCHEMES

The rise of blockchain technology, along with more organizations incorporating the use of cryptocurrency into their regular operations, creates another opportunity for individuals to perpetrate fraud. Only 8% of the frauds in our study involved the use of cryptocurrency (though anecdotal evidence suggests this number will rise in future years). Among these cases, the most common ways cryptocurrency was utilized were making bribery and kickback payments in cryptocurrency (48%) or converting misappropriated assets to cryptocurrency (43%).

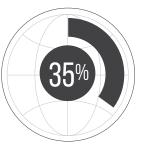
FIG. 9 AMONG FRAUDS INVOLVING CRYPTOCURRENCY, HOW WAS IT USED?



Bribery or kickback payments made in cryptocurrency



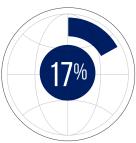
Conversion of misappropriated assets to cryptocurrency



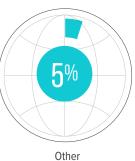
Proceeds of fraud laundered using cryptocurrency



Misappropriation of organizational cryptocurrency assets



Manipulation of reported cryptocurrency assets on the financial statements



Other



Among these cases, cryptocurrency was most commonly used for:



DETECTION

Detection is an essential step in fraud investigation because the speed with which fraud is detected—as well as the way it is detected—can have a substantial impact on the magnitude of the fraud. It is also an important component of fraud prevention because fraud examiners can take steps to improve how they detect fraud within their organizations. As a result, this might increase staff's perception that fraud will be detected and possibly deter future misconduct. Our data explores how fraud is initially detected, when it is detected, and who reports it.

INITIAL DETECTION OF OCCUPATIONAL FRAUD AND TIP SOURCES

Knowing the most common methods by which fraud is discovered is the foundation for effective detection of occupational fraud. Despite the increasing number of advanced fraud detection techniques available to organizations, tips were still the most common way occupational frauds were discovered in our study by a wide margin, as they have been in every one of our previous reports. As shown in Figure 10, 42% of cases in our study were uncovered by tips, which is nearly three times as many cases as the next most common detection method. Therefore, implementing effective processes to solicit and thoroughly evaluate tips is a crucial priority for fraud examiners.

Figure 11 identifies the sources of tips that led to fraud detection. More than half of all tips came from employees, while nearly a third of tips came from outside parties, including customers, vendors, and competitors. This reinforces the fact that anti-fraud education and the communication of designated reporting mechanisms should target both internal staff and external parties.

FIG. 10 HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED?

Tip	42 %
Internal audit	16%
Management review	12%
Document examination	6%
By accident	5%
Account reconciliation	5%
Automated transaction/data monitoring	4%
External audit	4%
Surveillance/monitoring	3%
Notification by law enforcement	2%
Confession	1%
Other	1%

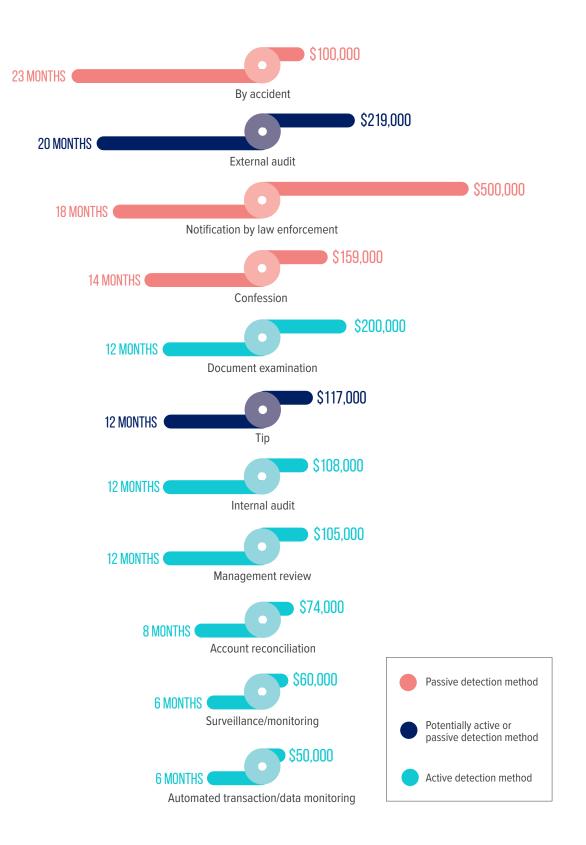
FIG. 11 WHO REPORTS OCCUPATIONAL FRAUD?



MEDIAN LOSS AND DURATION BY DETECTION METHOD

Results from our data show that some fraud detection methods are more effective than others in that they correlate to lower fraud losses. Figure 12 shows the relationship between the detection method and the associated fraud scheme duration and loss, respectively. In this chart, the pink bars indicate schemes that were detected by passive methods—that is, the fraud came to the victim's attention through no effort of their own—including notification by police, by accident, or by a fraudster's confession. In general, most passively detected schemes lasted longer and were associated with higher median losses relative to all other detection methods. The light blue bars indicate active detection methods—those that involved a process or effort designed (at least in part) to proactively detect fraud—such as document examination or surveillance/monitoring. Schemes discovered through an active method were shorter in duration and had lower median losses than those detected passively. The dark blue bars indicate detection methods that could potentially be passive or active, including tips and external audit.

This data highlights that when fraud is detected proactively, it tends to be detected more quickly and results in lower losses; in contrast, passive detection results in longer-lasting schemes and increased financial damage to the victim. Anti-fraud controls such as automated transaction/data monitoring, surveillance, account reconciliation, ongoing and proactive management review, and internal audit departments are all tools that can lead to more effective detection of occupational fraud.

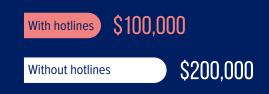


HOTLINE AND REPORTING MECHANISM EFFECTIVENESS

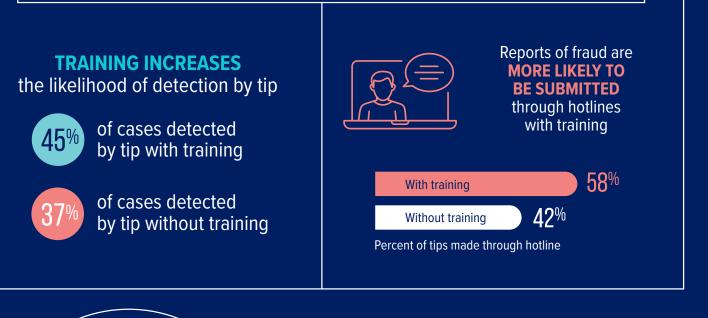
Maintaining a hotline or reporting mechanism increases the chances of earlier fraud detection and reduces losses. Fraud awareness training encourages tips through reporting mechanisms.







EFFECT OF EMPLOYEE AND MANAGER FRAUD AWARENESS TRAINING ON HOTLINES AND REPORTING





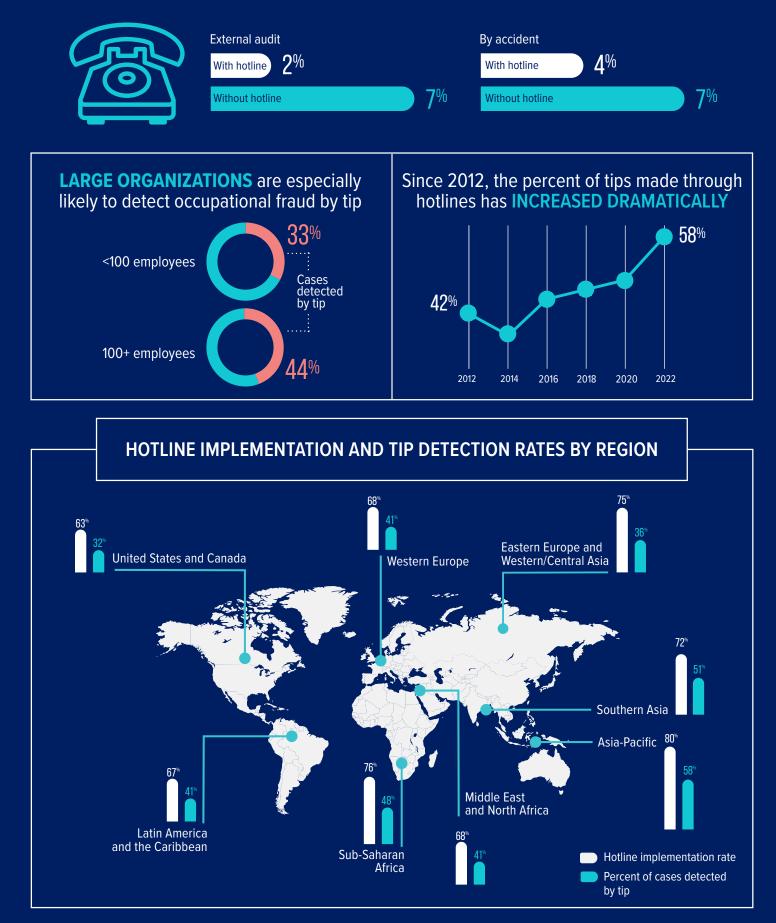
Organizations with hotlines are more likely to detect fraud **BY TIP**



Percent of cases detected by tip

ORGANIZATIONS WITHOUT HOTLINES ARE 3.5X MORE LIKELY

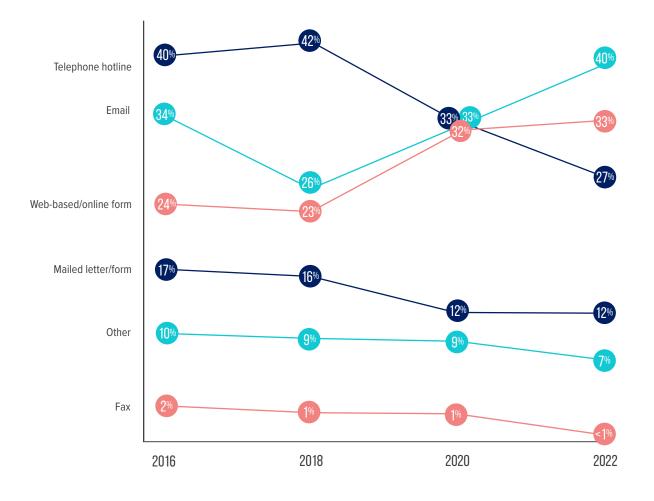
to discover fraud through an external audit and nearly 2X more likely by accident



REPORTING MECHANISMS

In cases where a reporting mechanism was used to report fraud, we asked respondents to specify how the tip arrived. In our previous studies, telephone hotlines were the most common mechanism whistleblowers used. However, as shown in Figure 13, telephone hotline use has declined substantially, while email and web-based/online reporting have both surpassed telephone hotlines. These findings demonstrate that whistleblowers' preferred methods of reporting fraud are diverse and evolving, particularly regarding online and electronic forms. Consequently, organizations should maintain multiple channels for reporting fraud.

FIG. 13 WHAT FORMAL REPORTING MECHANISMS DID WHISTLEBLOWERS USE?





More than HALF of all tips came from employees



PARTIES TO WHOM WHISTLEBLOWERS REPORT

Not all tips about suspected fraud are reported through a formal reporting mechanism. Some reports are made informally to individuals within the organization. Figure 14 indicates that whistleblowers who do not use hotline mechanisms are most likely to report their concerns to their direct supervisors (30%). But this chart also makes clear that whistleblowers may reach out to a wide variety of parties, such as executives, internal audit, fraud investigation teams, or their coworkers. Because almost anyone in an organization could potentially receive a report, it is important to provide all staff with guidance on how fraud allegations are handled within the organization and what to do if they receive a report about suspected fraud.

FIG. 14 TO WHOM DID WHISTLEBLOWERS INITIALLY REPORT?

Direct supervisor	30%
Executive	
	15%
Internal audit	
	12%
Fraud investigation team	10-1
	12%
Other	9%
Board or audit committee	9%
Owner	8%
Coworker	8%
Law enforcement or regulator	8%
Human resources	5%
In-house counsel	3%
External audit	1%

VICTIM ORGANIZATIONS

To determine how the impact of fraud varies among victim organizations, we asked survey participants about the victim organizations in their cases, including their size, type, industry, and which anti-fraud controls they had in place when the schemes occurred.

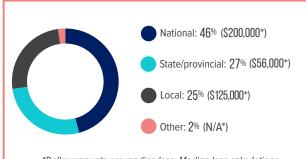
STANDIN WYP

TYPE OF ORGANIZATION

More than two-thirds (69%) of frauds reported by our survey respondents occurred in for-profit organizations, with 44% of the victim organizations being private companies and 25% being public companies, as shown in Figure 15. Private and public companies suffered a median loss of USD 120,000 and USD 118,000, respectively. Nonprofit organizations were the victims in only 9% of the reported fraud cases and suffered the smallest median loss of USD 60,000.

Government agencies at different levels can vary widely in terms of their operations, personnel, and budgets, and therefore tend to be impacted differently by fraud. To analyze this, we separated the government organizations in our study by level. National-level entities represented the highest number of reported frauds (46%) and had the greatest median loss of USD 200,000, which is nearly four times the median loss incurred by state/provincial-level entities (USD 56,000). Additionally, local governments, which tend to be smaller in terms of staffing and resources, suffered the second-highest median loss of USD 125,000, more than twice as much as state/provincial-level entities.

FIG. 16 WHAT LEVELS OF GOVERNMENT ARE VICTIMIZED BY Occupational fraud?



*Dollar amounts are median loss. Median loss calculations for categories with fewer than 10 cases were omitted.



SIZE OF ORGANIZATION

In Figure 17, we categorized all victim organizations based on their number of employees. Small businesses (fewer than 100 employees) had the highest median loss of USD 150,000, while the largest organizations (more than 10,000 employees) had a median loss of USD 138,000. Even though the median loss figures for small and large organizations were similar, the impact of such a loss is likely far more significant at a smaller organization.

FIG. 17 HOW DOES AN ORGANIZATION'S SIZE RELATE TO ITS OCCUPATIONAL FRAUD RISK?

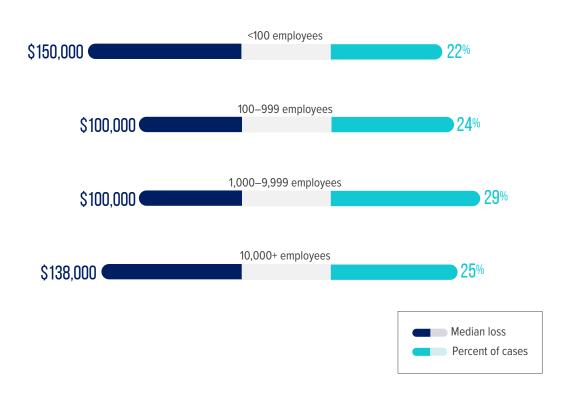


Figure 18 shows the distribution of victim organizations based on revenue size. Median losses ranged from USD 100,000 in the smallest organizations to USD 150,000 in the largest. But again, an organization with less than USD 50 million in annual revenue is likely to feel that impact much more than an organization with a revenue of USD 1 billion or more.

\$50 million \$50 million \$8% \$50 million \$499 million \$105,000 \$26% \$500 million \$999 million \$150,000 \$1 billion+ \$150,000 \$24% \$150,000 \$24%

FIG. 18 HOW DOES AN ORGANIZATION'S GROSS ANNUAL REVENUE RELATE TO ITS OCCUPATIONAL FRAUD RISK?



In Figure 19, we compare the frequency of schemes in small businesses (i.e., those with fewer than 100 employees) and larger organizations (i.e., those with more than 100 employees). The most significant difference involves corruption, which is much more prevalent in larger organizations than smaller ones (54% and 24%, respectively). Misappropriation of noncash assets was also more than twice as common in larger organizations. Only two schemes occurred more frequently in smaller organizations than larger organizations: skimming and check and payment tampering.

24% Corruption 54% 13% Billing 19% 10% Check and payment tampering 8% **g**% Skimming 8% 9% Noncash 19% 8% Payroll 8% 7% Expense 11% reimbursements 7% Cash larceny 7% 7% Cash on hand **g**% 5% Financial statement fraud 10% <100 Employees **1**% Register disbursements 3% 100+ Employees

FIG. 19 HOW DO FRAUD SCHEMES VARY BY ORGANIZATION SIZE?

INDUSTRY OF ORGANIZATION

Survey participants were asked to identify the victim organization's industry. The industries affected by the greatest number of cases in our study were banking and financial services, government and public administration, and manufacturing. It is important to note that this does not necessarily mean that more fraud occurs in these industries; rather, it might indicate that these industries employ more CFEs than others. The real estate industry suffered the highest median loss of USD 435,000, followed by the wholesale trade sector with the next-highest median loss of USD 400.000.

FIG. 20 HOW DOES OCCUPATIONAL FRAUD AFFECT ORGANIZATIONS IN DIFFERENT INDUSTRIES?



MOST COMMON SCHEMES BY INDUSTRY

Identifying the frequency of various fraud schemes within industries could help organizations in those industries determine which controls to implement. The heat map in Figure 21 shows the most common types of schemes that occurred in industries with more than 50 reported cases. The risks are shaded from light to dark blue, with darker variants representing higher-risk areas. For example, the most common fraud scheme in the retail industry was corruption (43%), followed by noncash schemes (24%); its lowest area of risk was financial statement fraud (4%).

FIG. 21 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN VARIOUS INDUSTRIES?

INDUSTRY	Cases	Billing	Cash larceny	Cash on hand	Check and payment tampering	Corruption	Expense reimbursements	Financial statement fraud	Noncash	Payroll	Register disbursements	Skimming
Banking and financial services	351	10%	11%	14%	14%	46%	8%	11%	11%	4%	2%	10%
Government and public administration	198	21%	8%	7%	9%	57%	12%	8%	16%	16%	3%	8%
Manufacturing	194	26%	5%	9%	7%	59%	10%	12%	23%	10%	4%	8%
Health care	130	20%	6%	8%	8%	50%	11%	9%	18%	12%	2%	9%
Energy	97	24%	9%	6%	8%	64%	16%	8%	13%	6%	3%	2%
Retail	91	19%	10%	9%	9%	43%	7%	4%	24%	5%	7%	14%
Insurance	88	15%	9%	8%	10%	40%	9%	5%	8%	10%	2%	11%
Technology	84	21%	6%	10%	6%	54%	14%	8%	30%	5%	1%	1%
Transportation and warehousing	82	20%	9%	15%	4%	59%	11%	7%	22%	9%	4%	11%
Construction	78	24%	8%	10%	14%	56%	17%	18%	24%	24%	3%	9%
Education	69	26%	9%	12%	12%	49%	12%	12%	19%	14%	4%	12%
Information	60	15%	5%	5%	8%	58%	12%	12%	33%	7%	2%	7%
Food service and hospitality	52	19%	10%	21%	17%	54%	13%	13%	29%	19%	10%	17%

Less risk

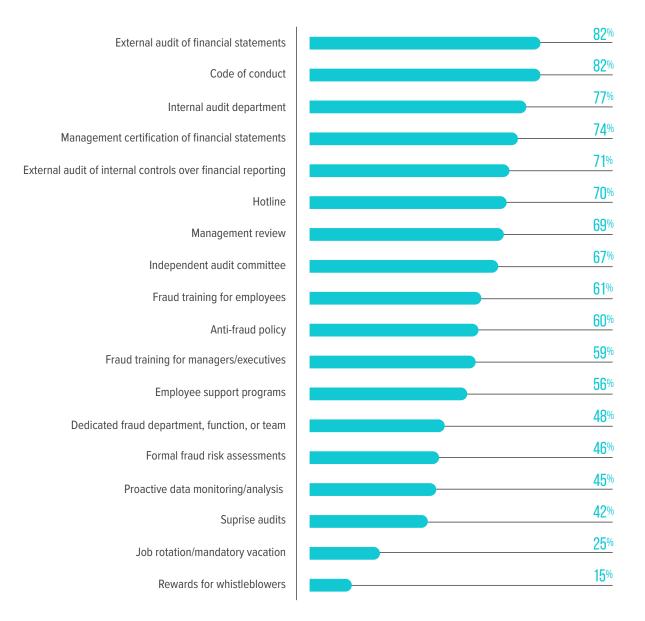
More risk

ANTI-FRAUD CONTROLS AT VICTIM ORGANIZATIONS

Fraud doesn't happen in a vacuum; organizations often enact specific internal controls designed to prevent, detect, or mitigate any attempted wrongdoing. However, the effectiveness of these measures in deterring and uncovering fraud can depend on many factors and can change over time. Consequently, it can be helpful for organizations to benchmark their own anti-fraud controls against those of other organizations.

We asked survey respondents which, if any, of 18 common anti-fraud controls the victim organization had in place at the time the fraud occurred. As shown in Figure 22, the two most common of these controls were external (independent) audits of financial statements and a formal code of conduct, each of which were implemented in 82% of the victim organizations. Other common controls include an internal audit department (77%), management certification of financial statements (74%), and an external (independent) audit of the internal controls over financial reporting (71%).

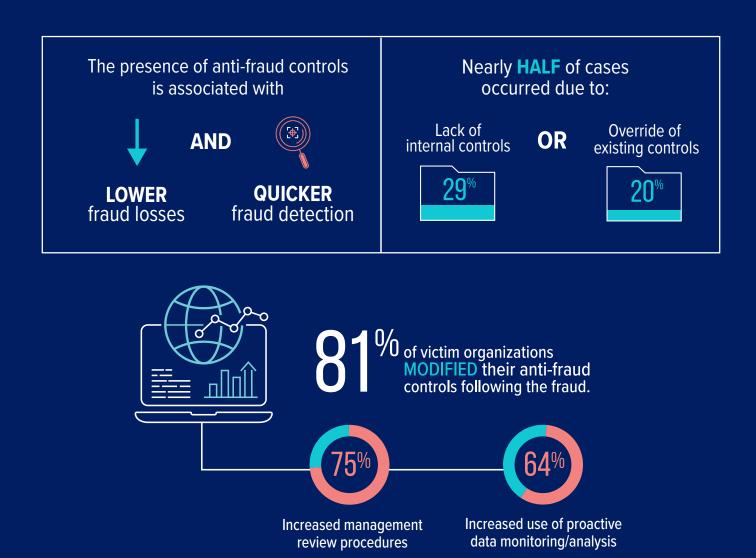
FIG. 22 WHAT ANTI-FRAUD CONTROLS ARE MOST COMMON?



EFFECTIVENESS OF ANTI-FRAUD CONTROLS

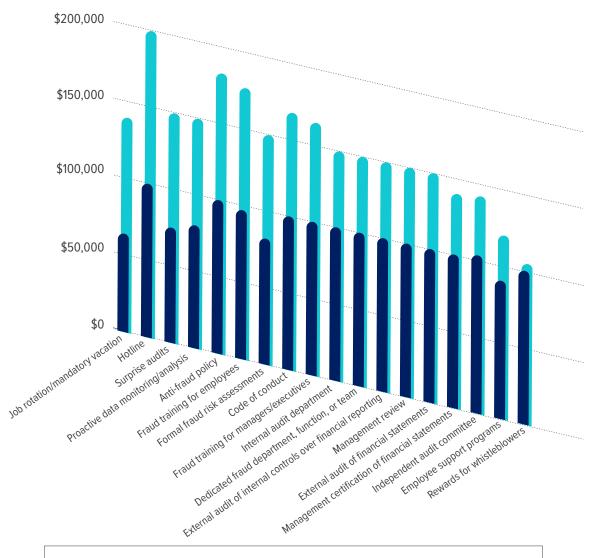
To help evaluate the effectiveness of these 18 anti-fraud controls, we compared the median losses and median durations in cases in which the victim organization had the control in place against cases in which the victim organization lacked the control. The results of these analyses are reflected in Figures 23 and 24. As noted, the presence of all 18 controls was associated with a lower median loss, and all but one control (employee support programs) was correlated with faster fraud detection.

In particular, two controls—job rotation/mandatory vacation policies and surprise audits—were associated with at least a 50% reduction in both median loss and median duration. Interestingly, these are among the least common controls implemented, with only 25% of organizations having a job rotation/mandatory vacation policy and 42% using surprise audits, indicating that numerous organizations have an opportunity to add these highly effective tools to their anti-fraud programs. Other controls with notable reductions in both measures include proactive data monitoring/analysis and formal fraud risk assessments.



VICTIM ORGANIZATIONS Occupational Fraud 2022: A Report to the Nations

FIG. 23 HOW DOES THE PRESENCE OF ANTI-FRAUD CONTROLS RELATE TO MEDIAN LOSS?

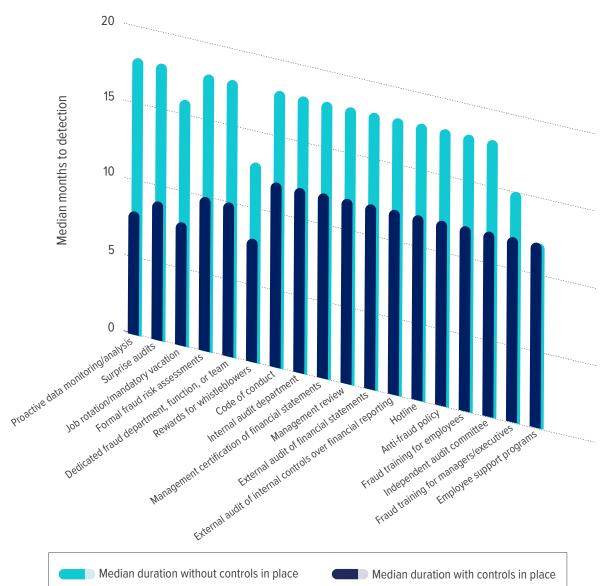


Median loss without controls in place

Median loss with controls in place

Control	Percent of cases	Control in place	Control not in place	Percent reduction
Job rotation/mandatory vacation	25%	\$ 64,000	\$140,000	54%
Hotline	70%	\$100,000	\$200,000	50%
Surprise audits	42%	\$ 75,000	\$150,000	50%
Proactive data monitoring/analysis	45%	\$ 80,000	\$150,000	47%
Anti-fraud policy	60%	\$100,000	\$183,000	45%
Fraud training for employees	61%	\$ 97,000	\$177,000	45%
Formal fraud risk assessments	46%	\$ 82,000	\$150,000	45%
Code of conduct	82%	\$100,000	\$168,000	40%
Fraud training for managers/executives	59%	\$100,000	\$165,000	39%
Internal audit department	77%	\$100,000	\$150,000	33%
Dedicated fraud department, function, or team	48%	\$100,000	\$150,000	33%
External audit of internal controls over financial reporting	71%	\$100,000	\$150,000	33%
Management review	69%	\$100,000	\$150,000	33%
External audit of financial statements	82%	\$100,000	\$150,000	33%
Management certification of financial statements	74%	\$100,000	\$140,000	29%
Independent audit committee	67%	\$103,000	\$142,000	27%
Employee support programs	56%	\$ 90,000	\$120,000	25%
Rewards for whistleblowers	15%	\$100,000	\$105,000	5%

FIG. 24 HOW DOES THE PRESENCE OF ANTI-FRAUD CONTROLS RELATE TO THE DURATION OF FRAUD?

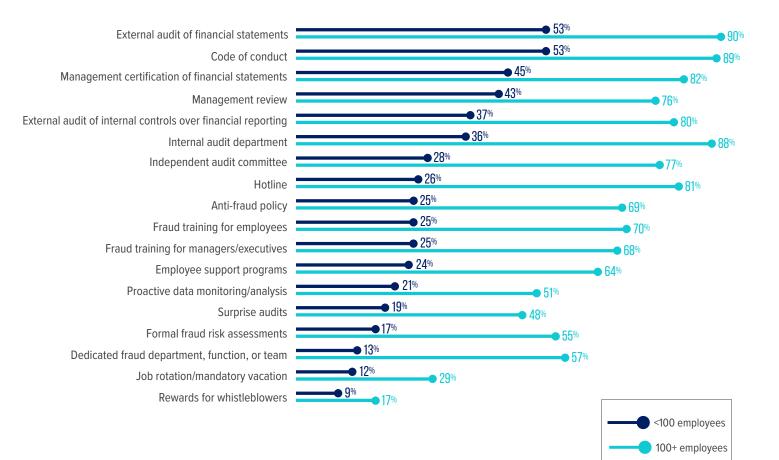


Control	Percent of cases	Control in place	Control not in place	Percent reduction
Proactive data monitoring/analysis	45%	8 months	18 months	56%
Surprise audits	42%	9 months	18 months	50%
Job rotation/mandatory vacation	25%	8 months	16 months	50%
Formal fraud risk assessments	46%	10 months	18 months	44%
Dedicated fraud department, function, or team	48%	10 months	18 months	44%
Rewards for whistleblowers	15%	8 months	13 months	38%
Code of conduct	82%	12 months	18 months	33%
Internal audit department	77%	12 months	18 months	33%
Management certification of financial statements	74%	12 months	18 months	33%
Management review	69%	12 months	18 months	33%
External audit of financial statements	82%	12 months	18 months	33%
External audit of internal controls over financial reporting	71%	12 months	18 months	33%
Hotline	70%	12 months	18 months	33%
Anti-fraud policy	60%	12 months	18 months	33%
Fraud training for employees	61%	12 months	18 months	33%
Independent audit committee	67%	12 months	18 months	33%
Fraud training for managers/executives	59%	12 months	15 months	20%
Employee support programs	56%	12 months	12 months	0%

ANTI-FRAUD CONTROLS IN SMALL BUSINESSES

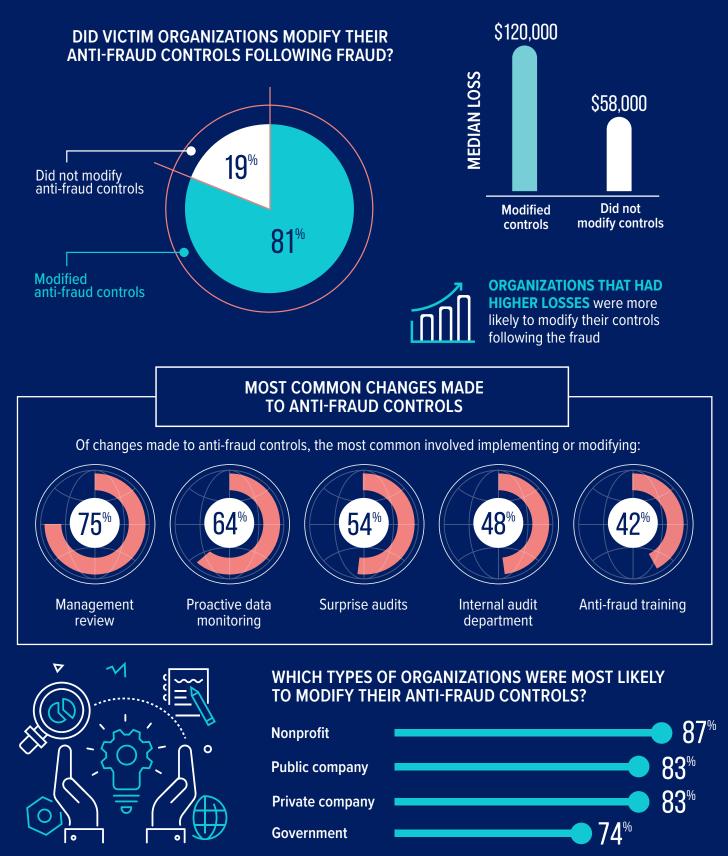
Small organizations face unique challenges in combatting fraud—from limited financial resources and smaller staff sizes that require many individuals to perform numerous functions, to the large amount of trust needed to keep operations running and the business growing. Unfortunately, that means that many of the protective anti-fraud controls that larger organizations rely on are simply not enacted within small businesses. Figure 25 shows the implementation rates of anti-fraud controls at small businesses (i.e., organizations with fewer than 100 employees) compared to their larger counterparts. Across all 18 controls, small organizations had notably lower levels of implementation; even the most common controls—external audits of financial statements and a formal code of conduct—were only in place at 53% of small businesses in our study, compared to approximately 90% of larger organizations.

FIG. 25 HOW DO ANTI-FRAUD CONTROLS VARY BY SIZE OF VICTIM ORGANIZATION?



MODIFYING ANTI-FRAUD CONTROLS FOLLOWING A FRAUD

A comprehensive response to a discovered fraud should include assessing the factors that allowed the fraud to occur and taking steps to prevent similar frauds from being able to happen again in the future.

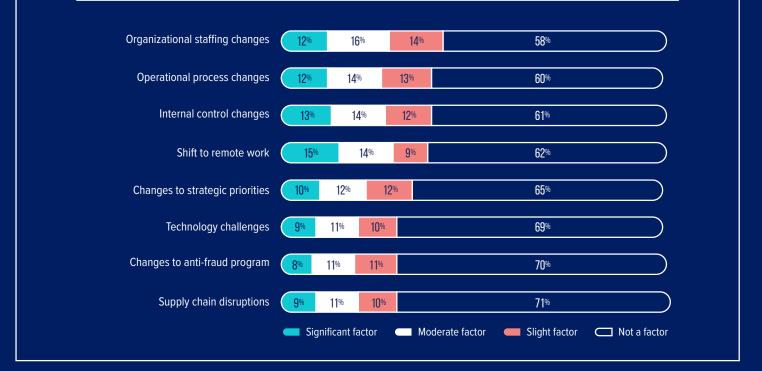


COVID'S EFFECT ON OCCUPATIONAL FRAUD

We asked survey participants whether several pandemic-related issues contributed to the frauds that they investigated; 52% of respondents noted that at least one of these factors was present in their case. Of the factors analyzed, pandemic-related organizational staffing changes were the most common (42% of cases), and a shift to remote work was the factor most commonly cited as significant (15% of cases).



TO WHAT EXTENT DID PANDEMIC-RELATED FACTORS CONTRIBUTE TO OCCUPATIONAL FRAUDS?





It's important to note that this study analyzes cases that were *investigated* between January 2020 and September 2021, not necessarily frauds that were committed during that time. Since the median duration of the frauds in this study was 12 months, many of the frauds analyzed were perpetrated before the COVID-19 pandemic began. Consequently, we anticipate seeing additional pandemic-related factors underlying the cases in our 2024 study, when many more frauds that began during the pandemic will have been detected and investigated.

BACKGROUND CHECKS

Background checks are an important tool in the fight against fraud, as they can prevent organizations from hiring individuals with known histories of misconduct. However, as noted in Figure 26, 43% of victim organizations did not run a background check on the perpetrator prior to hiring. Further, of the background checks that were run on the perpetrators, 21% revealed previous red flags, meaning that the individuals were hired even with known instances of misconduct or other concerns.

We also asked about the specific types of background checks that the victim organizations conducted. As shown in Figure 28, the two most common forms of background checks run by the organizations were employment history checks (45%) and criminal background checks (40%).

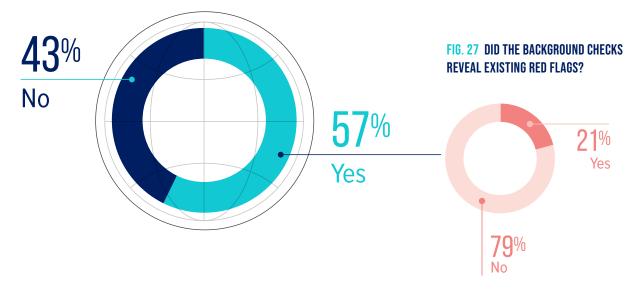


FIG. 26 WAS A BACKGROUND CHECK RUN ON THE PERPETRATOR PRIOR TO HIRING?

FIG. 28 WHAT TYPES OF BACKGROUND CHECKS WERE RUN ON THE PERPETRATOR PRIOR TO HIRING?

Employment history	45%
No background checks	43%
Criminal checks	40%
Reference checks	30%
Education verification	30%
Credit checks	21%
Drug screening	11%
Other	2%

INTERNAL CONTROL WEAKNESSES THAT CONTRIBUTED TO THE FRAUD

Even in organizations with anti-fraud programs, fraud can and does happen. To better understand the factors that can lead to occupational fraud, we asked survey participants to identify the primary internal control weakness that allowed the fraud case to occur. The most common factor underlying the occupational frauds in our study was a lack of internal controls; 29% of victim organizations did not have adequate controls in place to prevent the fraud from occurring. Another 20% of cases involved an override of existing internal controls, meaning the victim organization had implemented mechanisms to protect against fraud, but the perpetrator was able to circumvent those controls. Together, this data shows that nearly half of the frauds in our study likely could have been prevented with a stronger system of anti-fraud controls.

Individuals with different levels of authority within an organization tend to have different amounts of access and influence, which can affect how they are able to perpetrate fraud. We analyzed how the internal control weaknesses varied by the position of the perpetrator, as shown in Figure 30. Not surprisingly, a poor tone at the top was the most common factor underlying schemes perpetrated by owners and executives. The most common control weakness for both staff-level employees and mid-level managers was a lack of internal controls (34% and 29%, respectively).

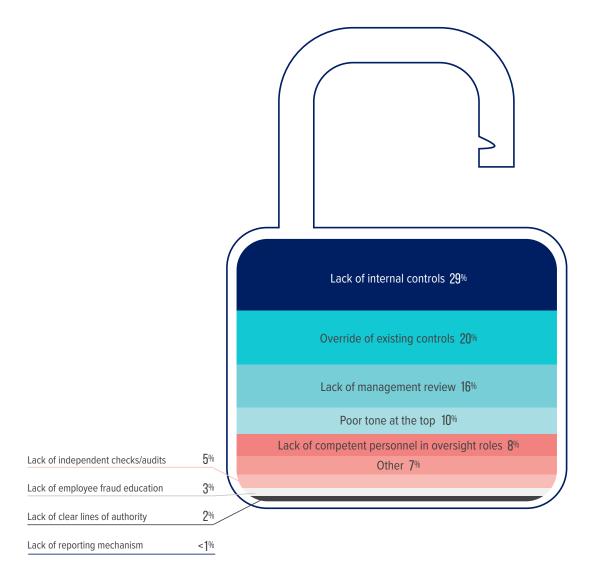
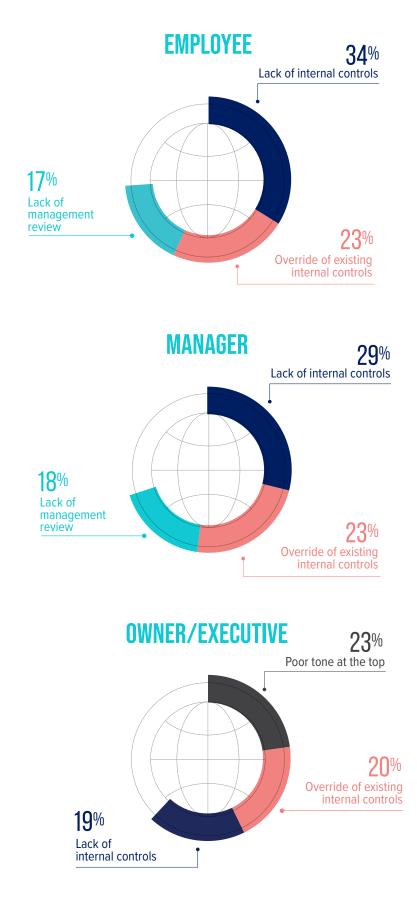


FIG. 29 WHAT ARE THE PRIMARY INTERNAL CONTROL WEAKNESSES THAT CONTRIBUTE TO OCCUPATIONAL FRAUD?

FIG. 30 TOP 3 INTERNAL CONTROL WEAKNESSES BASED ON THE PERPETRATOR'S POSITION



PERPETRATORS

Participants in our survey answered several questions about the fraud perpetrators' job details, basic demographics, prior misconduct, and behavioral warning signs that might have indicated fraud. This information helps us identify common characteristics and behaviors of fraud perpetrators, which can be used by organizations to assess relative levels of risk among their own employees.

PERPETRATOR'S POSITION

Our data shows a strong correlation between the perpetrator's level of authority and the size of the fraud. Owner/executives only committed 23% of the frauds in our study, but the median loss in those cases (USD 337,000) was significantly larger than losses caused by managers. In turn, managers caused much larger losses than staff-level employees. This finding is consistent with our past studies, all of which have shown that fraud losses tend to be larger in schemes committed by higher-level fraudsters.

Frauds committed by higher-level perpetrators also typically take longer to detect. As shown in Figure 32, the median duration of a fraud committed by an owner/executive was 18 months, whereas frauds committed by staff-level employees had a median duration of only eight months. One of the challenges of dealing with fraud committed by high-level perpetrators is that these individuals often have the ability to evade or override controls that would otherwise detect fraud. Additionally, fraudsters in positions of authority might bully or intimidate employees below them, which can deter those employees from reporting or investigating suspected wrongdoing. Both of these factors might contribute to the longer duration of frauds committed by high-level employees.

Owners/executives committed only 23% of occupational frauds, but they caused the largest losses. Owner/executive \$337,000 Manager \$125,000 Employee \$50,000



displayed at least one BEHAVIORAL RED FLAG OF FRAUD

FIG. 31 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY RELATE TO OCCUPATIONAL FRAUD?



FIG. 32 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY RELATE TO SCHEME DURATION?

Median duration



PERPETRATOR'S TENURE

The perpetrator's length of service with the victim organization is also strongly correlated with the size of the fraud. In our study, fraudsters with at least ten years of tenure at the victim organization caused median losses of USD 250,000. This was five times the median loss caused by perpetrators with less than one year of tenure.

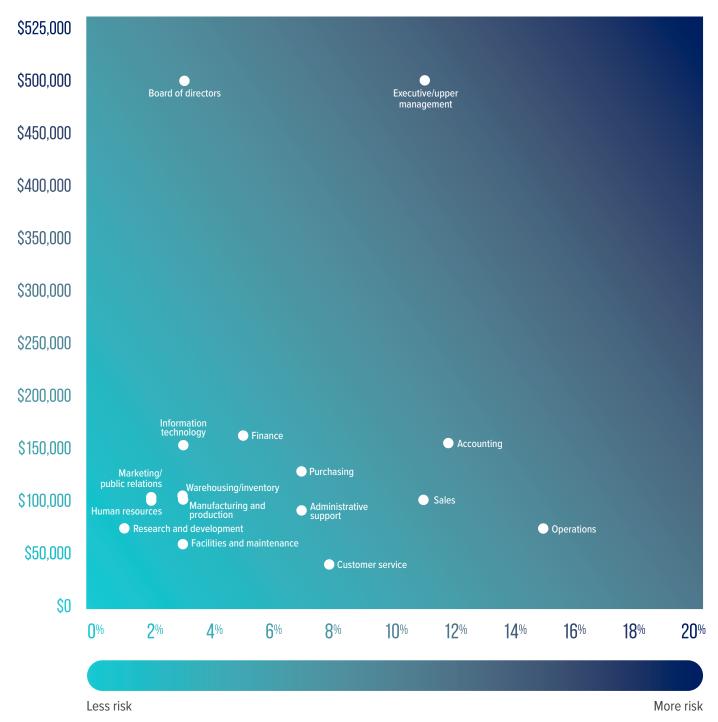
FIG. 33 HOW DOES THE PERPETRATOR'S TENURE RELATE TO OCCUPATIONAL FRAUD?



PERPETRATOR'S DEPARTMENT

In order to allocate anti-fraud controls and resources most effectively, it is important to understand the relative risks of occupational fraud throughout an organization. The heat map in Figure 34 shows the frequency and median loss of fraud schemes based on the departments in which fraud perpetrators worked. We can see, for example, that frauds committed by executives and upper management were not only common (11% of cases) but also costly (USD 500,000 median loss), making this a very high-risk area in general. Accounting and sales departments were also both associated with a high percentage of cases (12% and 11%, respectively) while also causing six-figure median losses.

FIG. 34 WHAT DEPARTMENTS POSE THE GREATEST RISK FOR OCCUPATIONAL FRAUD?



Department*	Number of cases	Percent of cases	Median loss
Operations	273	15%	\$74,000
Accounting	230	12%	\$155,000
Executive/upper management	206	11%	\$500,000
Sales	203	11%	\$100,000
Customer service	140	8%	\$40,000
Purchasing	131	7%	\$129,000
Administrative support	131	7%	\$90,000
Finance	95	5%	\$160,000

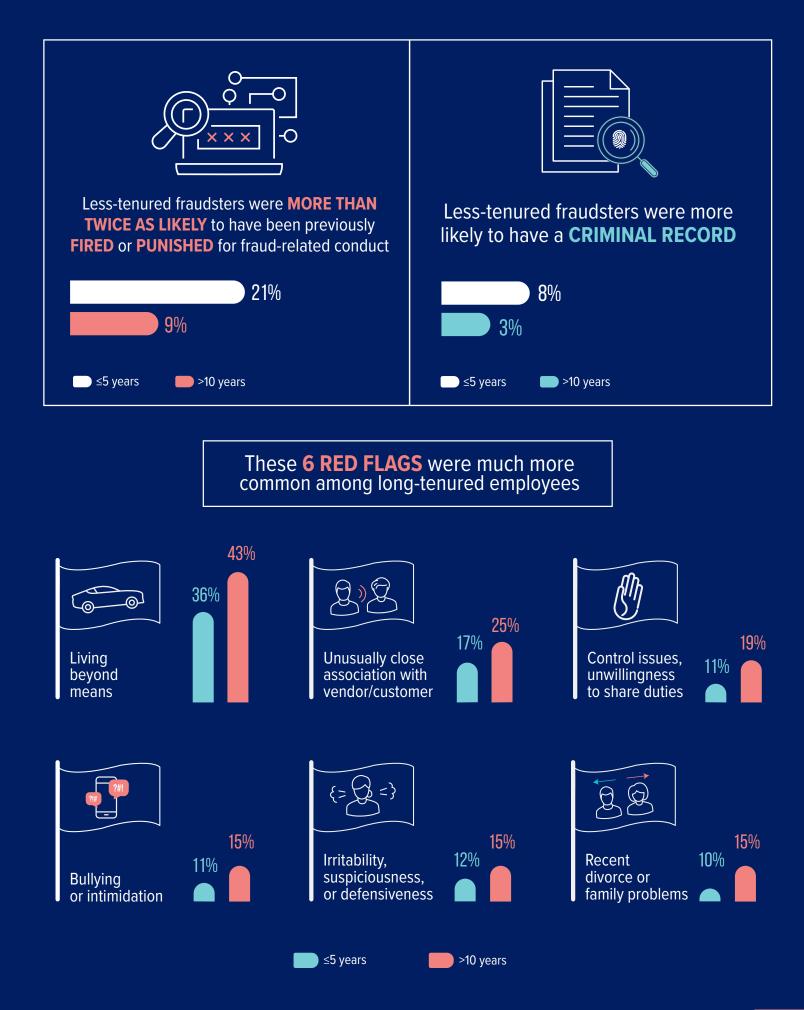
Department*	Number of cases	Percent of cases	Median loss
Board of directors	58	3%	\$500,000
Information technology	53	3%	\$150,000
Warehousing/inventory	58	3%	\$116,000
Manufacturing and production	63	3%	\$100,000
Facilities and maintenance	49	3%	\$58,000
Marketing/public relations	35	2%	\$112,000
Human resources	29	2%	\$100,000
Research and development	17	1%	\$75,000

*Departments with fewer than 10 cases were omitted.

HOW DOES TENURE AFFECT FRAUD RISK?

The ability to commit fraud is a skill, and our data suggests that the longer a person works for a company, the better they become at fraud. In this infographic, we compare fraudsters with long tenure (more than 10 years) to those with moderate-to-low tenure (5 years or less).





SCHEMES BASED ON PERPETRATOR'S DEPARTMENT

The eight departments shown in Figure 35 accounted for 76% of all occupational frauds in our study. In this chart, we have identified the frequency of various types of occupational fraud that occurred in each department. Boxes are shaded from light to dark, with darker boxes indicating higher-frequency schemes. This information can help organizations assess fraud risk and implement effective anti-fraud controls in these high-risk areas.

FIG. 35 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN HIGH-RISK DEPARTMENTS?

DEPARTMENT	Cases	Billing	Cash larceny	Cash on hand	Check and payment tampering	Corruption	Expense reimbursements	Financial statement fraud	Noncash	Payroll	Register disbursements	Skimming
Operations	273	16%	7%	8%	11%	48%	9%	6%	16%	8%	1%	6%
Accounting	230	24%	15%	13%	29%	33%	10%	10%	7%	16%	3%	19%
Executive/upper management	206	31%	9%	10%	12%	65%	18%	22%	21%	13%	2%	12%
Sales	203	11%	6%	7%	2%	51%	8%	6%	18%	4%	2%	11%
Customer service	140	8%	10%	16%	11%	44%	6%	7%	17%	6%	3%	10%
Administrative support	131	23%	8%	15%	15%	37%	16%	5%	12%	12%	5%	10%
Purchasing	131	27%	1%	4%	2%	82%	5%	2%	14%	3%	0%	2%
Finance	95	26%	7%	11%	12%	48%	20%	14%	12%	7%	3%	12%

Less risk

More risk



PERPETRATOR'S GENDER

As Figure 36 illustrates, 73% of occupational fraud perpetrators were male. This is consistent with our prior studies, all of which have found there to be a significant gender disparity in terms of occupational fraud frequency. However, the gap in median loss between men and women in this study was much smaller than in our previous research. Median losses caused by men (USD 125,000) were only 25% higher than median losses caused by women (USD 100,000). By comparison, in each of our prior studies, median losses caused by male perpetrators were at least 75% higher than median losses caused by female perpetrators (see A Decade of Occupational Fraud infographic, page 18).



FIG. 36 HOW DOES THE PERPETRATOR'S GENDER RELATE TO OCCUPATIONAL FRAUD?

PERPETRATOR'S GENDER BASED ON REGION

The gender disparity among occupational fraudsters varied significantly based on geographic region. In the United States and Canada, for example, female perpetrators accounted for 38% of occupational frauds, while in Southern Asia and the Middle East and North Africa, female fraudsters committed a far smaller percentage of all schemes (5% and 10%, respectively).

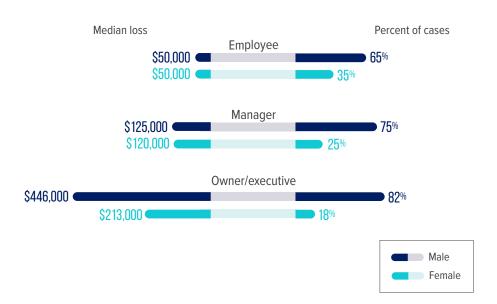
FIG. 37 HOW DOES THE GENDER DISTRIBUTION OF PERPETRATORS VARY BY REGION?



POSITION OF PERPETRATOR BASED ON GENDER

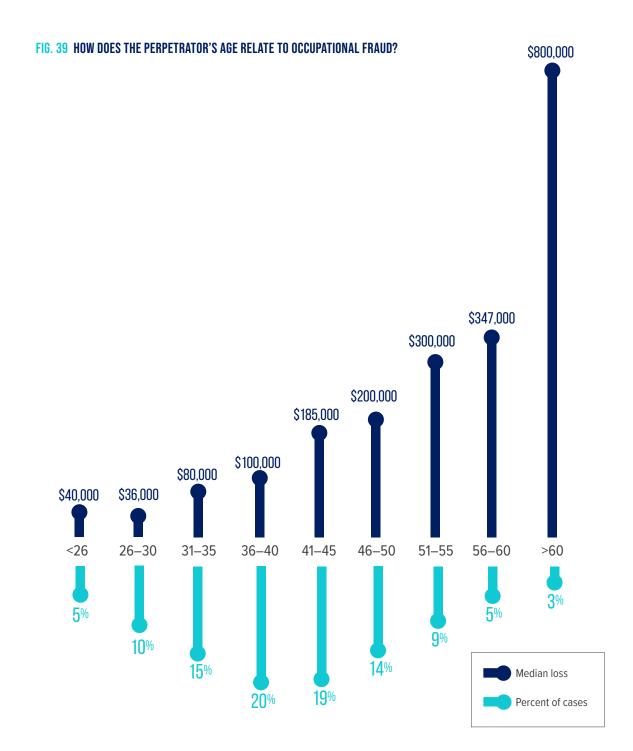
When we analyzed the cases in our study based on both the fraudster's gender and job position, we found that men committed a much larger percentage of frauds than women did at all three levels of authority (staff-level employee, manager, and owner/executive). Interestingly, median losses for male and female perpetrators were almost identical in the employee and manager categories. It was only in the owner/executive category that fraud losses caused by men significantly exceeded those caused by women.

FIG. 38 HOW DO GENDER DISTRIBUTION AND MEDIAN LOSS VARY BASED ON THE PERPETRATOR'S LEVEL OF AUTHORITY?



PERPETRATOR'S AGE

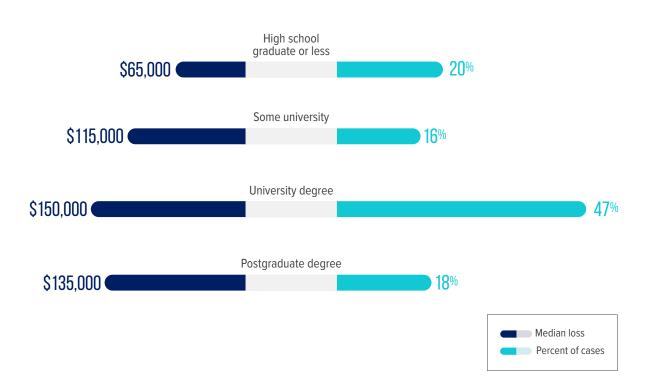
The age distribution of fraud perpetrators in our study resembles a bell curve with the majority of frauds (54%) having been committed by people between the ages of 31 and 45. Median losses, on the other hand, tended to directly correlate with age. Only 3% of fraudsters were over the age of 60, but the median loss in this group was USD 800,000, which far surpassed any other age category.



PERPETRATOR'S EDUCATION LEVEL

As seen in Figure 40, 65% of occupational fraud perpetrators had a university degree or higher. Median losses were also larger among this group compared to those with lower education levels. Generally, we would expect losses to correlate to educational background because those with higher levels of authority also tend to have higher levels of education.

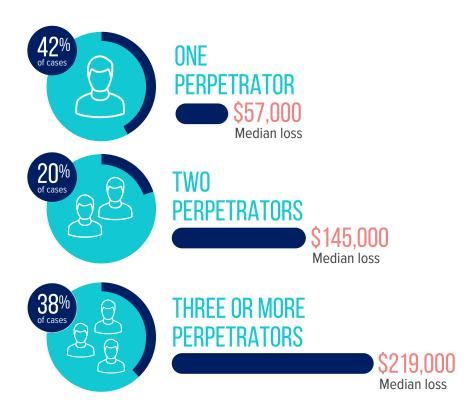
FIG. 40 HOW DOES THE PERPETRATOR'S EDUCATION LEVEL RELATE TO OCCUPATIONAL FRAUD?



COLLUSION BY MULTIPLE PERPETRATORS

The majority of frauds in our study (58%) were committed by two or more perpetrators acting in collusion. As Figure 41 illustrates, median losses tend to rise significantly when more than one person conspires to commit fraud. One likely reason for larger losses in collusive schemes is that multiple perpetrators working together may be able to circumvent controls based on separated duties and independent verification of transactions. Interestingly, however, the median duration of frauds in all three categories was the same (12 months), meaning frauds committed by multiple perpetrators tended to be caught just as quickly as frauds committed by single perpetrators.

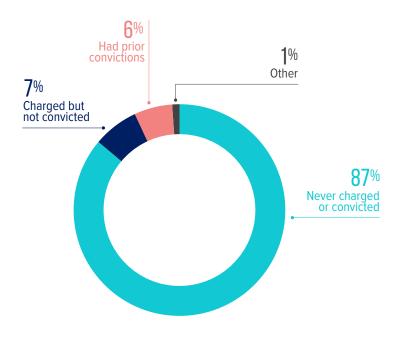
FIG. 41 HOW DOES THE NUMBER OF PERPETRATORS IN A SCHEME RELATE TO OCCUPATIONAL FRAUD?



PERPETRATOR'S CRIMINAL BACKGROUND

Only 6% of perpetrators in our study had a prior fraud-related conviction, which is consistent with our findings in previous studies. It is worth noting, however, that 42% of cases in our study were not reported to law enforcement (see Response to Fraud infographic, page 63), which is also consistent with prior findings. Because so many frauds go unreported, it is very likely that the true number of repeat offenders is higher than the 6% who have prior convictions.

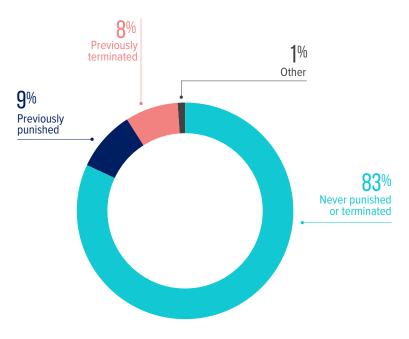
FIG. 42 DO PERPETRATORS TEND TO HAVE PRIOR FRAUD CONVICTIONS?



PERPETRATOR'S EMPLOYMENT HISTORY

As seen in Figure 43, 83% of fraudsters in our study had no prior record of having been punished or terminated by an employer for fraud-related conduct. But similar to the criminal conviction data in Figure 42, it is possible that this overstates the true number of first-time offenders. As seen in Figure 47 on page 62, 7% of fraudsters in our study were not punished, 11% were permitted to resign, and 10% signed settlement agreements with the victim organization. This indicates that a considerable number of fraudsters may have no employment disciplinary record for fraud even after having been caught.

FIG. 43 DO PERPETRATORS TEND TO HAVE PRIOR EMPLOYMENT-RELATED DISCIPLINARY ACTIONS FOR FRAUD?

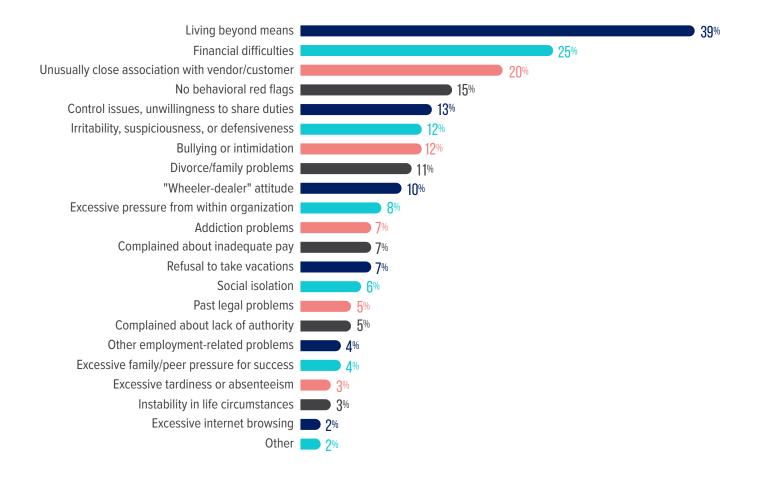


BEHAVIORAL RED FLAGS DISPLAYED BY PERPETRATORS

When a person is engaged in occupational fraud, that person will often display certain behavioral traits that tend to be associated with fraudulent conduct. The median duration of a fraud in our study was 12 months, which means that for a full year before the typical fraud is detected, the perpetrator may be exhibiting warning signs that could help the victim organization discover the crime.

We presented survey respondents with a list of 20 common behavioral red flags of fraud⁴, and asked which, if any, of these red flags were displayed by the perpetrator before the fraud was eventually detected. Figure 44 shows the results of this analysis. At least one red flag had been identified in 85% of the cases in our study, and multiple red flags were present in 51% of cases. The eight most common red flags were: (1) living beyond means; (2) financial difficulties; (3) unusually close association with a vendor or customer; (4) excessive control issues or unwillingness to share duties; (5) unusual irritability, suspiciousness, or defensiveness; (6) bullying or intimidation; (7) recent divorce or family problems; and (8) a general "wheeler-dealer" attitude involving shrewd or unscrupulous behavior. At least one of these eight red flags was identified in 76% of all cases.

FIG. 44 HOW OFTEN DO PERPETRATORS EXHIBIT BEHAVIORAL RED FLAGS?



⁴We added three new red flags to our survey this year that were not included in this question in previous studies: bullying or intimidation; excessive tardiness or absenteeism; and excessive internet browsing.

HUMAN RESOURCES-RELATED RED FLAGS

Figure 46 includes a list of factors that might relate to the fraudsters' job performance or job security as would likely be noted in human resources (HR) records. We refer to these as HR-related red flags. Each of these factors could potentially cause financial stress or resentment toward an employer, which might impact a person's decision to commit fraud. As shown in Figure 45, 50% of fraudsters had exhibited at least one HR-related red flag prior to or during the time of their frauds. The three most common were fear of job loss, poor performance evaluations, and having been denied a raise or promotion. Each of these flags was cited in more than 10% of all cases.

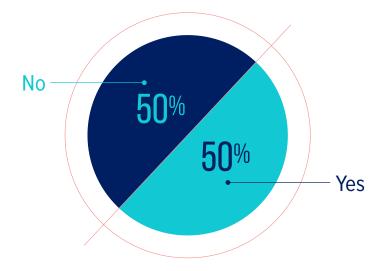
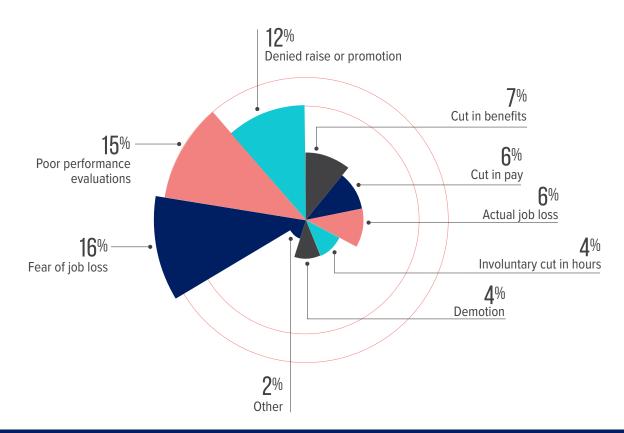


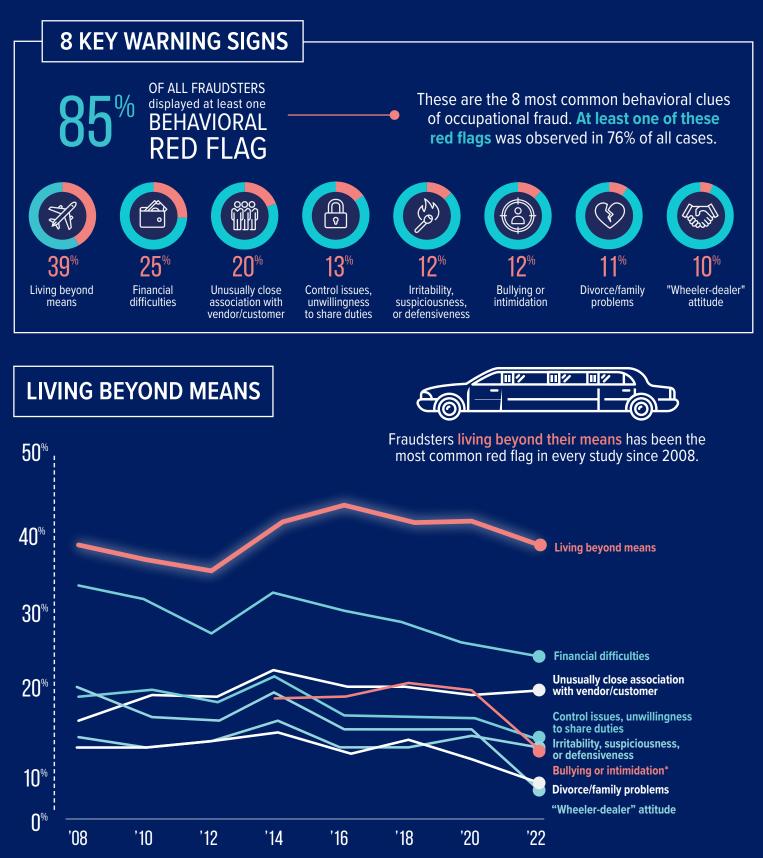
FIG. 45 DO FRAUD PERPETRATORS EXPERIENCE NEGATIVE HR-RELATED ISSUES PRIOR TO OR DURING THEIR FRAUDS?

FIG. 46 WHICH HR-RELATED ISSUES ARE MOST COMMONLY EXPERIENCED BY FRAUD PERPETRATORS?

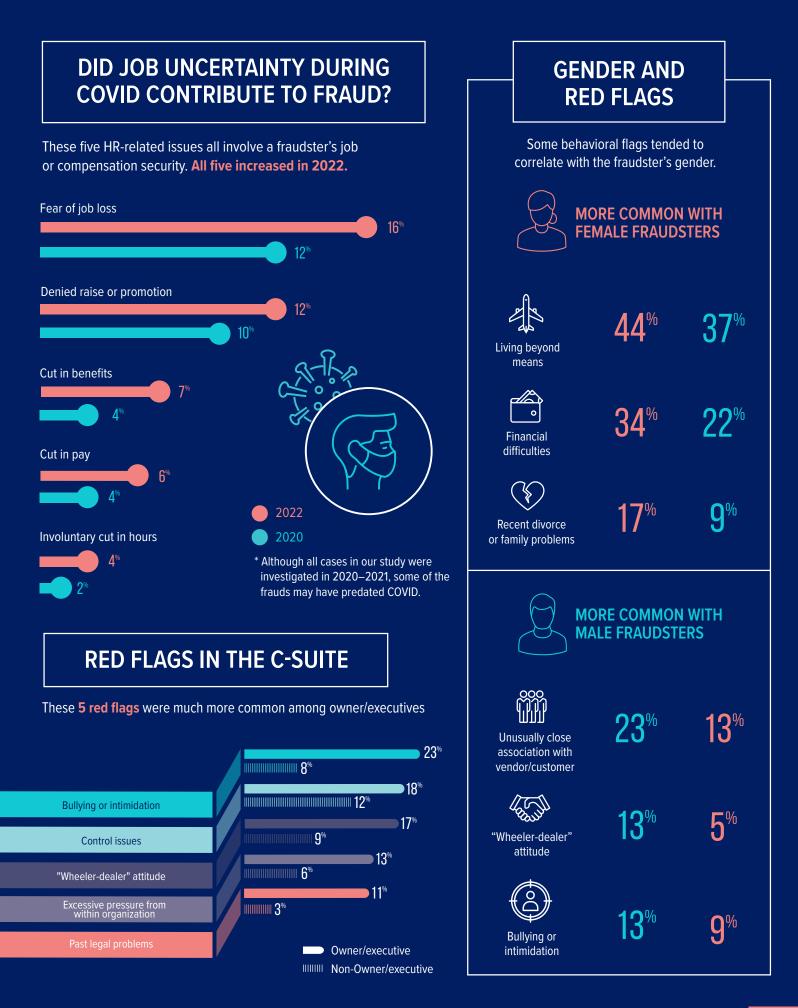


BEHAVIORAL RED FLAGS OF FRAUD

Recognizing the behavioral clues displayed by fraudsters can help organizations more effectively detect fraud and minimize their losses.



* "Bullying or intimidation" was included as an option in our survey beginning in 2014 and was asked in a separate question prior to 2022.



CASE RESULTS

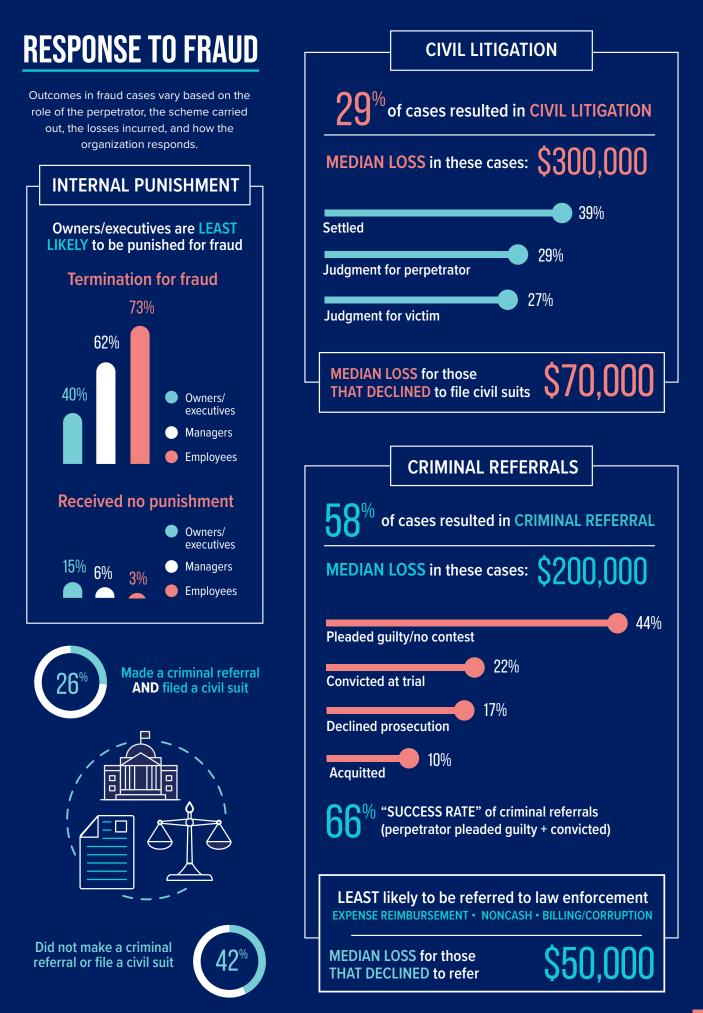
We asked survey participants how the victim organizations responded to the discovery of fraud and the outcome those responses produced. This information gives an idea of how organizations handle internal discipline of employees found to be committing fraud, the types of civil and criminal legal repercussions for fraudsters who faced litigation as a result of their actions, and the chances for recovering funds lost to fraud.

INTERNAL ACTION TAKEN AGAINST PERPETRATORS

Once an organization has identified fraud and determined who was responsible, it must decide whether to punish the perpetrator(s) and how. As in our previous studies, termination was by far the most common punishment faced by perpetrators (61% of cases). In 11% of cases, the perpetrator was permitted or required to resign in lieu of termination, and in 12% of cases, the perpetrator had already left the victim organization before the fraud was discovered.

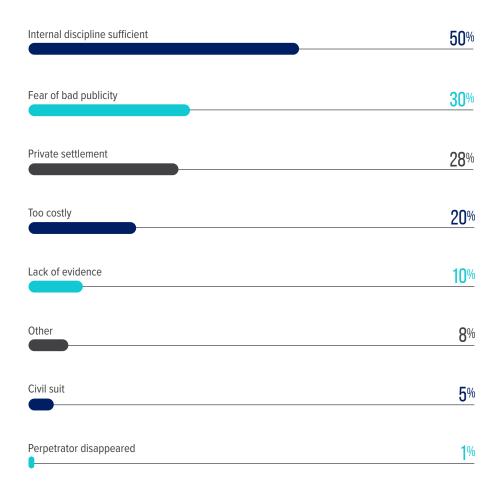
FIG. 47 HOW DO VICTIM ORGANIZATIONS PUNISH FRAUD PERPETRATORS?

Termination	61%
Perpetrator was no longer with organization	12%
Probation or suspension	12%
Permitted or required resignation	11%
Settlement agreement	10%
No punishment	7%
Other	5%



As illustrated in the Response to Fraud infographic on page 63, not all fraud cases end up in civil or criminal courts. Moreover, not all cases that do involve litigation lead to negative consequences for fraudsters. To better understand organizations' rationales for not pursuing criminal charges against fraudsters, we asked respondents whose organizations did not refer their cases to law enforcement why they chose not to. Internal discipline being deemed sufficient was the most commonly cited reason (50%), with fear of bad publicity ranking second (30%), and private settlements third (28%).

FIG. 48 WHY DO ORGANIZATIONS DECLINE TO REFER CASES TO LAW ENFORCEMENT?







58% of cases were referred to law enforcement



66% of cases referred to law enforcement resulted in a conviction 2222 2222 50[%]

of organizations that didn't refer cases to law enforcement cited internal discipline as the reason

RECOVERING FRAUD LOSSES

One of the primary motivating factors for management in determining an organization's response to fraud is the ability to recover funds and assets lost to the fraud. Unfortunately, in more than half of the cases in our study (52%), the victim organization did not recover any of its fraud losses. To determine whether the geographic location of the organization was correlated with success in recovering fraud losses, we analyzed the responses by region. Based on our findings, recovering fraud losses proved to be challenging worldwide. Only in the Middle East and North Africa (52%), Southern Asia (60%), and the Asia-Pacific (51%) regions were more than half of victim organizations able to recover any fraud losses. In every region, at least 40% of organizations recovered nothing.



of victim organizations DID NOT RECOVER any fraud losses.

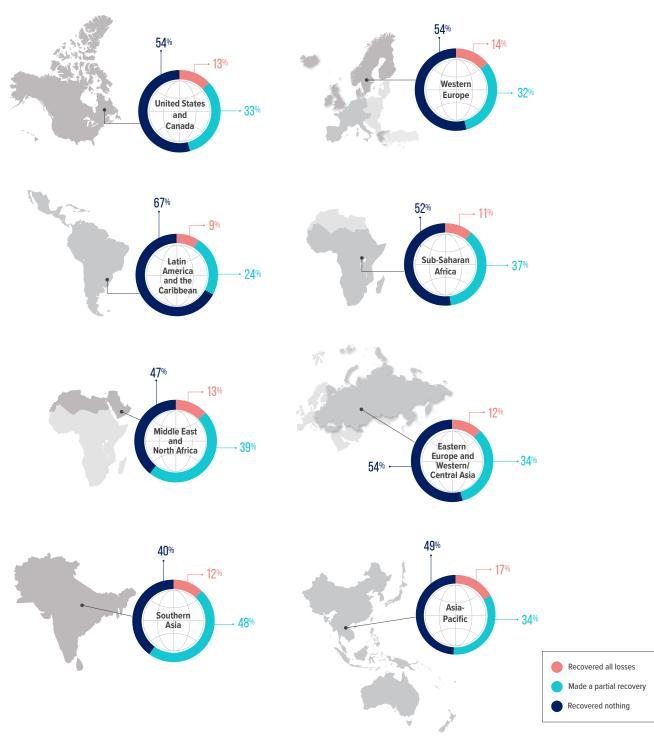


FIG. 49 HOW DID THE RECOVERY OF FRAUD LOSSES VARY BY REGION?

METHODOLOGY

Occupational Fraud 2022: A Report to the Nations is based on the results of the ACFE 2021 *Global Fraud Survey*, an online survey opened to 53,118 Certified Fraud Examiners (CFEs) conducted from July 2021 to September 2021.

As part of the survey, respondents were asked to provide a narrative description of the single largest occupational fraud case they had investigated since January 2020. Respondents were then presented with questions regarding the details of the fraud case, including information about the perpetrator, the victim organization, and the methods of fraud employed, as well as fraud trends in general. (Respondents were not asked to identify the perpetrator or the victim.)

We received 7,890 total responses to the survey, 2,110 of which were usable for purposes of the report. The data contained herein is based solely on the information provided in these 2,110 survey responses.

CASES SUBMITTED WERE REQUIRED TO MEET THE FOLLOWING FOUR CRITERIA:

- 1. The case must have involved occupational fraud (i.e., fraud committed by a person against the organization for which they work).
- 2. The investigation must have occurred between January 2020 and the time of survey participation.
- 3. The investigation must have been complete at the time of survey participation.
- 4. The respondent must have been reasonably sure the perpetrator(s) was (were) identified.

ANALYSIS METHODOLOGY

PERCENTAGES

In calculating the percentages discussed throughout this report, we used the total number of complete and relevant responses for the question(s) being analyzed. Specifically, we excluded any blank responses or instances where the participant indicated that they did not know the answer to a question. Consequently, the total number of cases included in each analysis varies.

In addition, several survey questions allowed participants to select more than one answer. Therefore, the sum of percentages in many figures throughout the report exceeds 100%. The sum of percentages in other figures might not be exactly 100% (i.e., it might be 99% or 101%) due to rounding of individual category data.

LOSS AMOUNTS

All loss amounts are expressed in terms of U.S. dollars, which is how respondents reported this information in the *Global Fraud Survey*.

Unless otherwise indicated, all loss amounts discussed throughout the report are calculated using median loss rather than mean, or average, loss. Using median loss provides a more conservative—and we believe more accurate—pic-ture of the typical impact of occupational fraud schemes. The statistical appendix to this report (see pages 86—88) provides a more holistic view of the losses in our study, reflecting quartiles and average loss amounts for numerous categories explored throughout the report.

Fraud examiner/investigator

To normalize the loss amounts reported to us and ensure that cases with extremely large losses were not identifiable, all average and total loss amounts reported were calculated using loss data that was winsorized at 5% (i.e., all cases in the top 2.5% and bottom 2.5% were assigned the same value as the 97.5th percentile and 2.5th percentile, respectively). Additionally, we excluded median and average loss calculations for categories for which there were fewer than ten responses.

Because the direct losses caused by financial statement frauds are typically spread among numerous stakeholders, obtaining an accurate estimate for this amount is extremely difficult. Consequently, for schemes involving financial statement fraud, we asked survey participants to provide the gross amount of the financial statement misstatement (over- or understatement) involved in the scheme. All losses reported for financial statement frauds throughout this report are based on those reported amounts.

SURVEY PARTICIPANTS

To provide context for the survey responses and to understand who investigates cases of occupational fraud, we asked respondents to provide certain information about their professional experience and qualifications.

PRIMARY OCCUPATION

The majority of survey respondents indicated that their primary profession is either a fraud examiner/investigator (40%) or an internal auditor (20%).

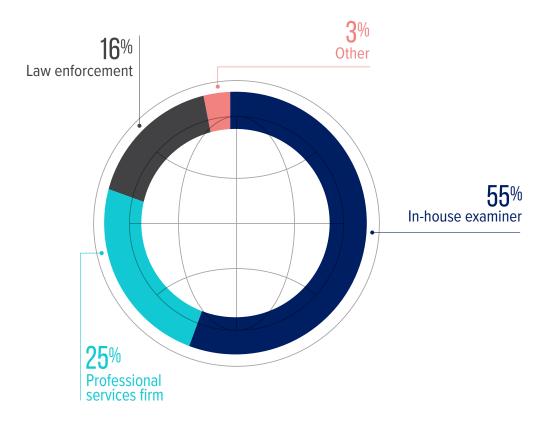
FIG. 50 WHAT WAS THE PRIMARY OCCUPATION OF SURVEY PARTICIPANTS?

	40%
Internal auditor	20 ⁹
Accounting/finance professional	6 [%]
Compliance and ethics professional	6 [%]
Law enforcement	5%
Risk and controls professional	5%
Corporate security and loss prevention	3%
Other	3%
External/independent auditor	3%
Consultant	3%
Attorney/legal professional	2%
Private investigator	1%
IT/computer forensics specialist	1%
Bank examiner	1%
Educator	1%

NATURE OF FRAUD EXAMINATION ROLE

More than half of our survey participants (55%) work in-house and conduct fraud-related engagements on behalf of a single organization (i.e., their employer), while one-quarter work for a professional services firm that conducts fraud-related engagements for client organizations. In addition, 16% work for law enforcement agencies and conduct fraud investigations of other parties under their agency's authority.

FIG. 51 WHAT WAS THE PROFESSIONAL ROLE OF THE SURVEY PARTICIPANTS?



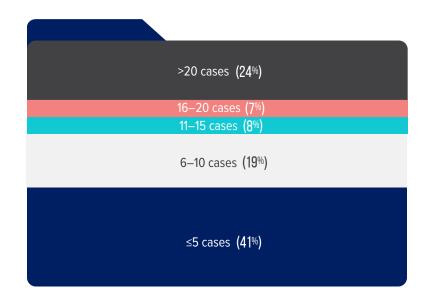
PROFESSIONAL EXPERIENCE

The CFEs who participated in the *Global Fraud Survey* had a median 11 years' experience in the fraud examination field, with 31% having more than 15 years of experience. Additionally, nearly one-quarter of participants have investigated more than 20 cases of fraud in the past two years (see Figure 53).



FIG. 52 HOW MUCH FRAUD EXAMINATION EXPERIENCE DID SURVEY PARTICIPANTS HAVE?

FIG. 53 HOW MANY FRAUD CASES HAVE SURVEY PARTICIPANTS INVESTIGATED IN THE PAST TWO YEARS?



REGIONAL FOCUS

FIG. 54 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN THE ASIA-PACIFIC REGION?

Corruption	
	57%
Billing	0.0%
	20%
Noncash	470/
	17%
Expense reimbursements	15%
Cash on hand	11%
Financial statement fraud	440/
	11%
Payroll	11%
Check and payment tampering	9%
Skimming	9%
Cash larceny	6%
Register disbursements	2%

FIG. 55 HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED IN THE ASIA-PACIFIC REGION?

Tip	58%
Internal audit	11%
Management review	10%
Document examination	5%
By accident	5%
Automated transaction/data monitoring	3%
Account reconciliation	3%
Confession	2%
External audit	2%
Surveillance/monitoring	1%
Notification by law enforcement	1%

FIG. 56 WHAT ANTI-FRAUD CONTROLS ARE THE MOST COMMON IN THE ASIA-PACIFIC REGION?

Control	Percent of cases
External audit of financial statements	88%
Code of conduct	84%
Internal audit department	82%
Hotline	80%
Management certification of financial statements	77%
Fraud training for employees	76%
Independent audit committee	75%
Management review	75%
External audit of internal controls over financial reporting	73%
Anti-fraud policy	72%
Fraud training for managers/executives	69%
Employee support programs	59%
Dedicated fraud department, function, or team	55%
Formal fraud risk assessments	54%
Proactive data monitoring/analysis	52%
Surprise audits	46%
Job rotation/mandatory vacation	31%
Rewards for whistleblowers	14%

FIG. 57 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY Relate to occupational fraud in the Asia-Pacific region?



FIG. 58 CASES BY COUNTRY IN THE Asia-pacific region

Country	Number of cases
American Samoa	2
Australia	38
China	33
Fiji	1
Hong Kong	13
Indonesia	23
Laos	1
Malaysia	25
Micronesia	1
New Zealand	6
Papua New Guinea	3
Philippines	12
Singapore	13
Solomon Islands	1
South Korea	2
Taiwan	3
Thailand	9
Vietnam	8
TOTAL CASES	194

MEDIAN LOSS: **USD 121,000**



REGIONAL FOCUS

EASTERN EUROPE AND WESTERN/CENTRAL ASIA



FIG. 59 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN EASTERN EUROPE AND WESTERN/CENTRAL ASIA?

Corruption	C /10/-
	64%
Billing	000/
	26%
Noncash	00%
	23%
Financial statement fraud	
	9%
Skimming	
	8%
Cash on hand	
	6%
Expense reimbursements	
	6%
Check and payment tampering	
	5%
Payroll	
	5%
Cash larceny	
	4%
Register disbursements	
	4%

FIG. 60 HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED IN EASTERN EUROPE AND WESTERN/CENTRAL ASIA?

Tip	36%
Internal audit	22%
	<u> </u>
Management review	14%
Document examination	10%
Automated transaction/data monitoring	<u>5%</u>
External audit	4%
By accident	<u>3%</u>
Surveillance/monitoring	3%
Other	3%
Notification by law enforcement	1%

FIG. 61 WHAT ANTI-FRAUD CONTROLS ARE THE MOST COMMON IN EASTERN EUROPE AND WESTERN/CENTRAL ASIA?

Control	Percent of cases
Code of conduct	83%
External audit of financial statements	83%
Internal audit department	81%
Hotline	75%
Management review	71%
Independent audit committee	69%
Management certification of financial statements	68%
External audit of internal controls over financial reporting	66%
Fraud training for employees	62%
Fraud training for managers/executives	60%
Dedicated fraud department, function, or team	55%
Anti-fraud policy	52%
Surprise audits	46%
Proactive data monitoring/analysis	40%
Formal fraud risk assessments	37%
Employee support programs	21%
Job rotation/mandatory vacation	21%
Rewards for whistleblowers	12%

FIG. 62 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY Relate to occupational fraud in eastern europe and Western/central asia?

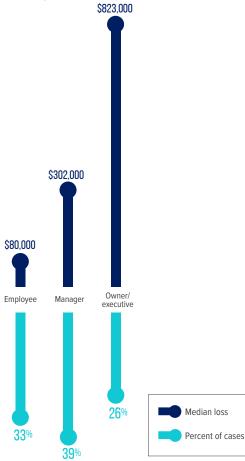


FIG. 63 CASES BY COUNTRY IN EASTERN EUROPE AND WESTERN/CENTRAL ASIA

Country	Number of cases
Albania	3
Azerbaijan	3
Bulgaria	5
Croatia	1
Czech Republic	8
Estonia	1
Hungary	1
Kazakhstan	2
Moldova	1
Poland	9
Romania	4
Russia	11
Serbia	6
Slovakia	2
Slovenia	1
Tajikistan	1
Turkey	8
Ukraine	11
TOTAL CASES	78

MEDIAN LOSS: **USD 190,000**



REGIONAL FOCUS LATIN AMERICA AND THE CARIBBEAN

FIG. 64 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN LATIN AMERICA AND THE CARIBBEAN?

Corruption	
	59%
Financial statement fraud	
	17%
Noncash	
	15%
Billing	
	13%
Cash on hand	
	9%
Skimming	
	7%
Check and payment tampering	
	5%
Cash larceny	
	5%
Payroll	4 04
	4%
Register disbursements	00/
	3%
Expense reimbursements	00/
•	2%

FIG. 65 HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED IN LATIN AMERICA AND THE CARIBBEAN?

Tip	41%
Internal audit	23%
Management review	9%
By accident	6%
Automated transaction/data monitoring	
Account reconciliation	<u> </u>
	4%
External audit	4%
Surveillance/monitoring	2%
Notification by law enforcement	2%
Document examination	1%
Other	1%

FIG. 66 WHAT ANTI-FRAUD CONTROLS ARE THE MOST COMMON IN LATIN AMERICA AND THE CARIBBEAN?

Control	Percent of cases
Code of conduct	84%
Internal audit department	81%
External audit of financial statements	76%
Management review	70%
Management certification of financial statements	69%
Independent audit committee	69%
Hotline	67%
External audit of internal controls over financial reporting	65%
Fraud training for managers/executives	52%
Anti-fraud policy	52%
Fraud training for employees	52%
Employee support programs	50%
Dedicated fraud department, function, or team	35%
Formal fraud risk assessments	32%
Proactive data monitoring/analysis	30%
Surprise audits	28%
Job rotation/mandatory vacation	21%
Rewards for whistleblowers	5%

FIG. 67 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY RELATE TO OCCUPATIONAL FRAUD IN LATIN AMERICA AND THE CARIBBEAN?

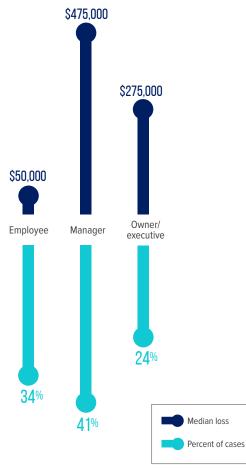


FIG. 68 CASES BY COUNTRY IN LATIN AMERICA AND THE CARIBBEAN

Country	Number of cases
Antigua and Barbuda	2
Argentina	8
Aruba	5
Bahamas	1
Barbados	2
Belize	2
Bermuda	1
Brazil	12
Chile	4
Colombia	7
Costa Rica	4
Curaçao	1
Guyana	1
Haiti	1
Jamaica	7
Mexico	22
Nicaragua	1
Panama	1
Peru	5
Suriname	2
Trinidad and Tobago	4
Uruguay	1
Virgin Islands, British	1
TOTAL CASES	95

MEDIAN LOSS: **USD 175,000**



REGIONAL FOCUS MIDDLE EAST AND NORTH AFRICA



FIG. 69 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN THE MIDDLE EAST AND NORTH AFRICA?

Corruption	500/
	59%
Noncash	170/
	17%
Billing	100/
	16%
Expense reimbursements	0.0/
	9%
Payroll	
	9%
Skimming	0.1
	9%
Financial statement fraud	0.1
	8%
Cash on hand	70/
	7%
Cash larceny	7%
	190
Check and payment tampering	C 0/
	6%
Register disbursements	/ 0/
	4%

FIG. 70 HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED IN THE MIDDLE EAST AND NORTH AFRICA?

Tip	41%
Internal audit	0.4%
	24%
Management review	9%
Account reconciliation	
	7%
External audit	5%
Document examination	4 %
Automated transaction/data monitoring	4%
Notification by law enforcement	2%
Confession	1%
By accident	1%
Other	1%

FIG. 71 WHAT ANTI-FRAUD CONTROLS ARE THE MOST COMMON IN THE MIDDLE EAST AND NORTH AFRICA?

Control	Percent of cases
External audit of financial statements	89%
Internal audit department	86%
Code of conduct	82%
Management certification of financial statements	79%
Management review	71%
Independent audit committee	71%
External audit of internal controls over financial reporting	70%
Hotline	68%
Anti-fraud policy	60%
Fraud training for employees	58%
Fraud training for managers/executives	54%
Surprise audits	48%
Dedicated fraud department, function, or team	44%
Formal fraud risk assessments	43%
Proactive data monitoring/analysis	43%
Employee support programs	32%
Job rotation/mandatory vacation	24%
Rewards for whistleblowers	14%

FIG. 72 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY RELATE TO OCCUPATIONAL FRAUD IN THE MIDDLE EAST AND NORTH AFRICA?

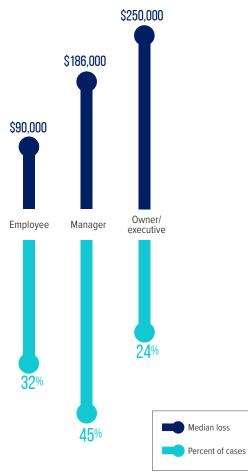


FIG. 73 CASES BY COUNTRY IN THE MIDDLE EAST AND NORTH AFRICA

Country	Number of cases
Algeria	1
Bahrain	3
Cyprus	4
Egypt	8
Iraq	1
Jordan	4
Kuwait	8
Lebanon	3
Malta	2
Oman	4
Qatar	7
Saudi Arabia	29
Tunisia	2
United Arab Emirates	60
Yemen	2
TOTAL CASES	138

MEDIAN LOSS: **USD 186,000**



REGIONAL FOCUS



FIG. 74 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN SOUTHERN ASIA?

Corruption	
	71%
Billing	10%
	18%
Noncash	450/
	15%
Financial statement fraud	15%
	1070
Cash on hand	12%
	1270
Cash larceny	11%
Expense reimbursements	10%
Skimming	10%
Check and payment tampering	5%
Deces II	
Payroll	4%
Posister disbursements	
Register disbursements	2%

FIG. 75 HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED IN SOUTHERN ASIA?

Tip	51%
Internal audit	10%
	16%
Document examination	9%
Management review	7%
By accident	5%
Account reconciliation	5%
External audit	3%
Surveillance/monitoring	1%
Other	1%
Notification by law enforcement	1%
Automated transaction/data monitoring	1%

FIG. 76 WHAT ANTI-FRAUD CONTROLS ARE THE MOST COMMON IN SOUTHERN ASIA?

Control	Percent of cases
External audit of financial statements	91%
Code of conduct	88%
Internal audit department	85%
External audit of internal controls over financial reporting	85%
Management certification of financial statements	84%
Independent audit committee	76%
Management review	72%
Hotline	72%
Fraud training for managers/executives	66%
Fraud training for employees	63%
Anti-fraud policy	63%
Dedicated fraud department, function, or team	53%
Surprise audits	48%
Employee support programs	45%
Formal fraud risk assessments	45%
Proactive data monitoring/analysis	42%
Job rotation/mandatory vacation	33%
Rewards for whistleblowers	24%

FIG. 77 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY RELATE TO OCCUPATIONAL FRAUD IN SOUTHERN ASIA?



FIG. 78 CASES BY COUNTRY IN SOUTHERN ASIA

Country	Number of cases
Afghanistan	7
Bangladesh	7
Bhutan	1
India	103
Nepal	1
Pakistan	10
Sri Lanka	9
TOTAL CASES	138

MEDIAN LOSS: **USD 92,000**



REGIONAL FOCUS SUB-SAHARAN AFRICA



FIG. 79 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN SUB-SAHARAN AFRICA?

Corruption	CO ^{0/}
	62%
Noncash	19%
Billing	19%
Check and payment tampering	10%
Financial statement fraud	9%
Cash on hand	8%
Skimming	7%
Expense reimbursements	6%
Payroll	5%
Cash larceny	5%
Register disbursements	1%
•	

FIG. 80 HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED IN SUB-SAHARAN AFRICA?

Tip	48%
Management review	11%
Internal audit	10%
Account reconciliation	6%
Document examination	6%
By accident	5%
Automated transaction/data monitoring	4%
External audit	4%
Notification by law enforcement	2%
Surveillance/monitoring	2%
Confession	1%
Other	<1%

FIG. 81 WHAT ANTI-FRAUD CONTROLS ARE THE MOST COMMON IN SUB-SAHARAN AFRICA?

Control	Percent of cases
Code of conduct	89%
External audit of financial statements	87%
Internal audit department	87%
Management certification of financial statements	83%
Hotline	76%
External audit of internal controls over financial reporting	76%
Independent audit committee	74%
Management review	72%
Anti-fraud policy	69%
Fraud training for employees	67%
Fraud training for managers/executives	62%
Employee support programs	58%
Dedicated fraud department, function, or team	56%
Formal fraud risk assessments	53%
Proactive data monitoring/analysis	47%
Surprise audits	47%
Job rotation/mandatory vacation	30%
Rewards for whistleblowers	18%

FIG. 82 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY RELATE TO OCCUPATIONAL FRAUD IN SUB-SAHARAN AFRICA?



FIG. 83 CASES BY COUNTRY IN SUB-SAHARAN AFRICA

Country	Number of cases
Angola	2
Botswana	5
Burkina Faso	1
Burundi	2
Cameroon	4
Democratic Republic of the Congo	11
Ethiopia	1
Ghana	15
Kenya	49
Lesotho	5
Liberia	4
Madagascar	4
Malawi	9
Mali	1
Mauritius	5
Mozambique	2
Namibia	3
Niger	1
Nigeria	61
Rwanda	2
Senegal	3
Seychelles	1
Sierra Leone	2
Somalia	4
South Africa	188
South Sudan	1
Sudan	1
Swaziland	1
Tanzania	8
Тодо	1
Uganda	16
Zambia	5
Zimbabwe	11
TOTAL CASES	429

MEDIAN LOSS: USD 100,000



REGIONAL FOCUS UNITED STATES AND CANADA



FIG. 84 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN THE UNITED STATES AND CANADA?

Corruption	
	37%
Billing	0.4%
	24%
Noncash	10%
	18%
Expense reimbursements	17 04
	17%
Payroll	100/
	16%
Check and payment tampering	15%
	1070
Skimming	10%
	13%
Cash on hand	11%
	11/0
Cash larceny	10%
Financial statement fraud	8%
	0
Register disbursements	4%

FIG. 85 HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED IN THE UNITED STATES AND CANADA?

Tip	32%
Internal audit	18%
Management review	16%
	10
By accident	7%
Surveillance/monitoring	5%
	0,0
Document examination	5%
	0,0
Automated transaction/data monitoring	5%
	0,0
Account reconciliation	5%
	0
External audit	4%
Notification by law enforcement	2%
	<u> </u>
Confession	1%
•	1/0
Other	1%
	170

FIG. 86 WHAT ANTI-FRAUD CONTROLS ARE THE MOST COMMON IN THE UNITED STATES AND CANADA?

Control	Percent of cases
Code of conduct	74%
External audit of financial statements	72%
Employee support programs	66%
Internal audit department	66%
Management certification of financial statements	65%
External audit of internal controls over financial reporting	63%
Hotline	63%
Management review	63%
Independent audit committee	56%
Fraud training for employees	55%
Fraud training for managers/executives	55%
Anti-fraud policy	51%
Proactive data monitoring/analysis	43%
Formal fraud risk assessments	42%
Dedicated fraud department, function, or team	41%
Surprise audits	35%
Job rotation/mandatory vacation	20%
Rewards for whistleblowers	14%

FIG. 87 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY RELATE TO OCCUPATIONAL FRAUD IN THE UNITED STATES AND CANADA?

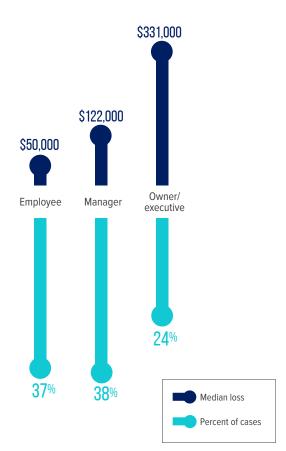


FIG. 88 CASES BY COUNTRY IN THE UNITED STATES AND CANADA

Country	Number of cases
Canada	50
United States	625
TOTAL CASES	675

MEDIAN LOSS: **USD 120,000**



REGIONAL FOCUS

WESTERN EUROPE



FIG. 89 WHAT ARE THE MOST COMMON OCCUPATIONAL FRAUD SCHEMES IN WESTERN EUROPE?

Corruption	
	44%
Noncash	
	24%
Billing	
	19%
Cash on hand	10%
	13%
Financial statement fraud	
	10%
Expense reimbursements	10%
	10%
Check and payment tampering	0%
	9%
Cash larceny	0%
	9%
Payroll	8%
	0.40
Skimming	70/
	7%
Register disbursements	0%
	3%

FIG. 90 HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED IN WESTERN EUROPE?

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Tip	41%
Internal audit	16%
Management review	10%
Automated transaction/data monitoring	9%
By accident	6%
Document examination	6%
External audit	5%
Account reconciliation	2%
Surveillance/monitoring	2%
Confession	1%
Notification by law enforcement	1%
Other	1%

FIG. 91 WHAT ANTI-FRAUD CONTROLS ARE THE MOST COMMON IN WESTERN EUROPE?

Control	Percent of cases	
External audit of financial statements	90%	
Code of conduct	84%	
Management certification of financial statements	78%	
External audit of internal controls over financial reporting	77%	
Internal audit department	74%	
Management review	72%	
Hotline	68%	
Independent audit committee	65%	
Fraud training for employees	59%	
Fraud training for managers/executives	58%	
Anti-fraud policy	56%	
Formal fraud risk assessments	52%	
Employee support programs	51%	
Proactive data monitoring/analysis	48%	
Dedicated fraud department, function, or team	47%	
Surprise audits	40%	
Job rotation/mandatory vacation	25%	
Rewards for whistleblowers	7%	

FIG. 92 HOW DOES THE PERPETRATOR'S LEVEL OF AUTHORITY RELATE TO OCCUPATIONAL FRAUD IN WESTERN EUROPE?



FIG. 93 CASES BY COUNTRY IN WESTERN EUROPE

Country	Number of cases
Aland Islands	1
Andorra	2
Austria	3
Belgium	5
Denmark	1
Finland	2
France	6
Germany	24
Greece	27
Ireland	3
Italy	17
Luxembourg	1
Netherlands	12
Norway	1
Spain	13
Switzerland	6
United Kingdom	21
TOTAL CASES	145

MEDIAN LOSS: **USD 173,000**



STATISTICAL APPENDIX

	Cases	25th percentile	Median (50th)	75th percentile	Mean*
ALL CASES ⁺	2,046	\$20,000	\$117,000	\$600,000	\$1,783,000
Schemes					
Asset misappropriation	1,605	\$20,000	\$100,000	\$500,000	\$1,203,000
Noncash	284	\$10,000	\$78,000	\$500,000	\$921,000
Billing	281	\$20,000	\$100,000	\$500,000	\$852,000
Expense reimbursements	140	\$10,000	\$40,000	\$100,000	\$152,000
Skimming	137	\$10,000	\$50,000	\$188,000	\$185,000
Check and payment tampering	135	\$26,000	\$100,000	\$500,000	\$1,020,000
Cash on hand	129	\$5,000	\$15,000	\$100,000	\$131,000
Payroll	117	\$10,000	\$45,000	\$185,000	\$201,000
Cash larceny	103	\$10,000	\$45,000	\$389,000	\$6,920,000
Register disbursements	25	\$5,000	\$10,000	\$42,000	\$33,000
Corruption	906	\$25,000	\$150,000	\$1,000,000	\$2,647,000
Financial statement fraud	150	\$100,000	\$593,000	\$6,000,000	\$50,482,000
Detection method					
Тір	810	\$25,000	\$117,000	\$650,000	\$1,754,000
Internal audit	306	\$20,000	\$108,000	\$500,000	\$1,245,000
Management review	235	\$20,000	\$105,000	\$500,000	\$1,340,000
Document examination	107	\$37,000	\$200,000	\$1,500,000	\$2,256,000
By accident	105	\$25,000	\$100,000	\$730,000	\$1,293,000
Account reconciliation	91	\$10,000	\$74,000	\$370,000	\$985,000
Automated transaction/data monitoring	85	\$10,000	\$50,000	\$203,000	\$696,000
External audit	73	\$56,000	\$219,000	\$1,224,000	\$3,490,000
Surveillance/monitoring	51	\$5,000	\$60,000	\$350,000	\$1,127,000
Notification by law enforcement	34	\$148,000	\$500,000	\$6,150,000	\$5,185,000
Confession	16	\$29,000	\$159,000	\$8,375,000	\$5,521,000

*Mean amounts were calculated using loss data that was winsorized at 5% (i.e., assigned all cases in the top 2.5% and bottom 2.5% the same value as the 97.5th percentile and 2.5th percentile, respectively).

*Loss calculations were omitted for categories with fewer than ten responses.

	Cases	25th percentile	Median (50th)	75th percentile	Mean*
Victim organization					
Region:					
United States and Canada	663	\$20,000	\$120,000	\$649,000	\$1,460,000
Sub-Saharan Africa	425	\$15,000	\$100,000	\$352,000	\$1,841,000
Asia-Pacific	188	\$15,000	\$121,000	\$723,000	\$2,310,000
Western Europe	140	\$60,000	\$173,000	\$577,000	\$1,152,000
Middle East and North Africa	136	\$42,000	\$186,000	\$875,000	\$2,093,000
Southern Asia	130	\$10,000	\$92,000	\$500,000	\$1,490,000
Latin America and the Caribbean	94	\$33,000	\$175,000	\$915,000	\$1,550,000
Eastern Europe and Western/Central Asia	78	\$42,000	\$190,000	\$1,125,000	\$1,669,000
Organization type:					
Private company	851	\$20,000	\$120,000	\$550,000	\$1,389,000
Public company	484	\$25,000	\$118,000	\$735,000	\$1,694,000
Nonprofit	180	\$14,000	\$60,000	\$266,000	\$851,000
Government	346	\$20,000	\$138,000	\$800,000	\$2,522,000
National	157	\$40,000	\$200,000	\$1,450,000	\$3,319,000
State/provincial	91	\$15,000	\$56,000	\$503,000	\$2,306,000
Local	84	\$17,000	\$125,000	\$521,000	\$1,370,000
Organization size:	01	\$11,000	\$120,000	<i>4021,000</i>	\$1,070,000
<100 employees	423	\$25,000	\$150.000	\$550,000	\$1,373,000
100–999 employees	468	\$20,000	\$100,000	\$500,000	\$1,641,000
1,000–9,999 employees	543	\$16,000	\$100,000	\$500,000	\$1,704,000
10,000+ employees	476	\$24,000	\$138,000	\$900,000	\$1,973,000
Organization revenue:	470	\$24,000	\$136,000	\$900,000	\$1,973,000
•	720	¢20.000	¢100.000	¢400.000	¢1 027 000
<\$50 million		\$20,000	\$100,000	\$400,000	\$1,027,000
\$50 million_\$499 million	496	\$20,000	\$105,000	\$644,000	\$1,821,000
\$500 million-\$999 million	222	\$27,000	\$150,000	\$1,150,000	\$2,840,000
\$1 billion+	455	\$25,000	\$150,000	\$973,000	\$2,076,000
Industry:			****	****	
Banking and financial services	341	\$15,000	\$100,000	\$368,000	\$1,739,000
Government and public administration	193	\$20,000	\$150,000	\$1,450,000	\$2,555,000
Manufacturing	191	\$35,000	\$177,000	\$1,000,000	\$1,755,000
Health care	126	\$18,000	\$100,000	\$600,000	\$1,392,000
Energy	95	\$30,000	\$100,000	\$1,000,000	\$1,793,000
Retail	89	\$15,000	\$65,000	\$375,000	\$1,024,000
Insurance	88	\$20,000	\$130,000	\$500,000	\$1,235,000
Technology	82	\$34,000	\$150,000	\$735,000	\$952,000
Transportation and warehousing	79	\$37,000	\$250,000	\$1,000,000	\$2,071,000
Construction	75	\$35,000	\$203,000	\$1,143,000	\$2,868,000
Education	67	\$10,000	\$56,000	\$306,000	\$1,022,000
Religious, charitable, or social services	58	\$20,000	\$78,000	\$275,000	\$323,000
Information (e.g., publishing, media, telecommunications)	58	\$20,000	\$58,000	\$500,000	\$714,000
Food service and hospitality	50	\$10,000	\$55,000	\$388,000	\$579,000
Services (professional)	41	\$33,000	\$125,000	\$625,000	\$1,716,000
Real estate	40	\$50,000	\$435,000	\$1,875,000	\$2,342,000
Arts, entertainment, and recreation	40	\$10,000	\$73,000	\$475,000	\$1,169,000
Agriculture, forestry, fishing, and hunting	39	\$15,000	\$154,000	\$1,500,000	\$2,114,000
Services (other)	31	\$15,000	\$100,000	\$268,000	\$417,000
Utilities	30	\$34,000	\$200,000	\$1,194,000	\$3,043,000
Wholesale trade	27	\$50,000	\$400,000	\$1,000,000	\$2,143,000
Mining	22	\$45,000	\$175,000	\$965,000	\$662,000

Perpetrator Number of perpetrators: 00 One perpetrators 360 \$29,000 \$150,000 \$259,000 \$149,000 Two perpetrators 691 \$42,000 \$219,000 \$1300,000 \$2,638,000 Postion: \$220,000 \$510,000 \$223,000 \$125,000 \$22,830,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,840,000 \$1,813,000 \$2,800,00 \$1,813,000 \$1,813,000 \$1,813,000 \$1,813,000 \$1,813,000 \$1,813,000 \$1,813,000 \$1,813,000 \$1,813,000 \$1,813,000 \$1,813,000		Cases	25th percentile	Median (50th)	75th percentile	Mean*
Number of perpetrators: One perpetrator 773 \$12,000 \$57,000 \$149,000 Thre or more perpetrators 691 \$42,000 \$145,000 \$57,000 \$64,99,000 Position: Employee 671 \$10,000 \$50,000 \$52,00,00 \$623,000 Manager 699 \$22,000 \$125,000 \$50,000 \$12,25,000 Convertion: 333,000 \$52,380,000 \$12,85,000 \$12,000,000 \$12,55,000 Convertion: 333,000 \$1,200,000 \$1,25,50,000 \$1,200,000 \$1,439,000 Convertion: 310,9987 625 \$6,000 \$10,0000 \$1,439,000 Convertion: 162 \$6,000 \$50,000 \$14,80,000 Convertion: 200 \$27,000 \$13,000 \$44,90,00 Department: 200 \$27,000 \$10,000 \$46,000 \$172,000 Sales 200 \$27,000 \$100,000 \$46,000 \$172,000 Sales 100 \$33,000 \$	Perpetrator					
Two perpetrators 360 \$29,000 \$145,000 \$750,000 \$1,499,000 Three or more perpetrators 691 \$42,000 \$210,000 \$2,030,000 \$22,0300 \$22,000 \$220,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$523,000 \$500,000 \$523,000 \$523,000 \$500,000 \$500,000 \$500,000 \$500,000 \$500,000 \$51,680,00 \$1,749,000 <	•					
Three or more perpetrators 691 \$42,000 \$219,000 \$1,300,000 \$2,638,000 Position: Employee 671 \$50,000 \$200,000 \$52,50,000 Manager 699 \$28,000 \$125,000 \$50,000 \$21,265,000 Owner/sexetuive 411 \$80,000 \$21,200,000 \$51,220,000 \$2,357,000 Former: >10 years 399 \$50,000 \$51,200,000 \$51,268,000 1-5 years 839 \$51,000 \$500,000 \$418,30,00 \$133,000 Performs 269 \$14,000 \$74,000 \$500,000 \$1133,000 Accounting 224 \$43,000 \$500,000 \$48,950,000 Sales 200 \$25,000 \$500,000 \$48,950,000 Sales 200 \$220,000 \$24,800 \$16,72,000 Manufacturing and production 6.3 \$10,000 \$24,80,00 \$13,220,000 Sales \$100,000 \$51,220,000 \$100,000 \$51,220,000 \$13,220,000 Maruinstr	One perpetrator	773	\$12,000	\$57,000	\$269,000	\$896,000
Position: Final State Employee 671 \$10,000 \$50,000 \$200,000 \$602,000 Owner/executive 411 \$80,000 \$337,000 \$2,380,000 \$3,328,000 Tenure:	Two perpetrators	360	\$29,000	\$145,000		
Position: Employee 671 \$10,000 \$50,000 \$200,000 \$623,000 Manager 699 \$228,000 \$515,000 \$50,000 \$1,228,000 \$3,328,000 \$3,328,000 \$3,328,000 \$3,328,000 \$1,200,000 \$2,357,000 \$50,000 \$1,200,000 \$2,357,000 \$50,000 \$1,200,000 \$2,357,000 \$1,000,000 \$1,480,000 \$1,343,000 \$1,589,000 \$1,000,000 \$1,480,000 \$1,420,000 \$1,420,000 \$1,420,000 \$1,420,000 \$1,420,000 \$1,420,000 \$1,420,000 \$1,420,000 \$1,420,000 \$1,	Three or more perpetrators	691	\$42,000	\$219,000	\$1,300,000	\$2,638,000
Manager 699 \$28,000 \$125,000 \$600,000 \$1,265,000 Owner/executive 411 \$80,000 \$33,2000 \$53,280,000 \$53,280,000 Insure:				· · ·		
Owner/executive 411 \$80,000 \$337,000 \$2,380,000 \$3,328,000 Tenue:	Employee	671	\$10,000	\$50,000	\$200,000	\$623,000
Owner/executive 411 \$80,000 \$33,7000 \$2,380,000 \$3,928,000 Tenue:	Manager	699	\$28,000	\$125,000	\$600,000	\$1,265,000
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FRAUD PREVENTION CHECKLIST

The most cost-effective way to limit fraud losses is to prevent fraud from occurring in the first place. This checklist is designed to help organizations test the effectiveness of their fraud prevention measures. Additional guidance, resources, and tools for managing organizational fraud risk can be found at <u>ACFE.com/fraudrisktools</u>.



- 1. Is ongoing anti-fraud training provided to all employees of the organization?
 - Do employees understand what constitutes fraud?
 - Have the costs of fraud to the company and everyone in it—including lost profits, adverse publicity, potential job loss, and decreased morale and productivity—been made clear to all employees?
 - Do employees know where to seek advice when faced with uncertain ethical decisions, and do they believe that they can speak freely?
 - Has a policy of zero-tolerance for fraud been communicated to employees through words and actions?

2. Is an effective fraud reporting mechanism in place?

- Have employees been taught how to communicate concerns about known or potential wrongdoing?
- Are one or more reporting channels (e.g., a third-party hotline, dedicated email inbox, or web-based form) available to employees?
- Do employees trust that they can report suspicious activity anonymously and/or confidentially (where legally permissible) and without fear of reprisal?
- Has it been made clear to employees that reports of suspicious activity will be promptly and thoroughly evaluated?
- Do reporting policies and mechanisms extend to vendors, customers, and other outside parties?
- Do reporting mechanisms include multilingual capabilities and provide access to a trained interviewer 24 hours a day, 7 days a week?

- 3. To increase employees' perception of detection, are the following proactive measures taken and publicized to employees?
 - Is possible fraudulent conduct aggressively sought out, rather than dealt with passively?
 - Are surprise fraud audits performed in addition to regularly scheduled audits?
 - Are data analytics techniques used to proactively search for fraud and, if so, has the use of such techniques been made known throughout the organization?
 - Do managers actively review the controls, processes, accounts, or transactions under their purview for adherence to company policies and expectations?

4. Is the management climate/tone at the top one of honesty and integrity?

- Are employees periodically surveyed to determine the extent to which they believe management acts with honesty and integrity?
- Are performance goals realistic and clearly communicated?
- Have fraud prevention goals been incorporated into the performance measures that are used to evaluate managers and to determine performance-related compensation?
- □ Has the organization established, implemented, and tested a process for oversight of fraud risks by the board of directors or others charged with governance (e.g., the audit committee)?

- 5. Are fraud risk assessments performed to proactively identify and mitigate the company's vulnerabilities to internal and external fraud?
 - Are fraud risk assessments updated regularly (e.g., annually), as well as following times of notable organizational or environmental changes?
 - Are the results of the fraud risk assessment shared with appropriate levels of management and used to update the organization's anti-fraud program and controls?

6. Are strong anti-fraud controls in place and operating effectively, including the following?

- Proper separation of duties
- Use of authorizations
- Physical safeguards
- Job rotations
- Mandatory vacations
- 7. Does the internal audit department, if one exists, have adequate resources and authority to operate effectively and without undue influence from senior management?
- 8. Does the hiring policy include the following (where permitted by law)?
 - □ Past employment verification
 - Criminal and civil background checks
 - Credit checks
 - Drug screening
 - Education verification
 - References checks
- 9. Are employee support programs in place to assist employees struggling with addiction, mental/emotional health, family, or financial problems?

- 10. Is an open-door policy in place that allows employees to speak freely about pressures, providing management the opportunity to alleviate such pressures before they become acute?
- 11. Are regular, anonymous surveys conducted to assess employee morale?

GLOSSARY OF TERMINOLOGY



Asset misappropriation: A scheme in which an employee steals or misuses the employing organization's resources (e.g., theft of company cash, false billing schemes, or inflated expense reports)

Billing scheme: A fraudulent disbursement scheme in which a person causes their employer to issue a payment by submitting invoices for fictitious goods or services, inflated invoices, or invoices for personal purchases (e.g., employee creates a shell company and bills employer for services not actually rendered; employee purchases personal items and submits an invoice to employer for payment)

Cash larceny: A scheme in which an incoming payment is stolen from an organization after it has been recorded on the organization's books and records (e.g., employee steals cash and checks from daily receipts before they can be deposited in the bank)

Cash-on-hand misappropriations: A scheme in which the perpetrator misappropriates cash kept on hand at the victim organization's premises (e.g., employee steals cash from a company vault)

Check or payment tampering scheme: A fraudulent disbursement scheme in which a person steals their employer's funds by intercepting, forging, or altering a check or electronic payment drawn on one of the organization's bank accounts (e.g., employee steals blank company checks and makes them out to themself or an accomplice; employee re-routes an outgoing electronic payment to a vendor to be deposited into their own bank account)

Corruption: A scheme in which an employee misuses their influence in a business transaction in a way that violates their duty to the employer in order to gain a direct or indirect benefit (e.g., schemes involving bribery or conflicts of interest)

Employee support programs: Programs that provide assistance to employees dealing with personal issues or challenges, such as counseling services for addiction, family, or financial problems

Expense reimbursements scheme: A fraudulent disbursement scheme in which an employee makes a claim for reimbursement of fictitious or inflated business expenses (e.g., employee files fraudulent expense report claiming personal travel or nonexistent meals)

Financial statement fraud: A scheme in which an employee intentionally causes a misstatement or omission of material information in the organization's financial reports (e.g., employee files fraudulent expense report claiming personal travel or nonexistent meals)

Fraudulent disbursement scheme: A scheme in which an employee makes a distribution of organizational funds or manipulates a disbursement/payment function for a dishonest purpose (e.g., submitting false invoices for payment, altering time cards, or making personal purchases with company funds)

Hotline: A mechanism to report fraud or other violations, whether managed internally or by an external party. This might include telephone hotlines, dedicated email addresses, web-based platforms, and other mechanisms established to facilitate fraud reporting.

Management review: The process of management reviewing organizational controls, processes, accounts, or transactions for adherence to company policies and expectations

Noncash misappropriations: A scheme in which an employee steals or misuses noncash assets of the victim organization (e.g., employee steals inventory from a warehouse or storeroom; employee steals or misuses confidential customer information)

Occupational fraud: The use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets

Payroll scheme: A fraudulent disbursement scheme in which an employee causes their employer to issue a payment by making false claims for compensation (e.g., employee claims overtime for hours not worked; employee adds ghost employees to the payroll)

Primary perpetrator: The person who worked for the victim organization and who was reasonably confirmed as the primary culprit in the case

Register disbursements scheme: A fraudulent disbursement scheme in which an employee makes false entries on a cash register to conceal the fraudulent removal of cash (e.g., employee fraudulently voids a sale on a cash register and steals the cash)

Skimming: A scheme in which an incoming payment is stolen from an organization before it is recorded on the organization's books and records (e.g., employee accepts payment from a customer but does not record the sale and instead pockets the money)

ABOUT THE ACFE

Founded in 1988 by Dr. Joseph T. Wells, CFE, CPA, the Association of Certified Fraud Examiners (ACFE) is the world's largest anti-fraud organization and premier provider of anti-fraud training and education. Together with more than 90,000 members, the ACFE is reducing business fraud worldwide and inspiring public confidence in the integrity and objectivity within the profession.



The ACFE unites and supports the global anti-fraud community by providing educational tools and practical solutions for professionals through events, publications, networking, and educational materials for colleges and universities.

CERTIFIED FRAUD EXAMINERS

The ACFE offers its members the opportunity for professional certification with the Certified Fraud Examiner (CFE) credential. The CFE is preferred by businesses and government entities around the world, and indicates expertise in fraud prevention and detection. CFEs are anti-fraud experts who have demonstrated knowledge in four critical areas: Financial Transactions and Fraud Schemes, Law, Investigation, and Fraud Prevention and Deterrence.

MEMBERSHIP

Members of the ACFE include accountants, internal auditors, fraud investigators, law enforcement officers, lawyers, business leaders, risk/compliance professionals, and educators, all of whom have access to expert training, educational tools, and resources. Whether their career is focused exclusively on preventing and detecting fraudulent activities or they just want to learn more about fraud, the ACFE provides anti-fraud professionals with the essential tools and resources necessary to accomplish their objectives.

To learn more, visit ACFE.com or call (800) 245-3321 / +1 (512) 478-9000.

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