



**AGENDA  
AUDIT COMMITTEE MEETING  
OF THE BOARD OF DIRECTORS  
INLAND EMPIRE UTILITIES AGENCY\*  
AGENCY HEADQUARTERS, CHINO, CA 91708**

**MONDAY, JUNE 8, 2020  
9:00 A.M.**

**INLAND EMPIRE UTILITIES AGENCY\*  
Telecon: (415) 856-9169/Conference ID: 164 688 084#**

PURSUANT TO THE PROVISIONS OF EXECUTIVE ORDER N-25-20 ISSUED BY GOVERNOR GAVIN NEWSOM ON MARCH 12, 2020, AND EXECUTIVE ORDER N-29-20 ISSUED BY GOVERNOR GAVIN NEWSOM ON MARCH 17, 2020 ANY BOARD MEMBER MAY CALL INTO THE BOARD MEETING WITHOUT OTHERWISE COMPLYING WITH ALL BROWN ACT'S TELECONFERENCE REQUIREMENTS.

**TELECONFERENCE ACCESSIBILITY FOR THE GENERAL PUBLIC:**

In all efforts to prevent the spread of COVID-19, until further notice, the Inland Empire Utilities Agency will be holding all Board and Committee meetings by teleconferencing.

The meeting will be accessible at: (415) 856-9169 / Conf Code: 164 688 084#

This meeting is being conducted virtually by video and audio conferencing. There will be no public location available to attend the meeting; however, the public may participate and provide public comment during the meeting by calling into the number provided here. The public may also view the meeting live through the Agency's website. Alternatively, you may email your public comments to the Executive Assistant Sally H. Lee at [shlee@ieua.org](mailto:shlee@ieua.org) no later than 24 hours prior to the scheduled meeting time. Your 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 Executive Assistant no later than 24 hours prior to the scheduled meeting time or address the Board during the public comments section of the meeting. Comments will be limited to three minutes per speaker. 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.

### **1. ACTION ITEM**

#### **A. MINUTES**

The Committee will be asked to approve the Audit Committee meeting minutes of March 9, 2020.

#### **B. FY 2020/21 ANNUAL AUDIT PLAN**

Staff recommends that the Committee/Board:

1. Approve the FY 2020/21 Annual Audit Plan; and
2. Direct the Manager of Internal Audit to implement the FY 2020/21 Annual Audit Plan.

### **2. INFORMATION ITEMS**

#### **A. FY 2019/20 FINANCIAL AUDIT – COMMUNICATION REQUIRED BY SAS 114 (WRITTEN)**

#### **B. HUMAN RESOURCES: WORKLOAD INDICATORS REVIEW (WRITTEN/POWERPOINT)**

#### **C. RECYCLED WATER REVENUES AUDIT REPORT (WRITTEN/POWERPOINT)**

#### **D. APPROVALS AND DISBURSEMENTS AUTOMATION FOLLOW-UP REVIEW (WRITTEN/POWERPOINT)**

#### **E. INTERFUND TRANSACTION – FOLLOW-UP REVIEW (WRITTEN/POWERPOINT)**

#### **F. REPORT OF OPEN AUDIT RECOMMENDATIONS (WRITTEN)**

#### **G. INTERNAL AUDIT DEPARTMENT QUARTERLY STATUS REPORT FOR JUNE 2020 (WRITTEN)**

### **3. AUDIT COMMITTEE ADVISOR COMMENTS**

### **4. COMMITTEE MEMBER COMMENTS**

5. **COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS**

6. **ADJOURN**

\*A Municipal Water District

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary (909-993-1736), 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

Proofed by: mg

**DECLARATION OF POSTING**

I, Sally H. Lee, Executive Assistant of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA on Thursday, June 4, 2020.

Sally H Lee  
Sally H. Lee

**ACTION  
ITEM**

**1A**





**MINUTES  
AUDIT COMMITTEE MEETING  
INLAND EMPIRE UTILITIES AGENCY\*  
AGENCY HEADQUARTERS, CHINO, CA  
MONDAY, MARCH 9, 2020  
9:00 A.M.**

**COMMITTEE MEMBERS PRESENT**

Kati Parker, Chair  
Steven J. Elie

**COMMITTEE MEMBERS ABSENT**

None

**STAFF PRESENT**

Shivaji Deshmukh, General Manager  
Kathy Besser, Executive Manager of External Affairs & Policy Development/AGM  
Christiana Daisy, Executive Manager of Engineering/AGM  
Christina Valencia, Executive Manager of Finance & Administration/AGM  
Lisa Dye, Manager of Human Resources  
Warren Green, Manager of Contracts, Procurement & Risk Services  
Sally Lee, Executive Assistant  
Sapna Nangia, Senior Internal Auditor  
Peter Soelter, Senior Internal Auditor  
Daniel Solorzano, Technology Specialist I  
Wilson To, Technology Specialist II  
Teresa Velarde, Manager of Internal Audit

**OTHERS PRESENT**

Travis Hickey, Audit Committee Advisor

The meeting was called to order at 9:02 a.m. There were no public comments received or additions to the agenda.

**ACTION ITEMS**

The Committee:

- ◆ Approved the Audit Committee meeting minutes of December 9, 2019.

**INFORMATION ITEMS**

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

- ◆ Human Resources: Grievance Policies and Procedures Comparable Survey

- ◆ Garden in Every School®: Follow up Audit Report
- ◆ Gate Transmitters – Results of a Six-Month Review
- ◆ Internal Audit Department Quarterly Status Report

**AUDIT COMMITTEE ADVISOR COMMENTS**

Audit Committee Advisor Travis Hickey stated he attended the annual Municipal Finance Officers Conference, which was attended by Executive Manager of Finance & Administration/AGM Christina Valencia and several other Agency staff members.

**COMMITTEE MEMBER COMMENTS**

There were no Committee Member comments.

**COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS**

There were no Committee Member requested future agenda items.

With no further business, the meeting adjourned at 9:44 a.m.

Respectfully submitted,

Sally H. Lee  
Executive Assistant

\*A Municipal Water District

**APPROVED: JUNE 8, 2020**

**ACTION  
ITEM**

**1B**

**Date:** June 17, 2020

**To:** The Honorable Board of Directors

**Committee:** Audit

  
**From:** Teresa Velarde, Manager of Internal Audit

06/08/20

**Manager Contact:** Teresa Velarde, Manager of Internal Audit

**Subject:** FY 2020/21 Annual Audit Plan

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**Executive Summary:**

The Board-approved Audit Committee Charter requires the Audit Committee to approve a flexible Annual Audit Plan of proposed audit projects, and recommend the plan and periodic updates to the Board of Directors for review and approval. The Board-approved Internal Audit Department (IA) Charter requires that IA submit a flexible Annual Audit Plan of proposed audit projects, with the goal of targeting for audit activities depending on the assessed risk, level of priority, and/or specific requests.

The Institute of Internal Auditors (IIA) audit standards require that periodic risk assessments be performed to ensure information captured is relevant, timely, and aligned with the Agency's changing environment, goals, and objectives. IA performs the required risk assessment, prepares the Annual Audit Plan, and submits quarterly status reports and amendments, as required. The audit projects proposed for FY 2020/21 include: The Human Resources Operational Audit - Training, Education & Employee Development, Agency Disbursements and Accounts Payable Audit, Agency Performance Workload Indicators, and follow-up reviews to evaluate the implementation status of prior audit recommendations provided and miscellaneous on-going audit projects and responsibilities. The attached plan provides details.

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**Staff's Recommendation:**

1. Approve the FY 2020/21 Annual Audit Plan; and
2. Direct the Manager of Internal Audit to implement the FY 2020/21 Annual Audit Plan.

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**Budget Impact** Budgeted (Y/N): N Amendment (Y/N): N Amount for Requested Approval:

Account/Project Name:

N/A

*Fiscal Impact (explain if not budgeted):*

Only when additional outside auditing or consulting services are required to provide assistance to IA or fulfill the responsibilities of the Audit Committee for appropriate action. Additionally, some audit projects are intended to identify opportunities for cost containment.

**Prior Board Action:**

On December 18, 2019, the Board of Directors reconfirmed the approved Audit Committee and the IA Department Charters. Both Charters require the Manager of IA to complete and present the Annual Audit Plan.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The Annual Audit Plan is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that audits and recommendations evaluate and promote a strong internal control environment, evaluate efficiency and effectiveness of processes and operations and assist management in achieving organizational goals and objectives.

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**Attachments:**

Attachment 1 - FY 2020/21 Internal Audit Department Annual Audit Plan  
Attachment 2 - PowerPoint



***Fiscal Year  
2020-2021***

# Internal Audit Department Annual Audit Plan

Submitted by:  
Teresa V. Velarde  
Manager of Internal Audit Department  
June 17, 2020

*The Annual Audit Plan is a plan of audit projects that is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment and Business Practices by ensuring that audits and recommendations evaluate and promote a strong control environment and assist management in achieving organizational goals.*

## **Annual Audit Plan Contents**

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## *Purpose of the Internal Audit Department*

According to the Board-approved Charter, the purpose of the Internal Audit Department (Internal Audit or IA) is to assist the Board of Directors and the Audit Committee in fulfilling their oversight responsibilities for reporting, internal controls, and compliance with legal and regulatory requirements applicable to Agency operations, and to provide objective assurance about the Agency's operations.

The purpose of the Internal Audit Department is also to provide consulting services, analyses, recommendations and information concerning the operations of the Agency as a service to management and as a way of adding value to improve the operations of the Agency. Internal Audit assists management and staff in achieving organizational goals and objectives by providing recommendations and advisory services based on results of analysis of the Agency's processes, procedures, governance, internal controls, financial reporting, and compliance with applicable laws and regulations.

The Internal Audit Department follows the guidance of the globally accepted *International Standards for the Professional Practice of Internal Auditing (Standards)* as documented in the International Professional Practices Framework (IPPF) and the Code of Ethics issued by the Institute of Internal Auditors (IIA) (<https://theiia.org>). This guidance is documented in the Internal Audit Department Charter and a requirement in the Internal Audit Department Standard Operating Procedures, as all auditors are required to follow.

The Internal Audit Department reports directly to the Board of Directors through the Audit Committee. The Internal Audit Department has a dotted line reporting relationship to the General Manager and works in cooperation with the Executive Management Team to coordinate audit projects and resources. As described in the Charter and according to the IIA *Standards* and best practices, Internal Audit is an independent function from Agency management, to provide objective analysis and recommendations, as a value-added service for the Board and Agency Management. Independence is essential to the effectiveness of internal auditing and is emphasized by the Institute of Internal Auditors (IIA). The authority and responsibilities of the Internal Audit Department are specifically defined in the Internal Audit Department Charter approved by the Board of Directors.



### **Mission Statement**

*The Internal Audit Department seeks to improve the operations of the Agency by providing unbiased and objective assessments to ensure Agency resources are efficiently and effectively managed in order to achieve Agency goals and objectives. The Internal Audit Department will help the Agency achieve accountability and integrity, improve operations and instill confidence among its employees and the citizens it serves by:*

- *Promoting a sound control environment.*
- *Providing independent, objective assurance and consulting services.*
- *Improving Agency risk management, control and governance.*
- *Promoting the Agency's vision and mission with a high degree of professionalism.*

### **Internal Audit Department Values**

*The Internal Audit Department has adopted the following value statements that form the foundation for the Internal Audit Department:*

#### **Independence**

*As documented in the Charter, the Internal Audit Department is an independent function of the Agency for the purpose of providing independent, objective, unbiased opinions.*

#### **Integrity**

*The Internal Audit Department staff is required to maintain the highest degree of integrity in conducting its audit work.*

#### **Professionalism**

*The Internal Audit Department will perform its work with professionalism at all times.*

#### **Collaboration**

*The Internal Audit Department will foster collaboration with all Agency personnel to promote teamwork within the various business units.*

### *Purpose of the Annual Audit Plan*

The Annual Audit Plan (Audit Plan) has been prepared in accordance with recommendations and best practices provided by the Institute of Internal Auditors (IIA). The Audit Plan allows the Manager of Internal Audit to carry out the responsibilities of the Internal Audit Department by prioritizing projects and allocating necessary resources where audit efforts are deemed appropriate and necessary. The Audit Plan is created to assist management and the Board in achieving organization goals and objectives.

The Audit Plan is a flexible plan of internal audit activities and was developed using an appropriate risk-based methodology, including any risks or control concerns identified or communicated by Management, the Internal Audit Department, External Auditors, the Audit Committee's Independent Advisor, the Audit Committee or Board. Additionally, IA discussed with the Agency's legal counsel information that came through the Agency's anonymous hotline, Ethics-Point, to determine if any of the reported items are under the responsibility and scope of IA's activities or should be considered in planning audit projects. The overall objective is to develop a plan consistent with the Agency's goals and objectives, to address the highest risk areas within the Agency and to evaluate and contribute to the improvement of risk management, control and governance processes, additionally to add value by recommending opportunities for improvements to increase effectiveness and efficiency of operations.

To provide practical guidance and an authoritative framework for the development of the Annual Audit Plan, the Internal Audit Department recognizes the following items: Achieving one hundred percent audit coverage each year is not practical or achievable. It should be noted that audit resources are limited; therefore, a system for prioritizing audits has been employed. The Annual Audit Plan must be a flexible plan and should be amended periodically as deemed necessary to reprioritize areas that require attention. In preparing the Annual Audit Plan, consideration is given to the work performed by other auditors, regulatory authorities, established rules, laws and ordinances and the Agency's system of controls. Auditable areas are ranked by knowledge of known or perceived areas of risk and understanding of the systems of internal controls. It should be noted that there are inherent risks, residual risks and limitations with any methodology applied when prioritizing risks and ranking audit projects; risk factors exist with any system of controls.

As stated in the Internal Audit Department Charter, the Manager of Internal Audit will set audit frequencies, select the subjects and set objectives, determine the scope of work and apply the techniques required to accomplish the audit objectives. The Manager of Internal Audit has the authority to deviate from the approved annual Audit Plan, when necessary, and if warranted by unforeseen issues that require immediate attention. The Manager of Internal Audit will use professional discretion and judgment in response to such unforeseen issues and resolve them according to the requirements of the Charter. Significant changes to or deviations from the approved Annual Audit Plan shall be reported to the Audit Committee and to the Board at the next regularly scheduled Audit Committee meeting.

Both the IAD Charter and the IIA's Code of Ethics have strict standards of ethical conduct for internal auditors. Internal auditors have a responsibility to maintain independence, ensure integrity, objectivity, confidentiality and competency in work performed.

### *Annual Audit Plan Methodology*

In planning for the Internal Audit projects the following were also considered:

- The Internal Audit Department Charter
- The Audit Committee Charter
- Communications with the Audit Committee and the Board of Directors
- Communications with Executive Management and key Agency personnel
- Communications with the External Financial Auditors
- Communications with the Audit Committee Independent Advisor
- Prior audit findings and recommendations
- Assessed risks in business practices and operations
- Agency's goals and objectives, including activities, developments and changes
- Agency policies & procedures
- Key areas that affect revenue and expenses
- Identified opportunities to improve operations and add value to services
- New audit requirements, audit trends and leading practices
- Audit Department resources

For the Fiscal Year 2019/2020 Annual Audit Plan, the audits were selected based on all things considered as discussed above, the results of audits completed, risks identified, discussions with key individuals and auditor judgement. Significant deviations and changes to the Audit Plan will be communicated to the Audit Committee through an Amended Audit Plan and progress information is provided through Quarterly Status Reports presented to the Audit Committee.

## ***FY 2020/21 Annual Audit Plan:***

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### **Human Resources Operational Audit – Training, Education & Employee Development**

The Training and Development audit will evaluate the administration of the Agency's Training and Development programs by the HR Department, and if the Training and Development programs are meeting the needs of its stakeholders (i.e., management and staff). Also, to evaluate the completeness of the Training and Development recordkeeping practices and to identify opportunities for improvement for the Training and Development program.

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### **Agency Disbursements and Accounts Payable Audit**

Select a specific vendor or types of payments, to ensure transactions do not bypass the required procurement processes and there are sufficient internal controls in place for the following:

- FEMA Expenditures
- Electronic Payments
- Agency Credit Cards & P-cards

Scope to include:

- Review financial transactions and supporting documents
  - Review proper expense coding and justifications
  - Evaluate internal controls
  - Compliance with policies and procedures
- 

### **GFOA Budget Preparation Guidelines for Performance Measures/Workload Indicators**

The purpose of this review is to evaluate the Budget document Workload Indicators as documented by each of the Agency departments. To evaluate if the indicators are tied to the department goals and objectives and the Agency's goals and objectives.

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### **Follow-up Reviews to evaluate the status of outstanding recommendations**

As required by the Charters and audit standards, IA will follow up on the status of outstanding recommendations to determine if corrective actions or alternate internal controls were implemented. There are currently 116 outstanding audit recommendations, 85 of which require follow-up action and 31 of which are associated with the renegotiation of the Regional Contract and are deferred. Follow-up reviews are scheduled as noted in the chart on Page 9.

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*On-Going Projects for FY 2020/21*

- ❖ Internal Audit Department Quality Assurance and Improvement Program
- ❖ Assist with annual CAFR Review and Filing
- ❖ Review and update IA Department and Committee Charters
- ❖ Continue to assist with SAP internal control inquiries
- ❖ Continue to participate with the Enterprise Content Management System (ECMS) Committee, Safety Committee and the Technology/Cybersecurity Committee.
- ❖ Provide needed support related to audit topics, internal controls, Agency policies and procedures and compliance items
- ❖ Further utilize capabilities of SAP to enhance IA functions
- ❖ On-going required administrative reporting, such as budget, goals/objectives, staff appraisals, and other administrative items.
- ❖ Conduct special requests and/or unforeseen projects
- ❖ Provide recommendations to strengthen/streamline policies and procedures
- ❖ Update IA Annual Audit Plan and corresponding Risk Assessment
- ❖ Continue to work with auditees to resolve outstanding recommendations
- ❖ Assist with requests for internal controls questions, discussions and evaluations
- ❖ Continue to review, update and document IA Policies and Procedures
- ❖ Continuous Professional Development of all auditors
- ❖ Plan, prepare and coordinate Audit Committee Meetings
- ❖ Utilize the IA site on AIM as an Agency-wide communication tool
- ❖ Unannounced Petty Cash Audits
- ❖ Provide "audit approach" presentations to requesting departments and/or for/within professional associations as a guest speaker

### *Outstanding Recommendations*

The Internal Audit Department Charter requires follow-up action be taken to ensure that management has effectively implemented recommendations or alternate controls have been incorporated to mitigate the risks identified. Follow-up audit work includes detailed testing and verification by Internal Audit staff. Below is a table of the Outstanding Recommendations:

Area Audited	Report Issued Date	No. of Recs. Remaining to be Verified by IA	Planned Follow-Up
Accounts Payable Follow-Up (Deferred Recommendations related to Agency Policies)	August 29, 2013	2	FY 2021
Follow-Up – IT Equipment Audit – ISS	February 29, 2016	2	FY 2021
Master Trade Contracts	September 1, 2016	6	FY 2021
Follow-Up – IT Equipment Audit – FAD	December 5, 2016	6	FY 2021
Audit of Master Services Contracts	December 5, 2016	3	FY 2021
2017 Petty Cash Audit & Follow-Up Review	June 5, 2017	7	FY 2021
Water Use Efficiency Programs Audit	June 5, 2017	6	FY 2022
Contracts and Procurement Follow-Up Audit	August 30, 2017	1	FY 2022
Payroll Operations Audit	August 30, 2017	6	FY 2022
Procurement Card Audit	March 1, 2018	7	FY 2022
Wire Transfers Audit	March 1, 2018	5	FY 2022
Garden in Every School®	May 31, 2018	1	FY 2022
Inter-fund Transactions Audit	August 30, 2018	3	FY 2023
Agency Vehicle Operational Follow-up audit: Review of Vehicle Inventory Procedures	November 29, 2018	3	FY 2023
Water Connection Fees Audit	February 25, 2019	5	FY 2023
Accounts Payable Follow-Up Audit	May 30, 2019	5	FY 2024
Voyager Fuel Card Audit	May 30, 2019	4	FY 2024
Human Resources Audit: Hiring and Promotions Operations Review	December 2, 2019	7	FY 2024
<b>Total Outstanding Audit Recommendations</b>		<b>79</b>	
<b>Recommendations related to the Regional Contract Review</b> (these recommendations are planned for full implementation with the renegotiation of the Regional Contract IA will not follow up on these unless requested to do so or after the new contract is executed.)			
Regional Contract Review – Final Audit Report	December 16, 2015	<b>31</b>	Pending – Renegotiation of the Regional Contract

*\*See the Report of Open Recommendations under separate cover.*

During FY 2019/20, IA reviewed and verified the implementation status of 19 open recommendations related to 6 different audits. The list reports there are 79 open recommendations, of which 40 recommendations relate to audits completed recently. An additional separate 31 recommendations stem from the Regional Contract Review, which will most likely be implemented through the renegotiation of the Regional Contract. Because all audit resources were utilized primarily for this effort, follow-up activities were temporarily on hold. Audit guidelines suggest that an adequate amount of time be granted to provide auditees with sufficient time to implement corrective action plans. Follow-up audit work for some of the open recommendations will be incorporated and completed along with the proposed projects. Required follow-up audit work will include a desk review of supporting documentation, follow-up discussions with the auditee, and/or the application of testing procedures to verify implementation.

### ***Long Range Audit Planning - Additional / Possible Audit Areas***

Internal Audit has identified additional audit areas. This list has been compiled as a preliminary list of future potential audits and as a list of additional, important audit areas where audit resources and efforts could be utilized. This is not a comprehensive/complete list. These audit areas have been selected based on identified risks at the time of completing this Audit Plan. If the risk/priority in any of the identified auditable areas increases, IA would perform the required audit/evaluation.

#### **Capital Projects**

The external financial auditors have in the past noted deficiencies with the process for closing completed capital projects. Projects were left open long after the project had been completed, therefore, impacting the accounting value of capital assets. This audit would focus on evaluating when open capital projects have been completed and examining when the construction in progress balances are closed to capital assets. The departments primarily engaged are the Finance and Accounting and the Engineering departments.

#### **Personal Computer Loan Program and Policy Compliance**

Review Agency policies and internal controls as they relate to the employee personal computer loan program and reimbursements to ensure adequate controls and that policy requirements are followed. The Finance and Accounting Department and the Integrated Systems Services Department will be the primary contact department.

#### **Accounts Payable Audit – Review of Agency Credit Cards**

Select a specific vendor or types of payments, for example travel credit cards and gas credit cards to ensure that transactions do not bypass the required procurement processes.

- Review financial transactions and supporting documents
- Evaluate internal controls
- Compliance with policies and procedures

#### **Various or Other Agreements**

Evaluate the variety of special and/or other types of agreements the Agency may have with other agencies or vendors that may or may not be formalized under an official Agency contract. This audit would also evaluate whether the special agreements provide preferential treatment or significant discounts/credits when compared to similar agencies for similar services.

**Bid and Selection Process for Construction Contracts**

To review the bid and selection process to ensure all legal and regulatory requirements are considered in the process, including grant requirements, where applicable, and that all contracts include required language. Additionally, to evaluate the process to award contracts and projects to pre-qualified contractors/vendors and ensure processes conform to legal and Board-approved requirements and are documented in formal operating procedures.

**Asset Management**

The Agency currently has \$1.1 billion in total assets. An audit of this area would evaluate the accountability and controls to ensure assets are properly recorded in the Agency's financial records. Additionally, to determine if periodic inventories or other valuation processes are performed to validate the amount of assets reported in accounting records.

**Operations**

Facility Operations, Groundwater Recharge and Organics Management are programs under Operations Administration. The audit scope of any of these areas would focus on permit compliance requirements, preventive maintenance of plants, staff training and staff certifications to operate plants/facilities, chemical and equipment use, and customer service to the service area, where applicable.

**Payroll Audit**

Payroll Audits were performed in 2010, 2012 and again in 2017. This is a sensitive area that should be continuously monitored and evaluated. This review would be a new audit focusing on any current changes in payroll requirements or Agency policy changes as well as test to ensure employee requested changes took effect. This audit would also focus on any outstanding recommendations that resulted from the prior audits.

**Data Analytics**

Fully utilize existing technology to gather additional data and analytical information to assist auditing. In addition, explore and expand utilizing new technology and tools to build and customize dashboards, reports and other analytics tools to assist with audit reviews and monitoring of transactions in various areas, such as payments, payroll, contract payments, etc.



### ***Risk Assessment Strategy***

The IIA IPPF standard 2120 states that Internal Audit must evaluate the effectiveness and contribute to the improvement of risk management processes.

The IIA IPPF defines Risk as follows:

- **Risk** – The possibility of an event occurring that will have an **impact on the achievement of objectives**. Risk is measured in terms of impact and likelihood and;
- **Residual Risks** – As the risk remaining **after management acts to reduce the impact** and likelihood of an adverse event, including control activities in response to a risk.

The risk assessment is a general assessment performed using best practice guidance, professional judgment and consideration for the impact on the Agency's operations if the targeted units fail to function in the most effective and efficient manner or neglect to comply with required policies. In performing the Risk Assessment for this FY 2018/19 Annual Audit Plan, the following were considered:

- Agency Policies and Procedures
- Communication with the External Auditors
- Communication with the Audit Committee and Board
- Communications with key Agency personnel
- Assessing risks and exposures that may affect the organization
- New Agency activities, developments and major changes
- Key areas that affect revenue and expenses
- Observations resulting from previous audits and reviews
- New audit requirements and trends
- Opportunities to improve operations

### ***Audit Universe***

The IIA PPF defines Universe as all possible auditable areas. For the purposes of this Annual Audit Plan, the universe includes all Agency Departments, operations, contracts, transactions, processes, and activities.

### *Quality Assurance and Improvement Program*

The Institute of Internal Auditing (IIA), International Professional Practices Framework (IPPF) defines a Quality Assurance and Improvement Program: “A quality assurance and improvement Program is designed to enable an evaluation of internal audit activity’s conformance with the Definition of Internal Auditing and the *Standards* and an evaluation of whether internal auditors apply the Code of Ethics. The program also assesses the efficiency and effectiveness of the internal audit activity and identifies opportunities for improvement.”

Standard 1311 of the IPPF requires that internal assessments include ongoing monitoring of the performance of internal audit activity; and periodic reviews performed through self-assessments.

Standard 1312 of the IPPF requires that external assessments be conducted at least once every five years by a qualified, independent reviewer or review team from outside the organization.

As part of IA’s commitment for continued quality audit services, beginning FY 2020/21, IAD will perform internal assessments of the IAD. An external assessment by an independent reviewer is planned for FY 2020/21. Results will be presented and discussed at the regularly scheduled Audit Committee meetings.

# **Audit Committee Meeting**

## **June 8, 2020**

### **FY 2020/21 Annual Audit Plan**



**Teresa V. Velarde,**  
**Manager of Internal Audit**

# FY 2020/21 Annual Audit Plan

## Proposing the following audits:

### **Completion of Human Resources Operational Audit – Training & Education**

### **Agency Disbursements and Accounts Payable Audit**

Select a specific vendor or types of payments, to ensure transactions do not bypass the required procurement processes and there are sufficient internal controls in place for the following:

- FEMA Expenditures
- Electronic Payments
- Agency Credit Cards & P-cards
- 

Scope to include:

- Review financial transactions and supporting documents
- Review proper expense coding and justifications
- Evaluate internal controls
- Compliance with policies and procedures

### **GFOA Budget Preparation Guidelines for Performance Measures/Workload Indicators**

### **Requests for audits/evaluations**

### **CAFR Review**

### **External Auditor RFP, Proposal Evaluations and Selection**

### **Follow-Up Reviews**

# Outstanding Recommendations

Area Audited	Report Issued Date	No. of Recs. Remaining to be Verified by IA	Planned Follow-Up
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Human Resources Audit: Hiring and Promotions Operations Review	December 2, 2019	7	FY 2024
Total Outstanding Audit Recommendations		79	
Recommendations related to the Regional Contract Review (these recommendations are planned for full implementation with the renegotiation of the Regional Contract IA will not follow up on these unless requested to do so or after the new contract is executed.)			
Regional Contract Review – Final Audit Report	December 16, 2015	31	Pending – Renegotiation of the Regional Contract

# Long Range Audit Planning – Additional / Possible Audit Areas

- Capital Projects
- Accounts Payable
- Agency Agreements & Contracts
- Bid and Selection Process for Construction Contracts
- Asset Management
- Operations
- Payroll Audit
- Personal Computer Loan Program & Policy Compliance
- Data Analytics

# FY 2020/21 Annual Audit Plan

## *Action:*

- 1. Approve the FY 2020/21 Annual Audit Plan; and*
- 2. Direct the Manager of Internal Audit to implement the FY 2020/21 Annual Audit Plan.*



# FY 2020/21 Annual Audit Plan

***The Annual Audit Plan is a proposed plan of audit projects that is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment and Business Practices by ensuring that audits and recommendations evaluate and promote a strong control environment and assist management in achieving organizational goals.***



# **INFORMATION ITEM 2A**

**Date:** June 17, 2020

**To:** The Honorable Board of Directors

**Committee:** Audit

**From:** Teresa Velarde, Manager of Internal Audit

06/08/20

**Manager Contact:** Teresa Velarde, Manager of Internal Audit

**Subject:** FY 2019/20 Financial Audit - Communications Required by SAS 114

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**Executive Summary:**

Statement on Auditing Standards No. 114 (SAS 114) requires the financial statement auditors to communicate the planned scope and timing of the financial audit. SAS 114 also describes the auditor's responsibility to inquire of the Audit Committee and those charged with governance, information that should be considered in the auditor's risk assessment in planning the financial audit. The Agency's external auditors are Lance, Soll & Lunghard, LLP (LSL), independent Certified Public Accountants (CPA), based in Brea, CA. This year will be LSL's fifth year performing the financial audit and Single Audit of the Agency, as well as the financial statements of the Chino Basin Regional Financing Authority for the fiscal year ending June 30, 2020. It is their responsibility to provide an opinion as to whether the financial statements are presented fairly.

Attached is the required communication letter under SAS 114. During the Audit Committee meeting, Mr. Ryan Domino, a CPA and partner with LSL will provide a presentation about the audit scope and approach, as well as the required communications. Additional one-on-one meetings may be scheduled separately to discuss the scope and approach of the audit.

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**Staff's Recommendation:**

This is an information item.

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**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 March 16, 2016, the Board approved Contract Numbers 4600002079, in the amount of \$100,820, and 4600002081, in the amount of \$12,450 with Lance, Soll and Lunghard, LLP, to provide Annual Financial and Single Audit Services for the Inland Empire Utilities Agency and the Chino Basin Regional Financing Authority for the three fiscal years ending June 30, 2016, 2017 and 2018 with options for an additional two fiscal years. The second option for an additional year was exercised on October 10, 2019.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The annual financial statement audit of the Agency is a requirement per the Agency's approved Fiscal Ordinance and other regulatory requirements and is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that the financial audit evaluate and promote a strong control environment and assist management in achieving organizational goals.

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**Attachments:**

Attachment 1 - Communication Letter - LSL

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April 29, 2020

To the Board of Directors  
Inland Empire Utilities Agency  
Chino, California

**Via Email**

Attn: Christina Valencia, Chief Financial Officer  
cvalencia@ieua.org

We are engaged to audit the financial statements of each major fund and the aggregate remaining fund information of the Inland Empire Utilities Agency (the "Agency") for the year ended June 30, 2020. In addition, we were engaged to perform an audit of the financial statements for the Chino Basin Regional Financing Authority component unit and perform the Single Audit for the year ended June 30, 2020. Professional standards require that we provide you with the following information related to our audit. We would also appreciate the opportunity to meet with you to discuss this information further since a two-way dialogue can provide valuable information for the audit process.

**Our Responsibilities under U.S. Generally Accepted Auditing Standards,  
*Government Auditing Standards* and the Uniform Guidance.**

As stated in our engagement letter dated May 12, 2020, our responsibility, as described by professional standards, is to express opinions about whether the financial statements prepared by management with your oversight are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles. Our audit of the financial statements does not relieve you or management of your responsibilities.

In planning and performing our audit, we will consider the Agency's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinions on the financial statements and not to provide assurance on the internal control over financial reporting. We will also consider internal control over compliance with requirements that could have a direct and material effect on a major federal program in order to determine our auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with the Uniform Guidance.

As part of obtaining reasonable assurance about whether the Agency's financial statements are free of material misstatement, we will perform tests of its compliance with certain provisions of laws, regulations, contracts, and grants. However, providing an opinion on compliance with those provisions is not an objective of our audit. Also in accordance with the Uniform Guidance, we will examine, on a test basis, evidence about the Agency's compliance with the types of compliance requirements described in the U.S. Office of Management and Budget (OMB) Compliance Supplement applicable to each of its major federal programs for the purpose of expressing an opinion on the Agency's compliance with those requirements. While our audit will provide a reasonable basis for our opinion, it will not provide a legal determination on the Agency's compliance with those requirements.

Generally accepted accounting principles provide for certain required supplementary information (RSI) to supplement the basic financial statements. Our responsibility with respect to the management's discussion and analysis, the schedule of changes in the net pension liability and related ratios, the schedule of changes



in the net OPEB liability and related ratios, and the schedules of plan contributions which supplement the basic financial statements, is to apply certain limited procedures in accordance with generally accepted auditing standards. However, the RSI will not be audited and, because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance, we will not express an opinion or provide any assurance on the RSI.

We have been engaged to report on the combining and individual fund statements and schedules which accompany the financial statements but are not RSI. Our responsibility for this supplementary information, as described by professional standards, is to evaluate the presentation of the supplementary information in relation to the financial statements as a whole and to report on whether the supplementary information is fairly stated, in all material respects, in relation to the financial statements as a whole.

We have not been engaged to report on the introductory and statistical sections of the Comprehensive Annual Financial Report, which accompany the financial statements but are not RSI. Our responsibility with respect to this other information in documents containing the audited financial statements and auditor's report does not extend beyond the financial information identified in the report. We have no responsibility for determining whether this other information is properly stated. This other information will not be audited, and we will not express an opinion or provide any assurance on it.

#### Planned Scope, Timing of the Audit, and Other

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested.

Our audit will include obtaining an understanding of the entity and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. Material misstatements may result from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the entity or to acts by management or employees acting on behalf of the entity. We will generally communicate our significant findings at the conclusion of the audit. However, some matters could be communicated sooner, particularly if significant difficulties are encountered during the audit where assistance is needed to overcome the difficulties or if the difficulties may lead to a modified opinion. We will also communicate any internal control related matters that are required to be communicated under professional standards.

We expect to begin our audit on approximately May 26, 2020 and issue our report on approximately December 4, 2020. Deborah Harper, CPA, is the engagement partner and is responsible for supervising the engagement and signing the report or authorizing another individual to sign it.

This information is intended solely for the use of the Board of Directors and management of the Inland Empire Utilities Agency and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

A handwritten signature in cursive script that reads "Lance, Soll & Lughard, LLP".

**INFORMATION  
ITEM  
2B**

**Date:** June 17, 2020

**To:** The Honorable Board of Directors

**Committee:** Audit

  
**From:** Teresa Velarde, Manager of Internal Audit

06/08/20

**Manager Contact:** Teresa Velarde, Manager of Internal Audit

**Subject:** Human Resources: Workload Indicators Review

---

**Executive Summary:**

Internal Audit (IA) completed a review of the Human Resources Department's (HR) Workload Indicators as reported in the Fiscal Year 19/20 and 20/21 Operating and Capital Program Budget (Budget document). HR performs a variety of tasks and activities for Agency staff. Workload Indicators measure and track and report some of the department's processes and activities which should be consistent with current department and overall Agency goals and objectives. HR currently reports 13 workload indicators, IA selected four for further review and analysis. The audit noted observations and recommendations to tighten processes and controls, and improve the information reported through the Workload Indicators. The bullet points below provide a summary of the observations:

- Consider additional and/or different Workload Indicators that provide information about the various activities of the department and ensure they are aligned to the department's goals.
- Document a Standard Operating Procedure or desk procedure to ensure consistency in the data collected and accuracy in the method for calculating workload indicators.
- Compare the target goals established for each workload indicator to their actual results and perform an analysis to determine differences.

The complete report with observations and recommendations is attached.

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**Staff's Recommendation:**

This is an information item.

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**Budget Impact** Budgeted (Y/N): N Amendment (Y/N): N Amount for Requested Approval:

Account/Project Name:

N/A

*Fiscal Impact (explain if not budgeted):*

N/A

**Prior Board Action:**

On December 18, 2019, the Board of Directors approved the Audit Committee and the Internal Audit Department Charters.

On September 18, 2019, the Board of Directors approved the amended Fiscal Year (FY) 2019/20 Annual Audit Plan. The original FY 2019/20 Annual Audit Plan was approved on June 19, 2019. This review was scheduled as part of the HR Operational Audit in the Annual Audit Plan.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The Human Resources: Workload Indicators Review is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices. IA's ongoing monitoring activities are to follow-up on the status of open audit recommendations to determine if the Agency has taken corrective action to address issues identified and to assist the Agency in achieving organizational goals.

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**Attachments:**

Attachment 1 - Human Resources: Workload Indicators Review Report  
Attachment 2 - PowerPoint






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[www.ieua.org](http://www.ieua.org)

DATE: May 29, 2020

TO: Shivaji Deshmukh  
General Manager

FROM:   
Teresa V. Velarde  
Manager of Internal Audit

**SUBJECT: Human Resources: Workload Indicators Review**

**Audit Authority**

The Inland Empire Utilities Agency (IEUA or Agency) Internal Audit Department (IA) performed an audit of the Human Resources Department's (HR) Workload Indicators. The audit was performed under the authority given by the IEUA Board of Directors (Board) and the Fiscal Year (FY) 2019/20 Annual Audit Plan. The attached report provides IA's observations and recommendations.

**Audit Scope**

The overall objective of the HR Operational Audit is to evaluate various processes and operations of the department and determine whether Agency policies are followed, and department-specific standard operating procedures are implemented. The objectives of the Workload Indicators Review were to:

- Evaluate workload indicator calculations and supporting information
- Compare with other similar agencies
- Identify opportunities for improvements

IA is performing the HR Operational Audit in multiple stages. To-date, IA has completed the Workload Indicators Review (attached report) along with the previously completed HR audits:

- Hiring and Promotions Operations Review (dated December 2, 2019): this report evaluated policies and processes for hiring and promoting Agency employees.
- Grievance Policies and Procedures Comparable Survey (dated February 20, 2020): this report compared the Agency's Grievance process and procedures to other Agencies to evaluate current trends and best practices.

IA will also evaluate the Agency's Training and Development program and follow up on outstanding recommendations from prior audit reports. An audit report is finalized after the completion of each area reviewed.

***Water Smart - Thinking in Terms of Tomorrow***

**Kati Parker**  
President

**Jasmin A. Hall**  
Vice President

**Steven J. Elie**  
Secretary/Treasurer

**Michael E. Camacho**  
Director

**Paul Hofer**  
Director

**Shivaji Deshmukh**  
General Manager

**Audit Techniques:**

Audit techniques included:

- Discussions and correspondence with Agency staff
- Review of Agency's Budget documents
- Review and analysis of supporting documentation
- Review of comparable agencies' workload indicators and performance measures

**Audit Results – Executive Summary:**

HR performs a variety of essential services for the Agency. Some of HR's processes and activities are tracked, measured, and reported through Workload Indicators and published in the Agency's budget document. HR currently reports 13 Workload Indicators as part of the *FY 2019/20 and 20/21 Operating and Capital Program Budget*.

Since the adoption of the most recent biennial budget document, there have been changes in leadership within HR and Agency management. HR noted that the documented goals and objectives may have changed or may continue to evolve since they were originally adopted to ensure they are aligned with the current Agency goals. Different indicators and data could be published that is more reflective of HR's current priorities. IA's review identified opportunities and suggestions to improve processes and controls, and the information reported. The bullet points provide a summary:

- Department Workload Indicators: IA selected four of the 13 Workload Indicators for a detailed evaluation. Based on the review, IA observed there were inconsistencies in the methodology used to calculate the indicators. IA suggests HR ensure uniformity in the data and methodology used to compute the indicators, which would allow for accurate calculation of the information and comparison from year to year. IA recommends HR develop a Standard Operating Procedure or desk procedures to serve as a guide for staff computing the department's workload indicators.
- Comparison of Actual to Target results: For the Workload Indicators reported in the Budget document, IA observed the actual results are not compared to the target levels established. Comparison and analysis of this type of information can provide insight about processes and/or functions that may require attention or further review, in addition to, highlighting areas where the department is performing well. An analysis of actual results to target goals can be completed as part of the department's accomplishments.
- Other Possible Workload Indicators: IA identified other potential Workload Indicators that the HR Department could consider in the future to track, measure, and report the various other activities of the department. IA recommends HR consider additional and/or different Workload Indicators that provide information about the various activities of the department and ensure they are aligned to the department's goals.

*The Human Resources: Workload Indicators Review is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by providing an independent evaluation of the Human Resources Department, providing recommendations for improvements, monitoring the internal control environment of the Agency, and assisting Agency management in achieving organizational goals and objectives.*

### **Acknowledgements**

IA would like to extend our appreciation to the HR Department staff for their cooperation and assistance during this review.

### **Discussions with Management**

Drafts of this audit report were provided to Lisa Dye, Manager of HR and Blanca Arambula, Deputy Manager of HR, for their review and input; their comments have been incorporated prior to finalizing the report.

## **Background**

The *Operating and Capital Program Budget* (Budget document) is approved by the Board every two years and documents the Board-adopted Business Goals which align with the Agency's mission, vision, and values. The Budget document provides estimates of the Agency's revenues, programs, funds, capital projects, debt and personnel for the upcoming two years. The Budget document also reports each Agency department's mission statement, department goals, initiatives, workload indicators and performance measures.

The Finance and Accounting Department (FAD) is responsible for compiling the Budget document. FAD also submits the Budget document to the Government Finance Officers Association (GFOA) for their distinguished budget presentation award. The Budget document must meet various criteria for award recognition. According to FAD, a **performance measure** reflects outputs of an organizational unit/department that provides a meaningful way to assess the effectiveness and efficiency of the unit and a **workload indicator** is a tracking mechanism for linking performance and output.

## **HR's Department Workload Indicators**

The HR Department's Workload Indicators track and document some of the department's functions and services. According to IAs observations, the HR's workload indicators were established to align with the department's and the Agency's Business goals and major accomplishments. The workload indicators tracked by HR are utilized as a mechanism to measure work performed over time and show how the HR Department has contributed to the Agency's overall goals. The most recent Board-approved Budget document for FY 2019/20 and 2020/21, shows:

### MISSION STATEMENT

Assist in providing effective and efficient support to the Agency's most valued asset, its employees. The Department strives to ensure the successful selection and retention of the best qualified candidates, the implementation of valuable benefits, the maintenance and enhancement of staff skills through training, and the resolution of personnel issues in a timely manner with the highest standards of confidentiality, integrity, courtesy, and respect.

### DESCRIPTION AND PURPOSE

The Human Resources (HR) Department strives to promote progressive practices in the following areas: recruitment and retention; application of the Memorandums of Understanding and Personnel Manuals for the various bargaining units; sustainment of positive labor relations with all employee bargaining units; benefits; development of the Agency's training program; compliance with State and Federal regulations such as the Family Medical Leave Act, Americans with Disabilities Act, Affordable Care Act and COBRA. In addition, the HR Department is charged with discovering new ways to motivate staff and provide a rewarding work environment for Agency employees. The Human Resources staff serves as advisors, consultants, and organizational champions for the Agency.

HR tracks, measures and reports the following 13 workload indicators:

	2017/18 Actual	2018/19 Projected	FY 2019/20 Target	FY 2020/21 Target
New Hires	41	46	40	40
Average Recruitment Processing Time	11 weeks	13 weeks	10 weeks	10 weeks
Average New Hire Processing Time	17 days	25 days	16 days	16 days
Separations	47	35	35	35
Turnover Ratio	12%	18%	15%	15%
Open Enrollment Transactions Processed	78	79	80	80
FMLA Requests	36	40	30	30
Customer Satisfaction Surveys	5	5	5	5
Training Hours per Employee	20	20	20	20
Grievances Filed	7	4	5	5
Grievances Resolved at Appeals Committee Level	1	0	1	1
Disciplinary Actions Processed	7	6	4	4
Disciplinary Actions Appealed	0	1	0	0

HRs section of the Budget document is included as **Attachment 1** of this report, which includes the additional sections:

- Position summary information
- Organizational chart
- Summary of the business goal's performance for the past year (FY 2018/19),
- Business goals and objectives planned for FY 2019/20 and 2020/21 to be measured using various Key Performance Indicators (KPIs) with an estimated timeline.

The Board-approved Budget document provides the actual results of the Workload Indicators from the prior fiscal year, projected results for the current fiscal year, and the target levels for the upcoming two fiscal years. To provide a longer-range comparison, IA used the Agency's current and prior budget documents to compile HR's target and actual Workload Indicators for the last five fiscal years for the purpose of comparing target to actual and evaluating any differences:

### Human Resources Other Department Workload Indicators\*

	2018/19	2018/19	2017/18	2017/18	2016/17	2016/17	2015/16	2015/16	2014/15	2014/15
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
New Hires	35	<b>41</b>	25	<b>42</b>	40	<b>49</b>	40	<b>35</b>	30	<b>32</b>
Average Recruitment Processing Time (reported in weeks)	10	<b>11</b>	10	<b>11</b>	6.4	<b>11.5</b>	6.4	<b>9.6</b>	6.4	<b>15.5</b>
Average New Hire Processing Time (reported in days)	25	<b>23</b>	17.5	<b>17</b>	14	<b>22.5</b>	14	<b>22.7</b>	14	<b>25.6</b>
Separations	30	<b>41</b>	30	<b>47</b>	35	<b>36</b>	35	<b>30</b>	30	<b>30</b>
Turnover Ratio (Percentage)	12%	<b>9%</b>	12%	<b>12%</b>	10%	<b>13.5%</b>	10%	<b>11.6%</b>	10%	<b>11.8%</b>
Open Enrollment Transactions Processed	90	<b>119</b>	90	<b>78</b>	60	<b>103</b>	60	<b>91</b>	60	<b>60</b>
FMLA Requests	30	<b>32</b>	30	<b>43</b>	30	<b>36</b>	30	<b>33</b>	35	<b>35</b>
Customer Satisfaction Surveys	5	<b>5</b>	5	<b>5</b>	5	<b>5</b>	5	<b>5</b>	5	<b>5</b>
Training Hours Per Employee	20	<b>21</b>	20	<b>19</b>	20	<b>16</b>	20	<b>20</b>	20	<b>20</b>
Grievances Filed	5	<b>4</b>	5	<b>7</b>	5	<b>14</b>	5	<b>22</b>	6	<b>11</b>
Grievances Resolved at Appeals Committee Level	0	<b>0</b>	0	<b>1</b>	0	<b>0</b>	0	<b>1</b>	0	<b>0</b>
Disciplinary Actions Processed	5	<b>6</b>	5	<b>7</b>	5	<b>12</b>	5	<b>8</b>	5	<b>6</b>
Disciplinary Actions Appealed	0	<b>2</b>	0	<b>0</b>	0	<b>0</b>	0	<b>0</b>	2	<b>0</b>

\*Source: HR Department and IEUA's *Operating and Capital Program Budget* for the corresponding fiscal year. Some actual figures were updated by the HR Department and provided to IA during the review. Therefore, some of the actual figures in this chart may differ from the information reported in the Budget document. Also, prior Budget Documents included indicators related to Safety, which are not included in this table and/or reviewed because the Safety Division has moved to the Contracts and Procurement Department and beyond the scope of IA's review.

Note: in some instances, for the purpose of comparisons for this table, for years 2014 through 2016, IA recalculated to provide comparison (i.e. days to weeks or weeks to days).

### **Observations and Recommendations**

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Performance measures and workload indicators serve to establish goals and provide the means to evaluate a department or activity. FAD has noted that information captured by performance measures and workload indicators should be relevant, useful and clearly tied to the end results and services provided by a department. Additionally, performance measures and workload indicators should be developed with the overall goals of the Agency in mind.

HR reports 13 workload indicators that provide information about the department's activities and measure those along with data about other staff activities. Based on IA's observation, the table Other Department Workload Indicators, compiled by HR, includes a combination of both performance measures and workload indicators.

IA selected four of the 13 workload indicators for additional analysis:

- Turnover Ratio
- Average Recruitment Processing Time
- Average New Hire Processing Time
- Customer Satisfaction Survey

For each of the workload indicator selected, IA performed the following:

- Obtained an understanding of the purpose of the workload indicator
- Obtained an understanding of how the indicators were measured
- Reviewed supporting data for the calculations
- Determined if the indicators were accurately calculated and reported
- Reviewed the results for five fiscal years to evaluate the trend

#### **Turnover Ratio:**

The Turnover Ratio is meant to measure the total number of employee separations from the Agency in a fiscal year, reported as a percentage of total staff. Turnover Ratio may vary by type of industry/employer, and all organizations experience employee turnover. HR's target indicates the goal is to have 10-12% of the permanent full-time employees separate from Agency employment, with at least a 90% employee retention rate.

HR provided an Excel Workbook that contained a spreadsheet for each fiscal year. The information in this spreadsheet showed the number of authorized employees, vacancies, positions on hold and filled, filled rate, and number of separations (full-time employees and interns). HR uses this information to calculate:

- Turnover ratio (separately for interns, full-time employees and overall)
- Average number of positions filled for the fiscal year
- Average vacancies per month

The Turnover Ratio is calculated as follows:

$$\frac{\text{Number of Employees Separated (full time employees)}}{\text{Average number of employees}} \times 100 = \text{Turnover Ratio}$$

Number of Employee Separations: is the total number of employees who separated from Agency employment in that fiscal year.

Average number of employees: HR calculates the number of positions filled using permanent full-time employee data (authorized minus vacancies) on a monthly basis and averages this over the fiscal year to determine the average number of positions filled.

In the table below, the Turnover Ratio has been higher than the Target rate for each year. According to HR, the number of interns that separated from the Agency was inadvertently included in the calculation of the Turnover Ratio for three fiscal years (2014/15 to 2016/17) when it should not have been. HR noted interns should not be included in the ratio because only permanent full-time employee data is used. As a result, the figures reported in the approved Budget document were higher than the Target, as seen in the table below:

**Turnover Ratio**

FY	Target Reported in the Budget Document	Actual Reported in the Budget Document or provided by HR	Correct Actual Rate that should have been reported
			Full-time employee Turnover Ratio
2014/15	10%	12%	7.9%
2015/16	10%	12%	7.4%
2016/17	10%	14%	9.8%
2017/18	12%	12%	12.8%
2018/19	12%	9%	8.7%

IA's recalculation of the ratios indicates that the Turnover Rate was lower than the target established in the Budget document for the three fiscal years. This indicates full-time employees did not separate from Agency employment at the rate anticipated.

*IA recommends HR ensure consistency in the methodology used to calculate the Agency's rates and indicators, including the Turnover Ratio, to ensure information is accurately calculated and can be compared from Target to Actual and from year to year. Additionally, when errors or changes are identified, consider reporting the information in the subsequent publication and/or internal documents kept as reference, to ensure information is clearly communicated to readers and recorded/reconciled.*



**Average Recruitment Processing Time:**

The Average Recruitment Processing Time calculates the average amount of time to recruit for an Agency position in a fiscal year, reported in weeks. It is calculated as:

Formula used prior to FY 2017/18:

$$\frac{\text{Approval Date} - \text{Offer date}}{\text{Total number of recruitments}} = \text{Average Recruitment Processing Time divided by 7 days in a week}$$

Data used for FY 2017/18 to current:

***Overall average of number of days from Approval Date to Offer Date***

Approval Date: This is the date the General Manager approved the Request to Fill a Vacant Position (RFVP) form.

Offer Date: This is the date there was an official job offer to the selected applicant.

Total number of recruitments: This is the number of positions that the Agency recruited for in a fiscal year.

IA recalculated the rates reported for Average Recruitment Processing Time and noted:

FY	Average Recruitment Processing Time (in weeks)		
	Total Reported	Total IA Recalculated	Difference in Weeks
2014/15	15.5	15.5	-
2015/16	9.6	12.8	3.3
2016/17	11.5	11.7	0.2
2017/18	N/A	N/A	N/A
2018/19	N/A	N/A	N/A

N/A = Not enough information available to calculate and compare.

**Average New Hire Processing Time:**

The Average New Hire Processing Time calculates the average number of days it takes to bring a new employee on-board, from the date the job offer was made to the date the employee reported to their first day of work. It is calculated as:

Formula used prior to FY 2017/18:

$$\frac{\text{Offer Date} - \text{Hire Date}}{\text{Total number of recruitments}} = \text{Average New Hire Processing Time}$$

Data used for FY 2017/18 to current:

***Overall average of days from Offer Date to Hire Date***

HR tracks and records detailed information about the various steps in the recruitment process (at least 18 elements of information are compiled). Using the data recorded for each recruitment, HR calculates the following:

- Total number of business days from the recruitment start date to hire date,
- Total number of business days from the approval date by the General Manager on the RFVP form to the offer date, and
- Total number of business days from the offer date to the hire date.

IA recalculated the rates reported for Average New Hire Processing Time and noted:

FY	Average New Hire Processing Time (in days)		
	Total Reported	Total IA Recalculated	Difference In Days
2014/15	25.6	25.6	-
2015/16	22.7	22.5	0.2
2016/17	22.5	23	0.5
2017/18	N/A	N/A	N/A
2018/19	N/A	N/A	N/A

N/A = Not enough information available to calculate and compare.

Based on the results of this audit and using the formulas outlined above, the two indicators had calculation errors in the three years tested (FY 2015 to 2017). The differences range from less than a day up to 3 weeks. According to HR, starting in FY 2017/18, the process and formula used to calculate these workload indicators changed from the prior fiscal years. Therefore, IA is unable to recalculate the indicators for the two most current fiscal years as they are not comparable to the other fiscal years.

For these indicators, HR now obtains the overall average of the Approval Date to Offer Date (Average Recruitment Processing Time) and Offer Date to Hire Date (Average New Hire Processing Time). HR stated the change in the formula resulted from collaboration with Agency staff and because the new formula was better suited to capture the data required by the department. Additionally, HR noted the data needs of the department have evolved, which effects recruitment information collected and has resulted in many updates and changes to the data gathered by the department.

HR currently does not have any Standard Operating Procedure (SOPs) or desk procedures related to the compilation and/or computation of the department's workload indicators. IA recommends a desk procedure, or an SOP be documented to serve as a guide in providing instructions for collecting the data and calculating the indicators. As the audit noted, it took some staff effort and time to gather the information for the purpose of this review. Having desk procedures would facilitate tracing and verifying the information published (See Recommendation #2).

*IA recommends HR ensure consistency in the methodology used to calculate the Agency's rates and indicators, to ensure information is accurately calculated and can be compared from Target to Actual and from year to year in a consistent manner. The HR Department should consider developing procedures to serve as a guide for staff to follow in the calculation of the workload indicators. Additionally, when errors or changes are identified, consider reporting the information in the subsequent publication that includes the HR Department's Workload Indicators, to ensure information is clearly communicated to readers and/or at minimum, changes be documented in the supporting documentation and made available for future reference.*

### **Customer Satisfaction Survey:**

This indicator reflects the number of training and/or information sessions that were hosted and provided to employees by the HR Department. This includes: Benefits Fair, Liebert Cassidy Whitmore trainings, and any in-house training sponsored directly by HR (i.e., Harassment, Diversity & Inclusion, Generational, etc.). Each training session is counted as an event and the annual goal is to provide five training/information events per fiscal year. HR offers a satisfaction survey for employees to complete after each event to gather information from employees about the training/event hosted.

It may appear that the name of this Workload Indicator may be confusing or misleading, because the indicator provides the total number of events not just the surveys given.

According to HR, the survey given after each event hosted is meant to gather feedback for the purpose of planning future events. HR may want to consider renaming this indicator, for example, "HR sponsored training/benefits events". Additionally, HR may want to consider creating a new indicator to rate the level of satisfaction with the training events based on the results of the surveys received for each event. The feedback generated from the survey responses does not appear to be tracked as part of the HR Department's Workload Indicators. It would be helpful to track the percentage of survey responses and the percentage of employees satisfied with the trainings.

*IA suggests HR review the purpose and intent of the Customer Satisfaction Survey Workload Indicator and determine what type of information should be gathered, collected, measured and reported to more accurately align with its department goals and objectives.*

### **Comparison of Actual results vs Target goals**

The Agency's Budget document reports the Workload Indicators for prior years and the target goals for current and future years. Currently, there is no comparison of actual results to previously projected or targeted totals. IA reviewed the Budget document for all Agency departments and the same observation applies Agency-wide. Currently, there is no comparison of the actual to target results. IA prepared a table to compare actual results as reported by HR to the target goals established for the four indicators selected:

**Comparison of HR's Actual results to Target goals\***

Workload Indicator	FY 2014/15		FY 2015/16		FY 2016/17		FY 2017/18		FY 2018/19	
	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target
Turnover Ratio	11.8%	10%	11.6%	10%	13.5%	10%	12%	12%	9%	12%
Average Recruitment Processing Time (Weeks)	15.5	6.4	9.6	6.4	11.5	6.4	11	10	11	10
Average New Hire Processing Time (Days)	25.6	14	22.7	14	22.5	14	17	17.5	23	25
Customer Satisfaction Survey	5	5	5	5	5	5	5	5	5	5

\*Source: Agency's Operating and Capital Program Budget and HR Department

Comparing the actual results to the target goals can provide information about the processes that may require attention or further evaluation, as well as highlight areas where the department is performing well. If not in the Budget document, the comparison can be performed separately, perhaps as part of an annual evaluation of department accomplishments.

For example, using the table above, if an analysis were performed of HR's actual results to the target levels established, the following would be observed:

- **Turnover Ratio:** The actual results were higher than the target for three fiscal years, one year there was no variance, and the actual was lower in the most recent fiscal year. Having this information could have resulted in the department researching to determine the reasons for the differences.
- **Average Recruitment Processing Time:** The target was 6.4 weeks for three fiscal years and the actual results showed it took longer than the target results. The comparable information would have provided an indication that it is taking longer than expected to recruit for Agency positions and prompted the department to evaluate probable causes.
- **Average New Hire Processing Time:** The target was 14 days for three fiscal years and the actual results showed it took longer. This analysis shows it took longer than 14 days to bring a new employee on-board. This information could have prompted the department to evaluate reasons for the differences from the original goal.

According to HR, each requirement is unique and various factors can contribute to the recruitment and/or new hire processing time, and many of those factors are not exclusively controllable by HR. HR's goal has been a two month or 60 days to fill Agency positions; 45 days/6 weeks to recruit and 14 days/2 weeks to hire. Performing an analysis comparing actual results to target goals, HR may be able to evaluate and identify areas in the processing time that require additional attention. Additionally, the results may indicate that the benchmarks established may need to be reevaluated and reestablished to a more realistic goal.

*HR should consider comparing the target goals established for each workload indicator to their actual results and perform an analysis to determine why the targeted results were not met and/or exceeded. Comparison and analysis of the actual versus target results of the measures and/or indicators would provide insight on functions and/or areas that could be requiring improvement within the HR Department. Having this information could result in the HR Department requiring additional resources that could assist them in achieving their targeted benchmarks, which would require consultation with Executive Management.*

IA provides this as a "soft recommendation" for the HR Department's consideration. It is considered "soft" because currently, this is not a requirement for any Agency department and the Budget document and Workload indicators are required for all departments. IA will evaluate all Agency-wide workload indicators as part of a future audit.

**IA suggestions on other Workload Indicators that could be considered in the future**

Using the definitions provided by FAD, IA identified from the Workload Indicators currently reported, what appears to be an indicator versus a measurement:

<b>Workload Indicator:</b>		<b>Performance Measure:</b>
<ul style="list-style-type: none"><li>• New Hires</li><li>• Separations</li><li>• Open Enrollment Transactions Processed</li><li>• FMLA Requests</li><li>• Customer Satisfaction Survey</li></ul>	<ul style="list-style-type: none"><li>• Grievances Filed</li><li>• Grievances Resolved at Appeals Committee Level</li><li>• Disciplinary Actions Processed</li><li>• Disciplinary Actions Appealed</li></ul>	<ul style="list-style-type: none"><li>• Average Recruitment Processing Time</li><li>• Average New Hire Processing Time</li><li>• Turnover Ratio</li><li>• Training Hours per Employee</li></ul>

Based on IA's review, most of the indicators reported are not HR driven and/or controllable. For example, Family Medical Leave Act (FMLA) requests, these are the number of requests received by HR from employees. The HR Department provides guidance, ensures eligibility and completion of the forms, and compliance with the FMLA's requirements. This indicator provides a figure on the number of requests, it does not measure HR's processing and/or handling of these requests which could be linked to the department's performance. The same observation could be applied to Open Enrollment Transactions Processed, Grievances Filed, etc.; they do not originate with the department, employee initiated.

IA recommends HR evaluate the current workload indicators reported and consider adding others that may be reflective of the department's mission and goals. For example, other workload indicators to consider include:

- Average number of days to resolve grievances (at each step in the process)
- Average number of days to resolve complaints (prior to filling a grievance)
- Number and/or time to process FMLA requests and/or Open Enrollment requests
- Number and/or amount of time to process wellness reimbursements
- Number and/or amount of time to process tuition reimbursements
- Number and/or amount of time to process the Personal Computer Loan program
- Number of job fairs/recruitment fairs attended
- Number of in-person interviews facilities

**HR's Response**

According to HR, the department believes it would be beneficial to reexamine the workload indicators reported in the Budget document to ensure they align with the department's goals and objectives as well as the Agency's goals and objectives. The Budget document is created biennially, and the goals and desired accomplishments may have shifted since the budget document was first approved. Other areas the department would consider reporting on include:

- Employee Motivation/Engagement
- Equity and Inclusion
- Innovation and Technology
- Labor/Management Relations
- Leadership Development
- Organizational Culture
- Outreach
- Strategic Orientation

IA supports HR's response and efforts to reevaluate the performance measures and workload indicators to ensure they are more reflective of the current goals and objectives.

### **Comparison to other Public Agencies**

IA compared the workload indicators reported by the HR Department in the Agency's Budget document with other public agencies. The purpose was to determine what performance measures and/or workload indicators are being assessed and measured by other agencies, and whether any of these could potentially be useful to the Agency's HR Department.

IA reviewed websites and budget documents for over eight water & wastewater agencies, and many of the agencies researched generally listed the goals and/or accomplishments of the Administrative Services, HR and/or Personnel department. Specific performance measures, workload indicators and other metrics were not listed for their designated HR/personnel department/function on their website and/or budget document. With the information that was available, IA compiled the following two examples:

***Cucamonga Valley Water District*** measures the following Performance Measures:  
(Taken from Budget: Fiscal Years 2019 & 2020)

- Average number of days to hire staff, from recruitment posting to candidate's effective date of hire (start date)
- Number of compensation and classification studies conducted
- Percentage of annual performance evaluations completed
- Number of workdays lost per workers compensation claim
- Number of ergonomic assessments completed
- Percentage of employees who completed first-aid/CPR training
- Percentage of employees utilizing Target solutions online modules
- Percentage of security camera monitored campus coverage
- Number of key emergency operations center staff who completed CSTI emergency preparedness training

***East Bay Municipal Utility District*** measures the following Key Performance Indicators:  
(Taken from Strategic Plan, 8th Edition, July 2018)

- Percentage completing Leadership Program: Graduates who place on applicable promotional lists
- Annual average training hours per employee
- Number of employees in development programs (academies, rotations, internships, mentorships)
- Percentage of performance plans completed on time
- Percentage of performance appraisals completed on time
- Number of injury and illness incidents resulting in time away from work per 100 employees
- Annually implemented outreach campaigns on wellness (“Well Being”) themes
- Percentage of exams resulting in hiring lists within 60 days or less
- Percentage of minorities and percentage of women on District eligibility lists

## **Conclusion**

Overall, HR is in compliance with the current Agency practice for documenting Workload Indicators, as there is no policy or requirement for what should be captured. Based on the results of this review, IA recommends HR reevaluate current Workload Indicators and determine if the current ones track, measure, and report information reflective of the current activities and department goals and objectives and if those are tied to the overall Agency goals. This audit report identifies opportunities to improve this process.

### **2020 Recommendation #1:**

***HR should evaluate the Department Workload Indicators as reported in the Agency’s Budget document and consider additional and/or different Workload Indicators that provide information about the various activities of the department and ensure they are aligned to the department’s goals.***

### **2020 Recommendation # 2:**

***HR should document a Standard Operating Procedure or desk procedures to ensure consistency in the data collected and the method in calculating workload indicator results as documented in the Budget Book.***



**Attachment 1:**  
**Excerpts from the HR Department Budget Document:**

**POSITION SUMMARY**

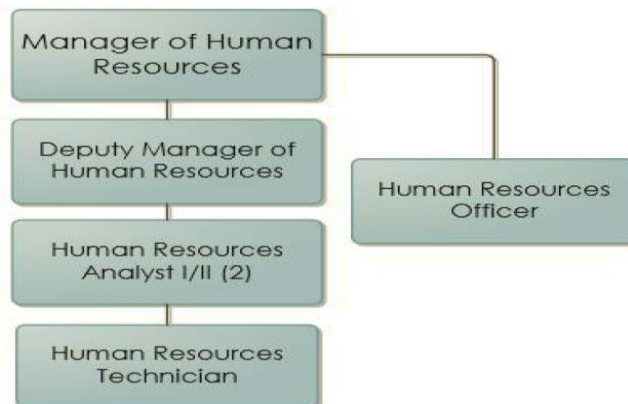
In FY 2018/19 the Human Resource department was moved from the Finance and Administration division to the Agency Management division and will report directly to the Agency's General Manager. Additionally, a departmental realignment moved safety services from Human Resources to the Contracts and Procurement department.

New in FY 2019/20, in order to better service agency needs the HR department will administer agency wide vacancies. This change adds additional flexibility in filling vacancies where they are needed most in a more efficient and expedient manner.

Position	2017/18 Actual	2018/19 Amended	2019/20 Budget	2020/21 Budget
Manager of Human Resources	1	1	1	1
Deputy Manager of Human Resources	1	1	1	1
Human Resources Officer	1	1	1	1
Safety Officer	1	0	0	0
Human Resources Analyst II	1	1	1	1
Human Resources Analyst I	1	1	1	1

Position	2017/18 Actual	2018/19 Amended	2019/20 Budget	2020/21 Budget
Safety Analyst	1	0	0	0
Human Resources Technician	1	1	1	1
Agency Wide Vacancy	0	0	4	4
<b>Total</b>	<b>8</b>	<b>6</b>	<b>10</b>	<b>10</b>

**ORGANIZATIONAL CHART**



## SUMMARY OF FY 2018/19 BUSINESS GOALS PERFORMANCE

### Major Accomplishments

A. Fiscal Responsibility B. Workplace Environment C. Business Practices

D. Water Reliability E. Wastewater Management F. Environmental Stewardship

IEUA Business Goal	Department Goals	KPI Status	Overall Accomplishments
<b>B. Workplace Environment</b>			
<b>B1</b>	Promote a positive work environment that holds managers, supervisors and employees accountable for creating and maintaining respectful and positive work relationships.	Ongoing	Agency wide mandatory Harassment Training held December 2017.  Generational Differences in the Workplace and Diversity & Inclusion training held October 2018 for supervisory and management employees as well as human resources staff.
	Develop creative communication methods and continue education of employee benefits to increase knowledge of benefits programs and services.	Ongoing	CalPERS onsite Retirement Workshop facilitated by a CalPERS representative held August 2018.  Social Security Administration onsite workshop held May 2018.
<b>B2</b>	Prepare Retirement Risk Assessment to identify employee retirement forecasting and timelines. Identify critical Agency positions. Use vacant position pool to mentor and increase knowledge transfer for critical positions.	Ongoing	A retirement risk assessment was prepared identifying retirement probabilities.  A total of 21 promotions were processed.
<b>B3</b>	Identify strengths and areas of improvement and develop action plans from 2017 survey results. Design, conduct, analyze employee engagement survey in 2019.	Completed	The employee engagement survey was conducted in FY 17 18 with an 81% participation rate. An action plan was finalized by the executive team to address the survey findings which included: Promotional Announcement to all, GM Weekly Update to all and GM Column in Wave address Transparency & Communication. Wave employee spotlights/interview addressed Respect. Executives shared "Lessons learned" at the GM All Hands Meeting.
<b>B4</b>	Analyze and identify MOU items requiring revisions or streamlining.	Completed for 2018	All five units approved of new 3-year term MOUs by June 30, 2018.

Major Accomplishments			
A. Fiscal Responsibility B. Workplace Environment C. Business Practices			
D. Water Reliability E. Wastewater Management F. Environmental Stewardship			
IEUA Business Goal	Department Goals	KPI Status	Overall Accomplishments
B5	Create draft MOUs and Personnel Rules.	ongoing for 2021	
	Promote a culture that recognizes employees for job related accomplishments.	Ongoing	Employees who are promoted are acknowledged at Board Meetings. Additionally, revised Policy A-70 License and Certification to expand eligibility to unrepresented employees and overall increased benefits for all eligible employees who obtain a job- related license or certification.
	B7 Hold quarterly Labor Management meetings to address concerns and issues on an ongoing basis.	Ongoing	Held several labor management meetings to address concerns and issues.
	Promote and sustain open communication with all levels of staff to effectively resolve work related issues in harmonious manner.	Ongoing	Total number of grievances in FY 17/18 and 18/19 declined compare to the last two previous fiscal years.
	B12 Identify policies which are most relevant to employees. Create a training plan, schedule and conduct training for all staff.	Ongoing	Five Agency-wide policies have been revised with increased benefits to employees.

DEPARTMENT GOALS AND OBJECTIVES FOR FYS 2019/20 AND 2020/21

IEUA BUSINESS GOAL OVERVIEW				
A. Fiscal Responsibility		B. Work Environment		C. Business Practices
D. Water Reliability		E. Wastewater Management		F. Environmental Stewardship
IEUA Business Goals	Department Goals	Timeline FY 2019/20	Timeline FY 2020/21	KPIs
<b>B. Work Environment</b>				
<b>B1</b>	Promote a positive work environment that holds managers, supervisors and employees accountable for creating and maintaining respectful and positive work relationships.	June 2020	June 2021	Surveys and employee feedback.
	Develop creative communication methods and continue education of employee benefits to increase knowledge of benefits programs and services.	June 2020	June 2021	Number of educational sessions held.
<b>B2</b>	Work with Executive Management and managers to identify potential leaders within the Agency; utilize the Career Management Program, Supervisory Program and Leadership Academy and other training opportunities to enhance existing talent.	June 2020	June 2021	Number of employee participants in the Career Management Program, Supervisory Program and Leadership Academy.
<b>B3</b>	Create and distribute an employee engagement survey.	June 2020	June 2021	Overall results of the employee engagement survey.
	Identify strategies to increase employee engagement and promote employee retention.	June 2020	June 2021	Overall results of the employee engagement survey.

IEUA BUSINESS GOAL OVERVIEW				
A. Fiscal Responsibility		B. Work Environment		C. Business Practices
D. Water Reliability		E. Wastewater Management		F. Environmental Stewardship
IEUA Business Goals	Department Goals	Timeline FY 2019/20	Timeline FY 2020/21	KPIs
B5	Develop creative and cost-effective ways to reward and recognize outstanding and dedicated staff.	December 2020		Number of employees recognized.
B7	Hold quarterly Labor Management meetings to address concerns and issues on an ongoing basis.	Quarterly	Quarterly	Number of labor/management meetings held.
	Promote and sustain open communication with all levels of staff to effectively resolve work related issues in harmonious manner.	Quarterly	Quarterly	Number of grievances filed and number of grievances resolved informally.
B8	Post the Disaster Response Plan, along with the Incident Organization Chart (IOC) on Agency portal to ensure staff accessibility.	Annually	Annually	Complete periodic reviews of the Disaster Response Plan and Incident Organization Chart.



# **Audit Committee Meeting**

## **June 8, 2020**

### **Human Resources Workload Indicators Review**



# Other Performance Workload Indicators

The most recent Board-approved Budget document for FY 2019/20 and 2020/21, shows:

	2017/18 Actual	2018/19 Projected	FY 2019/20 Target	FY 2020/21 Target
New Hires	41	46	40	40
Average Recruitment Processing Time	11 weeks	13 weeks	10 weeks	10 weeks
Average New Hire Processing Time	17 days	25 days	16 days	16 days
Separations	47	35	35	35
Turnover Ratio	12%	18%	15%	15%
Open Enrollment Transactions Processed	78	79	80	80
FMLA Requests	36	40	30	30
Customer Satisfaction Surveys	5	5	5	5
Training Hours per Employee	20	20	20	20
Grievances Filed	7	4	5	5
Grievances Resolved at Appeals Committee Level	1	0	1	1
Disciplinary Actions Processed	7	6	4	4
Disciplinary Actions Appealed	0	1	0	0

# Workload Indicators

## **Workload Indicator:**

- **Track and document some of the department's functions and services**
- Indicates results, outputs and total items done and workload activity
- Reported in the Agency's Budget Document

## **IA selected 4 indicators for additional review:**

- **Average Recruitment Processing Time**
- **Average New Hire Processing Time**
- **Turnover Ratio**
- **Customer Satisfaction Surveys**



# Audit Observations

- Performance Measure vs. Workload Indicator
- Accuracy in calculation methods
- Consistency from year to year
- Ensure indicators capture what is intended to capture
- Comparing Actual to Target and from year to year
- Align to department's goals and objectives
- Align to Agency's goals and objectives

# Other Workload Indicators to Consider

- Average number of days to resolve grievances (at each step in the process)
- Average number of days to resolve disciplinary actions
- Number and/or time to process FMLA requests and/or Open Enrollment requests
- Number and/or amount of time to process wellness reimbursements
- Number and/or amount of time to process tuition reimbursements
- Number and/or amount of time to process the Personal Computer Loan program
- Number of job fairs/recruitment fairs attended

# Recommendations

***Document an SOP or desk procedures to ensure consistency in the data collected and the method in calculating workload indicator results as documented in the Budget Book.***

***HR should consider comparing the target goals established for each workload indicator to their actual results and perform an analysis to determine differences.***

***Consider additional and/or different Workload Indicators that provide information about the various activities of the department and ensure they are aligned to the department's goals.***

# Human Resources Workload Indicators Review

***The Human Resources Workload Indicators Review is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by providing an independent evaluation of the Human Resources Department, providing recommendations for improvements, monitoring the internal control environment of the Agency, and assisting Agency management in achieving organizational goals and objectives.***

**INFORMATION  
ITEM  
2C**

**Date:** June 17, 2020

**To:** The Honorable Board of Directors

**Committee:** Audit

**From:** Teresa Velarde, Manager of Internal Audit

06/08/20

**Manager Contact:** Teresa Velarde, Manager of Internal Audit

**Subject:** Recycled Water Revenues Audit Report

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**Executive Summary:**

Internal Audit completed a limited review of recycled water revenues. Overall, the Agency has effective processes in place to record and collect recycled water revenues. The audit identified opportunities to further strengthen and tighten processes and controls, including:

- As described and permitted in Agency Ordinance #63, the Agency should consider whether to review and verify records and processes at the individual contracting agencies to ensure completeness of information and to prevent and detect errors.
- Staff should document procedures for its reconciliation between recycled water usage reported by the contracting agencies and Agency recycled water distribution information and document evidence of supervisor review and the reasons for and the resolution of variances.
- Staff should take the lead to work with Agency departments and contracting agencies to standardize and automate the reports and methods for providing recycled water usage information reported by contracting agencies.
- Staff should update the Standard Operating Procedure which documents procedures for preparing Recycled Water billing to provide current instructions and contact information staff to use as a guide.

Overall, staff agreed with the recommendations and plans to implement in the future.

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**Staff's Recommendation:**

This is an information item.

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**Budget Impact** *Budgeted (Y/N): Y    Amendment (Y/N): N    Amount for Requested Approval:*

*Account/Project Name:*

N/A

*Fiscal Impact (explain if not budgeted):*

N/A

**Prior Board Action:**

On December 18, 2019, the Board of Directors reconfirmed the Audit Committee and the Internal Audit Department Charters.

On September 18, 2019, the Board of Directors approved the amended FY 2019/20 Annual Audit Plan. The original FY 2019/20 Annual Audit Plan was approved on June 19, 2019. The plan was in accordance with auditing standards and the Charter.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The Recycled Water Revenues Report is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by providing an independent evaluation of Recycled Water Revenues, suggesting recommendations for improvements, monitoring the internal control environment of the Agency, and assisting Agency management in achieving organizational goals and objectives.

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**Attachments:**

Attachment 1 - Recycled Water Revenues Report  
Attachment 2 - PowerPoint





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[www.ieua.org](http://www.ieua.org)

DATE: May 28, 2020

TO: Shivaji Deshmukh  
General Manager

FROM:   
Teresa V. Velarde  
Manager of Internal Audit

**SUBJECT: Recycled Water Revenues Audit**

**Audit Authority**

The Inland Empire Utilities Agency Internal Audit Department (IA) has performed a limited review under the authority given by the Board of Directors (Board), the Fiscal Year 2019/20 Annual Audit Plan and the IA Charter.

**Audit Scope**

This review was limited to evaluating controls and reports over recycled water revenues. The objectives of the Recycled Water Revenues Audit were to:

- Determine if adequate internal controls are in place over revenues
- Determine compliance with the Agency's Ordinances and Resolutions
- Evaluate the collection and recognition of revenue
- Determine whether there are procedures to reconcile revenues collected
- Determine compliance with Agency policies and procedures
- Identify opportunities for improvements

The recycled water revenues review is considered a limited review since audit procedures were limited to reviewing responses to an internal control questionnaire completed by the Planning and Environmental Compliance Department (Planning), reviewing the written procedures in the Engineering and Construction Management Department's (Engineering) Standard Operating Procedure (SOP), analyzing revenues and the related supporting documentation maintained in the Agency's accounting records in SAP and considering responses to e-mailed questions. IA also recently met with Planning representatives and obtained spreadsheets documenting annual reconciliations of recycled water entitlements and of comparisons of recycled water production to the total of amounts billed, creek discharges and ground water recharge. IA did not observe Engineering's current monthly procedures for processing recycled water activity to compare to the department's SOP and IA did not review the reconciliation activity maintained by Planning to any source documents.

***Water Smart - Thinking in Terms of Tomorrow***

Kati Parker  
President

Jasmin A. Hall  
Vice President

Steven J. Elie  
Secretary/Treasurer

Michael E. Camacho  
Director

Paul Hofer  
Director

Shivaji Deshmukh  
General Manager



### **Executive Summary**

Actual recycled water demands/usage are reported to Engineering by the contracting agencies. Using this information, revenues are processed, recorded and collected in the Agency's financial records by the Finance and Accounting Department (FAD). The audit found that the Agency has effective controls in place over collecting recycled water revenues. IA identified opportunities to improve and strengthen processes and controls. The details of IA's observations and recommendations are presented in the report that follows this summary. IA noted:

- Recycled Water Ordinance #63 (dated 1998) establishes procedures for examining contracting agency and retail customer records, including verifying meters and obtaining calibration data. Planning noted that when discrepancies in the amount of recycled water reported by the member agencies have been observed in the past, they have coordinated with Operations to perform inspections/examinations. IA recommends Planning consider whether a formal review and verification of contracting agency records and processes would be beneficial and appropriate as allowed under the Ordinance. This would provide additional assurance of the completeness and accuracy of information provided to the Agency and potentially prevent and/or correct any discrepancies noted. Planning noted that the contracting agencies have been cooperative about providing original documentation when needed for other audits. Planning agreed to consider adopting an oversight/verification process in the future.
- Planning prepares and documents periodic review and reconciliation processes as a tool to compare Agency metered records to information reported by the contracting agencies. IA recommends Planning maintain additional documentation to show that the reconciliations have been properly reviewed by a supervisor and provide clear written descriptions of the reasons for variances, if any, and how they were resolved. The documented reconciliations should be kept on file for future reference to demonstrate oversight over the information obtained from contracting agencies and as a reference tool. IA also makes a "soft recommendation" for Planning to document the reconciliation and review procedures in a departmental Standard Operating Procedure or desk procedure to serve as a guide for staff to follow.
- IA's limited review evaluated Engineering's SOP that describes the process of collecting, collating and reporting the monthly recycled water usage information received from contracting agencies. According to staff, additional aspects of the process have been updated, but contracting agencies still report their usage information in more than one way; each agency may have a different approach to reporting the information. This approach differs from the ways that the Agency obtains information for other types of revenues. For instance, Planning has collaborated with contracting agencies to provide a consistent, automated method for reporting Wastewater Connection Fees on a monthly basis. Another example is Planning's successful collaboration with BIS to automate and simplify the collection and reporting of Water Connection Fees. Similarly, Planning should take

the lead to work with Agency staff and the contracting agencies to develop standardized information reporting of recycled water usage to the Agency. Standardized and automated reports and methods of providing information would create efficiencies and ensure accuracy of the information. Planning agrees that further standardizing and automating the information received from the contracting agencies is an appropriate long-term goal.

- Engineering should update their Standard Operating Procedure (attached Exhibit #1: Work Instruction for Preparing Recycled Water Billing) to provide current detailed step-by-step instructions and contact information for recording and reporting recycled water information received from the member agencies. Engineering plans to update their SOP to use position titles and not individual contacts and to remove tasks that are now obsolete due to newer processes.

### **Acknowledgements**

IA would like to extend our appreciation to Planning, Engineering and FAD staff for their cooperation and assistance during this review.

### **Discussion with Management**

IA provided the results of this review to Christiana Daisy, Executive Manager of Engineering/Assistant General Manager and Sylvie Lee, Manager of Planning and Environmental Resources on April 29, 2020 and received initial responses on May 5, 2020. IA provided a revised draft on May 19, 2020 and obtained additional information and responses on May 26, 2020. Where possible, comments have been incorporated prior to finalizing the report.

If you have any questions or need additional information, please contact me at Extension 1521 or at [tvelarde@ieua.org](mailto:tvelarde@ieua.org).

*The Recycled Water Revenues Audit 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.*

## **Recycled Water Revenues Audit – Limited Review**

### **Background**

The parameters for recycled water (effluent) distribution and use in the Agency's service area were first established in the Regional Sewage Service Contract from 1972 and as subsequently amended. Agency Ordinances #63, 69 and 75 provided further guidelines, incentives and procedures for the expansion of recycled water distribution in the Agency's service area.

The Recycled Water Business Plan (RWBP) was then adopted in December 2007 to maximize the beneficial use of recycled water and develop climate resilient local supplies. The RWBP was updated in 2015 with the Recycled Water Program Strategy (RWPS). The primary objective of the RWPS is to update supply and demand forecasts and prioritize projects to maximize the beneficial use of recycled water throughout the year and through the planning period ending in 2035. Recycled water provides a cost effective and more reliable local water supply and is a key part of the Agency's goal of drought proofing its service area by 2030.

The Agency publishes several reports about Recycled Water each year. These include an annual "Recycled Water Quality Report" and the "Recycled Water Annual Report". Both reports include information about water quality: Effluent monitoring data and water compliance data. According to the Recycled Water Annual Report, the Agency's recycled water revenues have varied from year to year depending on hydrologic conditions and the amount of rainfall in the region.

<b>Description</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>
Recycled Water – Direct Use	\$6,267,821	\$6,035,896	\$7,681,448	\$9,717,408	\$7,671,217
Ground Water Recharge	\$3,700,343	\$5,353,286	\$6,624,157	\$7,160,349	\$6,230,569
<b>TOTAL REVENUES</b>	<b>\$9,968,164</b>	<b>\$11,389,182</b>	<b>\$14,305,605</b>	<b>\$16,877,757</b>	<b>\$13,901,786</b>

The annual report also provides additional information about customers and historical demands. Some of the data included is:

Direct use and Recharge statistics for the past 10 years:

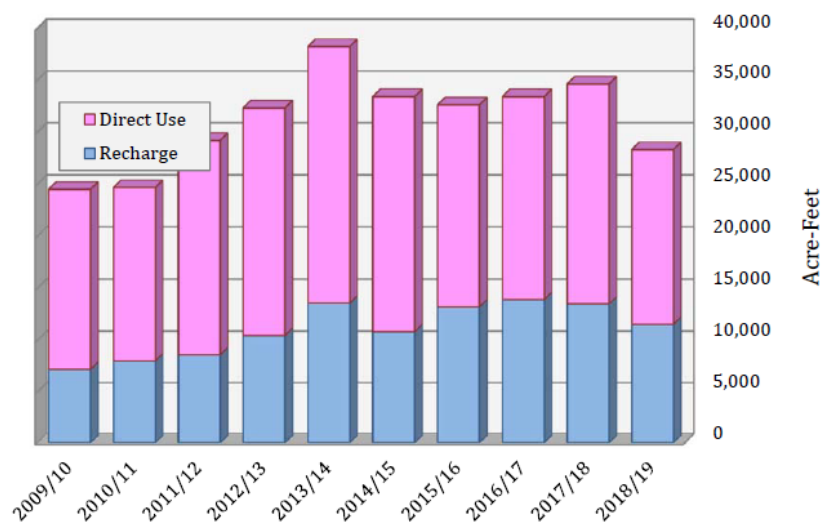


Figure 2 – Historical Recycled Water Direct Use and Groundwater Recharge

Recycled water demand by use type:

**Table 1 – Recycled Water Demand by Use Type for 2018/19**

Type of Use	Demand (AF)	Percent of Demand
Recharge	11,542	41%
Agriculture	5,850	21%
Landscape	9,469	33%
Industrial	1,078	4%
Construction	406	1%
<b>Total Demand</b>	<b>28,345</b>	<b>100%</b>

Recycled water usage by contracting agency:

**Table 2 – Recycled Water Demand by Agency for 2018/19**

Retail Agency	Direct Use (AF)	Recharge Allocation (AF)	Agency Total (AF)
Chino	4,760	1,240	6,000
Chino Hills	1,548	1,018	2,566
CVWD	996	2,837	3,833
Fontana/FWC	143	2,233	2,377
Montclair/MVWD	289	495	784
Ontario	7,511	2,634	10,145
Upland	709	1,084	1,793
IEUA	685	0	685
San Bernardino County	162	0	162
<b>Subtotal</b>	<b>16,803</b>	<b>11,542</b>	<b>28,345</b>

Top 10 customers:

**Table 3 – Top 10 Recycled Water Customers for 2018/19**

Customer	Use (AF)	Type of Use	Retailer
Cleveland Farm	2,203	Agricultural	Ontario
New Indy Ontario	907	Industrial	Ontario
Cal Poly Pomona	875	Agricultural	Chino
Murai Farm	596	Agricultural	Ontario
Whispering Lakes Golf Course	554	Landscape	Ontario
IEUA Headquarters	529	Landscape	IEUA
GH Dairy	485	Agricultural	Ontario
Superior Sod	448	Agricultural	Chino
Weststeyn Dairy	409	Agricultural	Chino
Los Serranos Golf Course	385	Landscape	Chino Hills
<b>Subtotal</b>	<b>7,390</b>		

Recycled Water Rates:

	2015/16		2016/17	2017/18	2018/19	2019/20	2020/21*
<b>Effective Date</b>	7/1/15	10/1/2015	7/1/2016	7/1/2017	7/1/2018	7/1/2019	7/1/2020
Direct Delivery AF Rate	\$290	\$350	\$410	\$470	\$480	\$490	\$500
Recharge Delivery AF Rate	\$335	\$410	\$470	\$530	\$540	\$550	\$560

\*Fee subject to change pending 2019 rate study results

Because of the amount and variety of information collected about Recycled Water revenues, the Agency can spot trends, missing information and other anomalies.

### **Process**

IA obtained an understanding from FAD about the method and process for recording recycled water revenues for direct use. Additionally, IA reviewed the responses received by Planning staff to the Internal Control Questionnaire, followed up with e-mailed questions and most recently met with Planning staff on May 26, 2020. The recycled water revenue recognition process has multiple steps:

1. The process is initiated when Engineering staff receive monthly recycled water usage information from the contracting agencies. Each contracting agency reports their monthly usage with an e-mail (although some contracting agencies utilize a bi-monthly billing cycle). The information is provided to the Agency on the "honor system", meaning that there is no information available to independently verify the individual contracting agency's reports. Some agencies provide reports with beginning and ending meter usage readings and others report only monthly usage per meter without providing beginning and ending meter readings.
2. Engineering staff creates a monthly summary report of contracting agency reported recycled water usage and Operations reported recycled water recharge usage. This report is forwarded by e-mail to FAD staff for billing purposes each month.
3. Engineering staff also maintain and update a Recycled Water Database each month from the information submitted by the contracting agencies and Operations. This provides information to track recycled water usage and to update the Agency's GIS system and facilitate future statistical analysis.
4. Based on the information received from Engineering, accounts receivable staff in FAD prepare a billing to each of the contracting agencies which is sent to each contracting agency by e-mail and regular mail. This entry credits the revenues to the recycled water fund and debits accounts receivable from each contracting agency.
5. Contracting agencies can remit their payments electronically directly to the Agency's bank account or by check. Checks are received and logged at the Agency's front desk which provides segregation of duties. When FAD is made aware of a check being received at the front desk, one of the General Ledger accountants collects the check, prepares the deposit slip and makes the accounting entry to clear the receivable and recognize the cash receipt.
6. The deposit slip is reviewed and approved by a FAD supervisor. The deposit is then scanned, and an online deposit is made to the Agency's main bank account.
7. The bank accounts are reconciled monthly.

## **Evaluation**

In order to evaluate the recycled water process, IA performed the following steps:

1. Reviewed the Agency's Ordinances that govern Recycled Water activities:
  - *Ordinance #63: "Regulating the availability and use of recycled water; approved February 18, 1998:* This Ordinance establishes the rules and regulations for wholesale and retail recycled water distribution. The Ordinance also establishes the regulations for oversight and inspection of resale agencies and direct retail recycled water users.

Inspection and entry authorization of indirect and resale recycled water users includes:

### SECTION 111 - INSPECTION AND ENTRY

- (A) The District, the RWQCB and/or DOHS shall be authorized at any reasonable time and/or hours of operations to enter the Premises of all Indirect Recycled Water Users or Resale Agency to determine compliance with all applicable requirements, to inspect the Districts facilities and monitoring equipment, and/or take photographs. Reasonable hours shall include hours when irrigation is occurring. Such inspection shall also include the right to inspect and copy records required to be maintained by the Indirect Recycled Water User under Federal, State, local or Recycled Water Use Permit requirements. The District shall provide a 24-hour notice to the Resale Agency and the Indirect Recycled Water User prior to inspection.
- (B) Inspection may include every facility that is directly or indirectly involved with the use of recycled water as determined by the District, and the respective Indirect Recycled Water User and/or Resale Agency. Authorized personnel of the District shall be provided immediate access to all of the above facilities at reasonable times and/or hours of operation. No Person shall interfere with, delay, resist or refuse entrance to authorized District's personnel attempting to inspect any facility involved directly or indirectly with the use of recycled water.

Inspection and entry authorization of direct recycled water users includes:

### SECTION 212 - DUTY TO PROVIDE INFORMATION

The Direct Recycled Water User shall furnish to the District, within a reasonable time, any documents or records maintained by the Direct Recycled Water User which may be requested to determine whether cause exists for modifying, revoking, reissuing, or to determine compliance with the Recycled Water User Permit. The Direct Recycled Water User shall also furnish to the Chief Executive Officer/General Manager upon request, copies of records required to be kept by the Direct Recycled Water User.

### SECTION 213 - INSPECTION AND ENTRY

- (A) The District, the RWQCB and/or DOHS shall be authorized at any reasonable time and/or hours of operation to enter the Premises of all Direct Recycled Water Users to determine compliance with all applicable requirements, to inspect the Districts facilities and monitoring equipment, and/or take photographs. Reasonable hours shall include hours when irrigation is occurring. Such inspection shall also include the right to inspect and copy records required to be maintained by the Direct Recycled Water User under Federal, State, local or Recycled Water Use Permit requirements.
- (B) Inspection may include every facility that is directly or indirectly involved with the use of recycled water as determined by the District, and the respective Direct Recycled Water User. Authorized personnel of the District shall be provided immediate access to all of the above facilities at reasonable times and/or hours of operation. No Person shall interfere with, delay, resist or refuse entrance to authorized District's personnel attempting to inspect any facility involved directly or indirectly with the use of recycled water.

- *Ordinance #69: "Regulating the availability and use of recycled water; approved May 18, 2000:* This Ordinance establishes billing procedures to retail agencies and customers supplied directly by IEUA (customers whose property falls outside a retail agency's service area).
  - *Ordinance #69: "Establishing incentives and encouraging the use of recycled water; approved May 15, 2002:* This Ordinance provides for using recycled water in new development where possible and provides for reviewing parcels in the service area for suitability for mandatory use of recycled water and provides for surcharges for failure to use recycled water.
2. Performed a walkthrough of the steps in the Recycled Water revenue recognition process.
  3. Reviewed Engineering's Standard Operating Procedure (and the attached Exhibit #1: Work Instruction for Preparing Recycled Water Billing) that provides detailed step-by-step instructions and contact information for recording and reporting recycled water information received from the contracting agencies. IA did not observe Engineering's current monthly procedures for processing recycled water activity to compare to the department's SOP.
  4. Obtained and reviewed information and responses from Planning to questions included in an IA prepared "Internal Control Questionnaire":
    - Responses received April 13, 2020
    - Additional comments provided to first draft audit report, dated May 5, 2020
    - Additional comments received, examples of reconciliations provided and meeting with Planning staff on May 26, 2020
  5. Compared the pdf, excel, e-mail and other information provided by Engineering to the financial information in SAP and the financial statements and to the annual Recycled Water Annual Report.
  6. Analyzed the information to ensure consistency in the various Agency documents.

### **Summary of Results**

Based on the steps performed by IA, the limited review found that the Agency has effective controls in place over collecting recycled water revenues. IA's review identified opportunities to improve and strengthen processes and controls to ensure information received is verified for accuracy of reporting and recording revenues.

### **Contracting Agency Reporting**

The Agency relies on the "honor system" for reporting recycled water revenue by the contracting agencies to IEUA. The information is reported in various e-mail reports by the contracting agencies. Currently, there is no verification or cross check done by IEUA staff



to verify that what is reported by the contracting agencies is accurate; for example, requesting additional supporting information. Further, the Agency is not provided meter readings, logs, or other reports to support/validate the totals reported to IEUA. According to Planning staff, if the monthly recycled water usage is within historic trends, no further monitoring is done by staff. If individual months are not within historic trends, Engineering works with the contracting agency to confirm the accuracy of abnormal reading deviations. Planning staff also performs a review of the overall results reported by the member agencies annually and compares these to the Agency's own metered distribution information. The review is documented in Planning's files and involves tracking total annual contracting agency reported recycled water direct use data and comparing this to the Agency's total recycled water production data. This is stored in an internal spreadsheet and according to Planning, staff has averaged an approximate 3% difference with the Agency's metered data over the last 10 years. IA has not validated this data as part of this limited review and IA is available to review if the evaluation is requested. Without redundant meters at major recycled water distribution connection points, the Agency does not have the means to more formally review/compare/verify the data. If there are deviations from industry standard for meter accuracy (+/- 5 – 10%), Planning described a process that is initiated to work with Operations and member agencies to identify the sources of variation and work to a resolution.

*Planning staff suggested to IA (in the initial Internal Control Questionnaire responses) that a review of how member agencies are collecting and reporting recycled water usage - including how often their meters are checked, maintained, and calibrated would provide additional assurance about the reliability of the information received from the member agencies. IA supports Planning and reinforces their suggestion with a recommendation in this report. IA has performed similar evaluations as part of the periodic EDU audits performed to validate wastewater connection fees and monthly sewerage charges. IA agrees with Planning staff that a validation would provide additional assurance.*

Several of IEUA's other revenue sources also rely on information provided by the Agency's contracting agencies on the "honor system" with no additional supporting documentation. These include Wastewater Connection Fees and Monthly Sewerage Fees. Recycled water revenues are similarly dependent on information provided by the member agencies. The Agency's recycled water Ordinance #63 has specific provisions for inspecting and validating information provided by member agencies and by individual retail customers.

To verify Wastewater Connection Fees and Monthly Sewerage Fees, the Agency has performed "EDU audits" every few years that include reviewing and testing records and processes at the individual contracting agencies to ensure completeness of information provided to the Agency.

**RECOMMENDATION #1:**

***IA recommends implementing a process to review and verify recycled water records and processes (including how meters are checked, maintained and calibrated) at the individual contracting agencies to ensure completeness and***

***accuracy of information provided to the Agency as provided in Agency Ordinance #63. An internal or external audit and/or review of contracting agency reporting of recycled water would provide an independent analysis of the information received from the contracting agencies to verify the data reported to the Agency. At a minimum, Planning staff should request additional supporting documentation from the contracting agencies periodically, to verify the information reported. This would potentially prevent, detect and/or correct any discrepancies to minimize any potential risk of error in reporting.***

*DEPARTMENT RESPONSE: The Metropolitan Water District (MWD) has performed occasional audits over the years in connection with their incentive programs and in other instances. The Agency has served as MWD's contact point and the contracting agencies (resale agencies) have been cooperative about providing original documentation when needed. Although Planning is aware that the Agency's Ordinance #63 allows for periodic audits and inspection of "resale agencies" Planning has determined that there is no need at this time for additional verification and is currently focusing on higher priority recycled water issues. At a future date, Planning will consider adopting an oversight control that provides for obtaining calibration and other supporting information from the resale agencies from time to time.*

#### *Reconciliations*

Planning has noted that there is an annual overall review of recycled water distribution reported by contracting agencies as compared to the Agency's own internal reports of recycled water production as well as an annual reconciliation of contracting agency reported usage to their recycled water entitlements.

*According to Planning staff, the Agency knows how much recycled water is produced from each of the plants, sent to each pressure zone, and discharged to the Santa Ana River, however specific contracting agency use is self-reported and there are no checks in place to determine accuracy of their readings other than the annual data review. The installation of redundant meters at major member agency connection points would minimize risks of unintentional under-reporting but has been found to be cost-prohibitive. Overall annual recycled water use reported by the Agency in its annual permit reports is compared to the annual billings to ensure that the discrepancies, if observed, are within industry standards.*

***Planning comment and suggestion:*** *An annual reconciliation process was collaboratively developed with the contracting agencies. The final annual recycled water use data is reviewed and confirmed with the contracting agencies before a final adjustment bill is issued. This process occurs within 90 days after the close of the fiscal year and involves Engineering, Operations, Planning, and Accounting. This process is formal and allows the Chino Basin Watermaster to finalize an annual assessment package which reports each stakeholder's recycled water use and quantities recharged/drawn.*

*Engineering also performs a comparison between reported recycled water use data and historical reported recycled water use data each month and Planning compares total reported recycled water use (external data) to total reported recycled water production (internal data reported for regulatory compliance) each year. Discrepancies in the monthly data are checked with the member agencies. Discrepancies in the annual metered data is logged for tracking purposes and thus far has averaged an approximate 3% difference with the Agency's metered data over the last 10 years.*

IA agrees with the steps being taken to compare and reconcile recycled water use data for accuracy. IA's recommendation is intended to ensure a complete, documented record of these steps is maintained and to support staff's suggestion.

Based on responses received from Planning and this evaluation, IA understands that Planning prepares and documents periodic review and reconciliation processes that are complete and well-documented. Based on IA's evaluation of the information provided, IA provides the following "soft recommendation":

***RECOMMENDATION #2 (soft recommendation):***

***IA suggests that Planning staff maintain additional documentation that shows that the reconciliations have been properly reviewed by a supervisor and provide clear written descriptions of the reasons for any variances and how they were resolved. These should be kept on file for future reference to ensure oversight over the information obtained from the contracting agencies. Additionally, Planning should consider documenting the review/reconciliation procedures in a departmental SOP or desk procedure to serve as a guide for staff.***

*DEPARTMENT RESPONSE: Planning prepares an annual reconciliation of recycled water entitlements that compares the total available recycled water entitlement for each contracting agency based on their total purchased Equivalent Dwelling Units (EDU's) to the amount of recycled water billed to their retail customers plus their total Groundwater Recharge (GWR) amounts. This entitlement reconciliation serves as the basis for determining any "entitlement exceedance" which is used to determine the annual GWR adjustment allocation credit to contracting agencies with surplus entitlement.*

*The Department also performs a comparison of recycled water production from the Agency's treatment plants to the total amounts used by the contracting agencies, the Agency and San Bernardino County as well as for GWR and the amount of creek discharge. The Department ensures that these differences are limited to a 3% to 5% average variance attributable to water meter accuracy limitations and other natural phenomena. Additionally, Planning works with Operations to investigate any discrepancies exceeding the 5% average variance threshold, should there be any.*

Tracking and Billing

As a wholesaler, the Agency relies on its contracting agencies to self-report recycled water usage to the Agency Engineering Department's "water-data email list" on a monthly basis, the contracting agencies have some differences in the methods with which data is reported:

**Report beginning and ending usage meter readings:** Planning reported that Cucamonga Valley Water District (CVWD), The Fontana Water Company, Monte Vista Water District (MVWD) and the City of Upland each report beginning and ending usage meter readings. With this information, IEUA staff can review prior reports to check that the new beginning balance matches the ending balance from the prior period.

**Report monthly usage:** The Cities of Ontario, Chino, and Chino Hills report only monthly usage per meter and do not submit beginning and ending usage readings. With this information, IEUA staff cannot verify beginning balance to ending balance to verify total meter reading amounts.

Additionally, the Agency's Operations Department reports the amount of recycled water that was recharged at the region's basins each month.

Engineering collects the data from the contracting agencies and from Operations and organizes it into a recycled water database and billing spreadsheet to be sent to FAD for billing purposes. After the billing spreadsheet is sent to FAD, a file with all active meters is sent to GIS where it is coded and placed on the recycled water GIS map. Lastly, the BIS dashboard/application is updated with the new usage data.

Because each contracting agency maintains their own billing system (including some contracting agencies that bill on a bi-monthly basis), the format of what they extract to submit to the Agency depends on their individual systems. The multiple methods used to e-mail reports of recycled water usage to Engineering cause Engineering staff to "cut and paste" the relevant information from their e-mail submittals and then input the information into a standardized format which is then uploaded into the RW database, resulting in multiple e-mails and documents saved on the Agency's server every month. Additional manual processes are then performed by Accounting to create the bills that are sent back to the contracting agencies each month.

In contrast, IA notes that the monthly wastewater connection fee submissions from the contracting agencies to Planning are now all submitted on a standard format and multiple, redundant data entry and "cutting and pasting" has been eliminated.

Planning stated Engineering has previously attempted to standardize the way data is reported to the Agency. This has resulted in complaints from the contracting agencies claiming this results in an undue training burden to contracting agency staff. Additionally, much like the monthly sewerage information that the Agency requests from contracting agencies, recycled water meter information is collected differently by different contracting agencies, including every two months by some agencies. Having to report information

that is not consistent with their current billing processes has caused discussion and issues with contracting agencies about the Agency's monthly billing methodology.

Although Engineering and FAD staff provide reliable information and billings, the potential exists for errors as a result of the way the information must be processed. After the 2015 EDU audit, the Planning department streamlined contracting agency reporting of monthly wastewater connection fees and created additional automation in the way the fees are reported to the Agency. Planning has also successfully collaborated with BIS to automate and simplify the collection and reporting of Water Connection Fees to eliminate redundant data entry. In both cases the Agency's workload has been reduced and the accuracy of the information enhanced.

**RECOMMENDATION #3:**

***Planning should take the lead to work together with Agency staff and the contracting agencies to develop standardized information reporting. Standardized and automated reports and methods of providing information would create efficiencies, make the process consistent and ensure accuracy.***

*DEPARTMENT RESPONSE: Planning and Engineering have made attempts to automate the reporting of recycled water billings from the contracting agencies in the same way that Planning successfully standardized and automated the Building Activity Reports and the Water Connection Fees billings. However, due to differences between the way each of the seven contracting agencies maintains their own records, it is not practical to create a reporting tool that is acceptable for all the contracting agencies to use at this time. Instead, the Department has worked with Engineering and the Agency's own Business Information Systems Department to develop greater quality control when monthly usage information is received from the contracting agencies. Engineering is able to process and upload the information into the Recycled Water Database.*

*Planning agrees that further standardizing and automating the information received from the contracting agencies is appropriate and will work towards this as a long-term goal.*

**Standard Operating Procedure (SOP) and Exhibit #1: Work Instruction for Preparing Recycled Water Billing**

In 2015 Engineering staff developed SOP #79 to document the steps involved in collecting and reporting recycled water usage. The SOP provides an outline of the different steps in the process and who has responsibility for them. Exhibit #1 of the SOP provides comprehensive and detailed step-by-step "work instructions" to perform the monthly information collection.

Since this valuable information was documented some of it has become obsolete as contact information and roles have changed. IA was also informed that some additional automation of processes has occurred.

Having up-to-date information is important to ensure job continuity and to provide cross-training resources. Therefore, IA suggests that the Engineering staff update SOP #79 and the related work instructions.

**RECOMMENDATION #4:**

***Engineering should update the Standard Operating Procedure and attached Exhibit #1: Work Instruction for Preparing Recycled Water Billing (last updated in 2015) to provide current detailed instructions and information for recording and reporting the recycled water information received from the contracting agencies.***

***Engineering response:*** *The 2015 SOP will be updated to use position and not individual contacts and to remove tasks that are now obsolete.*

**Overall Conclusion**

Based on the results of recycled water revenues audit overall the Agency provides effective oversight of the program. IA provides recommendations to enhance controls and processes and to support Planning's suggestions.

IA is available to discuss or perform additional audit procedures, if requested. Please contact Internal Audit for additional information or questions.

# **Audit Committee Meeting**

## **June 8, 2020**

### **Recycled Water Revenues Review**



# Recycled Water Revenues Background Information

Description	2014/15	2015/16	2016 /17	2017/18	2018/19
Recycled Water – Direct Use	\$6,267,821	\$6,035,896	\$7,681,448	\$9,717,408	\$7,671,217
Ground Water Recharge	\$3,700,343	\$5,353,286	\$6,624,157	\$7,160,349	\$6,230,569
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IEUA	685	0	685
San Bernardino County	162	0	162
<b>Subtotal</b>	<b>16,803</b>	<b>11,542</b>	<b>28,345</b>



# Recycled Water Revenues Observations & Recommendations

## **RECOMMENDATION #1:**

*Consider performing additional validation of the data provided by member agencies*

- a process to review and verify recycled water records and processes (including how meters are checked, maintained and calibrated) as provided in Agency Ordinance #63.*
- An independent analysis of the information received from the contracting agencies.*
- At a minimum, staff requesting additional supporting information, to verify the information reported.*

*The purpose:*

- To add a preventive control*
- As a periodic or spot check to verify the information*
- Mitigate any potential risks of any errors*

# Recycled Water Revenues Observations & Recommendations

## **RECOMMENDATION #2:**

*Consider having a documented procedure to ensure reconciliations are completed, reviewed by a supervisor and document reasons for any variances and how they were resolved.*

### *The purpose:*

- Staff to maintain additional documentation to support the reconciliation*
- To add a control to identify any variances that need to be addressed*
- Filed and retained for future reference and ensure oversight over the information obtained*

# Recycled Water Revenues Observations & Recommendations

## **RECOMMENDATION #3:**

*Staff should work together with contracting agencies to develop standardized and automated methods of providing information*

### *The purpose:*

- *Ensures all contracting agencies provide the same information in a similar manner*
- *Eliminate the need for duplicate entry and/or cut and paste*
- *Create efficiencies*

# Recycled Water Revenues Observations & Recommendations

## ***RECOMMENDATION #4:***

***Engineering should update the Standard Operating Procedure (Exhibit #1) Work Instruction for Preparing Recycled Water Billing***

***The purpose:***

- To provide current detailed step-by-step instructions***
- Update information for recording and reporting recycled water***
- To serve as a guide for staff to follow***

## Questions/Comments?

***The Recycled Water Revenues Audit 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.***

# **INFORMATION ITEM 2D**

**Date:** June 17, 2020

**To:** The Honorable Board of Directors

**Committee:** Audit

**From:** Teresa Velarde, Manager of Internal Audit

06/08/20

**Manager Contact:** Teresa Velarde, Manager of Internal Audit

**Subject:** Approvals and Disbursements Automation Follow-Up Review

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**Executive Summary:**

Internal Audit completed a follow-up review of automated approvals processes at the Agency. Since 2016, through several audits, IA has made various recommendations about automating approvals and disbursements and eliminating the need for manual signatures and multiple copies, scanning and emails. This follow up review evaluates how four recommendations have been addressed with the recent implementation of “work from home” requirements, the Business Information Systems Department and the Finance and Accounting Department (FAD) have established a new process to provide digital signature authorization for internal documents using security features available in PDFs. Human Resources and FAD are also moving forward on automating payroll and vendor disbursements to eliminate the need for manual checks. IA’s review indicates that the internal controls for the digital signature authorization and over the automation of disbursements through direct deposit and ACH payments are adequate and provide a sufficient audit trail to support Agency operations and there are no significant risks to the Agency. IA also supports that the new processes to use automated signatures for internal documents should be implemented permanently and not just on a temporary to ensure efficiencies and eliminate duplicate printing, uploading and saving of documents.

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**Staff's Recommendation:**

This is an information item.

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**Budget Impact** *Budgeted (Y/N):* N *Amendment (Y/N):* N *Amount for Requested Approval:*

*Account/Project Name:*

N/A

*Fiscal Impact (explain if not budgeted):*

None. Efficiencies gained from eliminating manual processes.

**Prior Board Action:**

On September 18, 2019, the Board of Directors approved the amended Fiscal Year 2019/20 Annual Audit Plan. The original Fiscal Year 2019/20 Annual Audit Plan was approved on June 19, 2019. This follow-up review was scheduled in the Annual Audit Plan.

On December 19, 2018, the Board of Directors reconfirmed the approved Audit Committee and the Internal Audit Department Charters.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The Approvals and Disbursements Automation Follow-Up Review is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by providing an independent evaluation of automated approval processes, suggesting recommendations for improvements, monitoring the internal control environment of the Agency, and assisting Agency management in achieving organizational goals and objectives.

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**Attachments:**

Attachment 1 - Approvals and Disbursements Automation Follow-Up Review Report  
Attachment 2 - PowerPoint





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DATE: May 21, 2020

TO: Shivaji Deshmukh  
General Manager

FROM:   
Teresa V. Velarde  
Manager of Internal Audit

**SUBJECT: Approvals and Disbursements Automation – Follow-Up Review**

**Audit Authority**

The Inland Empire Utilities Agency Internal Audit Department (IA) has performed a follow-up review of recommendations associated with Approvals and Disbursements Automation. This follow-up review was performed under the authority given by the Board of Directors, the Fiscal Year 2019/20 Annual Audit Plan and as requested by the Audit Committee.

Additionally, the Internal Audit Department Charter states that IA must follow up on outstanding recommendations to ensure that corrective actions have been implemented.

**Audit Scope**

The objectives of the review were to:

- Ensure adequate internal controls are in place
- Determine whether the automation process has been implemented
- Determine compliance with Agency policies and procedures
- Identify opportunities for improvements

**Executive Summary**

IA has made several related recommendations about automating approvals and disbursements at the Agency and eliminating the need for “wet” (manual) signatures. With the Agency operating in compliance with the State’s “safer at home” order and the majority of Agency employees working remotely, the Business Information Systems Department (BIS) and the Finance and Accounting Department (FAD) have established a new process to provide digital signature authorization for internal documents using security features available in PDFs. This review found that the Agency has effective controls in place over digital signature authorizations using PDFs for internal approvals of some Agency documents.

IA has also recommended that the Agency automate as many disbursements as possible to eliminate the need for manual checks including that payroll payments should be made by direct deposit, whether for regular payroll payments or for less frequent payments such

***Water Smart - Thinking in Terms of Tomorrow***

as vacation buy-backs. This review found that the Agency has effectively automated current payroll disbursements and is in the process of transitioning to automating as many other disbursements as possible. IA will monitor disbursements to verify that the Agency continues to reduce the number of manual checks to only in exceptional, non-routine circumstances.

### **Acknowledgements**

IA would like to extend our appreciation to BIS and FAD Departments' staff for their cooperation and assistance during this review.

### **Discussion with Management**

IA provided the results of this review to Christina Valencia, Executive Manager of Finance and Administration/Assistant General Manager, Javier Chagoyen-Lozaro, Manager of Finance and Accounting and Kanen Pantayatiwong, Manager of Business Information Systems on May xx, 2020. Where possible, comments have been incorporated prior to finalizing the report.

If you have any questions or need additional information, please contact me at Extension 1521 or at [tvelarde@ieua.org](mailto:tvelarde@ieua.org).

*The Approvals and Disbursements Automation – Follow-Up Review 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.*

## **Approvals and Disbursements Automation – Follow-Up Review**

### **Background**

Over the years, IA has made several recommendations about automating Agency internal approvals and disbursements processes. These include the following recommendations which are all now considered **implemented**:

#### **Digital Approval:**

##### **Wire Transfers Audit: March 1, 2018**

*As the Agency moves towards automated recordkeeping using Laserfiche and possibly other tools, the Agency should consider utilizing electronic signature technology and implementing digital approval documentation.*

##### **Accounts Payable Follow-Up Audit: May 30, 2019**

*FAD should take the lead and work with BIS to implement efficiencies by fully utilizing automated workflows to process and approve invoices to migrate to a paperless environment, eliminate printing, manual/handwritten approvals, manual duplicate scanning of invoices/documents and additional emailing of documents. FAD should consider the process changes (to current largely manual procedures) necessary to efficiently utilize an automated process.*

##### **Master Trade Contracts Audit & Response: September 1, 2016**

*IA supports and encourages the initiative to fully implement the Agency's Enterprise Content Management System (ECMS) - Laserfiche. CFS should continue to work closely with BIS to implement the Agency's ECMS - Laserfiche to assist with the organization and centralizing of contract documents, facilitate research and access to information, streamline recordkeeping and eliminate multiple copies of the same documents.*

**Status: All Implemented**

#### **Direct Deposit and Automated Clearing House (ACH) Payments:**

##### **Payroll Operations Audit: August 30, 2017**

*As part of moving into a paperless, automated environment, HR should take the lead to promote and encourage having all payments made more efficiently through direct deposits instead of manually writing paper checks.*

*Department response: Regular payrolls for all employees and directors are currently done via ACH. Certain units already include one-time pay outs, (vacation and sick leave) with regular ACH payroll, but others still require a separate check. Those units were very clear that they had agreed to a one-time exception to pay the April vacation pay out via ACH, and that they would like to see a return to a separate check for future pay outs.*

**Status: Implemented**

On March 19, 2020 California Governor, Gavin Newsom issued Executive Order N-33-20 which required all individuals in nonessential occupations living in the State of California to stay home or at their place of residence. To comply with this Executive Order, the

Agency now has most staff (other than those considered “essential”) working remotely. As a result, a new emphasis has been placed on automating processes and creating ways to complete Agency business that do not require staff to work physically at IEUA Headquarters to perform manual data entry and complete manual signatures. The Agency is pursuing two initiatives:

1. Creating a digital approval process for internal documents with rigorous internal controls and a clear “audit trail” that eliminates the need for a “wet” signature and multiple scanning and e-mailing of documents.
2. Developing automated disbursement and ACH processes for payroll and vendor payments, eliminating the need for processing manual checks.

### **Process**

BIS undertook a review to determine what additional efficiencies could be implemented to enhance the ability of Agency employees to work remotely without disrupting the efficiency of processing required documents and ensuring internal controls are present. The approval and processing of invoices and the subsequent creation of the disbursement both included manual processes that had long been in place. In both instances, IA had previously made recommendations to automate the processes.

#### **Digital Approval – Implemented:**

To automate this process BIS and FAD needed to establish a new process that would eliminate manual signatures (“wet signatures”) that then needed to be scanned and e-mailed to Accounts Payable staff in FAD for processing. The most secure alternate approach is to develop a work-flow process using “Docu-Sign” and the Agency’s Laserfiche records management tool. This is a secure approach that is most effective when the Agency needs to maintain the integrity of the document and have a record of approvals with third parties that is distributed and/or shared with external entities such as contract signatures, construction change-orders and similar approvals. The Agency also needs to obtain official Docu-Sign licenses for any users that are authorized to use this approval process.

The Agency’s own internal approval process does not require as formal a mechanism as Docu-Sign. Accounts Payable in FAD routinely scans all invoices and distributes them via e-mail to departments for their approval. Current practice has been for managers to print the invoices, sign them manually signifying their approval, and then re-scan the signed invoices and e-mail them back to FAD for payment processing.

IA had previously recommended that this process be streamlined to eliminate the printing and scanning by allowing for a digital signature and either e-mailing the document back to FAD or documenting the approval directly through SAP (the Agency’s financial system) on the attachment using a workflow process.

In response to the current need to work remotely, BIS and Accounting rapidly implemented existing PDF technology to implement a digital signature option and

provided written instructions and documentation to Agency managers and executives about the automated option.

IA's review indicates that the internal controls for the digital signature authorization are adequate and provide a sufficient audit trail to support Agency operations and that there are not significant risks to the Agency. IA also believes the new processes should be implemented permanently and not just on a temporary basis during the "safer at home" mandate.

#### ACH Payments and Direct Deposit – Implemented

IA has also recommended that the Agency automate as many disbursements as possible to eliminate the need for manual checks. In particular, IA recommended that payroll payments should all be made by direct deposit, whether for regular payroll payments or for less frequent payments such as vacation buy-backs. Direct deposits do not require any significant changes to Agency processes, just the employee's authorization.

In response to working remotely, regular payrolls for all employees and directors are now done via ACH. Certain units already included one-time pay-outs, (vacation and sick leave) with regular ACH payroll, but others still require a separate check. Those units were very clear that they had agreed to a one-time exception to pay the April vacation pay out via ACH, and that they would like to see a return to a separate check for future pay outs. This recommendation is considered currently implemented, and IA makes a soft suggestion to negotiate these automated processes for future vacation and sick leave pay-outs with the affected bargaining units.

Similarly, making vendor payments electronically through the banking system's ACH process does not require significant changes to Agency processes. The procedures consist of obtaining the necessary bank account information and establishing the appropriate mechanisms with vendors.

IA considers this recommendation "Implemented" as the Agency transitions to having all vendors included in the automated payment processes. IA will continue to monitor disbursements to verify that the Agency continues to reduce the number of manual checks until manual checks are issued only in exceptional, non-routine circumstances.

#### Evaluation

In order to evaluate the approvals and disbursements automation projects, IA performed the following procedures:

1. Reviewed the documented process and sample screen prints.
2. Tested the steps in the process for validity of the process.
3. Compared the process to prior IA reports and recommendations.

#### Summary of Results

Based on the steps performed, IA's limited review found that the internal controls that the Agency has in place for digital signature authorization are adequate and provide a

sufficient audit trail to support Agency operations and that there are not significant risks to the Agency. IA supports the new processes should be implemented permanently and not just as a temporary approach during the “safer at home” mandate.

IA also found that the internal controls that the Agency has in place for automating disbursements through direct deposit and ACH payments are adequate and provide a sufficient audit trail to support Agency operations and that there are not significant risks to the Agency. IA considers its recommendations as “Implemented” and IA will monitor disbursements activity to verify that the Agency continues to reduce the number of manual checks to only in exceptional, non-routine circumstances.

During this review, IA did not test any actual transactions that have been processed with this method. Testing of the transactions to observe the computerized digital signatures will be performed as part of a separate audit, planned through the approved Annual Audit Plan. This brief report intends to follow up on outstanding recommendations to ensure those have been addressed.

IA is available to discuss or perform additional steps, if requested.

**Attachment 1:**  
**Introduction to new digital PDF document approval**



How-To Series

**Sign PDF Document via Adobe Reader/Acrobat**

## How to Sign PDF Document via Adobe Reader/Acrobat

### Overview

This document shows how to use the free version of Adobe Reader to digitally write the text (e.g., PO information and account assignment), digitally sign the document, save it and email it back to AP staff for payment processing.

The goal is to avoid a need to print the invoice, sign it with pen, rescan it and then email it back to AP staff.

NOTE: This is for internal approval only. It is intended to confirm to AP staff that the invoice has been reviewed and approved by the appropriate person.

# Audit Committee Meeting

## June 8, 2020

### Approvals and Disbursements Automation – Follow-Up Review





# Approvals and Disbursement Automation – Follow-Up Report

- **Scope:**
  - **Evaluate internal controls**
  - **Determine whether the automation process has been implemented**
  - **Determine compliance with Agency policies and procedures**
  - **Identify opportunities for improvements**

**Follow up on 4 prior outstanding recommendations**

# Prior Audit Recommendations - Implemented

## **Wire Transfers Audit: March 1, 2018**

*As the Agency moves towards automated recordkeeping using Laserfiche and possibly other tools, the Agency should consider utilizing electronic signature technology and implementing digital approval documentation.*

## **Accounts Payable Follow-Up Audit: May 30, 2019**

*FAD should take the lead and work with BIS to implement efficiencies by fully utilizing automated workflows to process and approve invoices to migrate to a paperless environment, eliminate printing, manual/handwritten approvals, manual duplicate scanning of invoices/documents and additional emailing of documents. FAD should consider the process changes (to current largely manual procedures) necessary to efficiently utilize an automated process.*

## **Master Trade Contracts Audit & Response: September 1, 2016**

*IA supports and encourages the initiative to fully implement the Agency's Enterprise Content Management System (ECMS) - Laserfiche. CFS should continue to work closely with BIS to implement the Agency's ECMS - Laserfiche to assist with the organization and centralizing of contract documents, facilitate research and access to information, streamline recordkeeping and eliminate multiple copies of the same documents.*

# Prior Audit Recommendations - Implemented

Direct Deposit and Automated Clearing House (ACH) Payments:

**Payroll Operations Audit: August 30, 2017**

*As part of moving into a paperless, automated environment, HR should take the lead to promote and encourage having all payments made more efficiently through direct deposits instead of manually writing paper checks.*

# Discussion & Questions

***The Approvals and Disbursements Automation – Follow-Up Review 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.***

**INFORMATION  
ITEM  
2E**



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**Date:** June 17, 2020

**To:** The Honorable Board of Directors

**Committee:** Audit

*Teresa Velarde*  
**From:** Teresa Velarde, Manager of Internal Audit

06/08/20

**Manager Contact:** Teresa Velarde, Manager of Internal Audit

**Subject:** Interfund Transactions - Follow-Up Review

---

**Executive Summary:**

The Interfund Transactions Audit Report, dated August 30, 2018, provided recommendations for Agency staff to work together to provide more descriptive information in the Notes to the Financial Statements included in the Comprehensive Annual Financial Report (CAFR). Additionally to make an annual presentation about Interfund Transactions to the Board. The intent of the recommendations is to ensure the information about Interfund Transactions is complete and clearly documented in the CAFR and to the Board. This follow-up review found that the Agency provided additional, clear and comprehensive information in the Notes to the 2019 CAFR about Interfund Transactions and that the Finance and Accounting Department (FAD) provided a complete oral and written report to the Board as part of the presentation of the audited CAFR, both as recommended by IA.

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**Staff's Recommendation:**

This is an information item.

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**Budget Impact** *Budgeted (Y/N):* N *Amendment (Y/N):* N *Amount for Requested Approval:*

*Account/Project Name:*

N/A

*Fiscal Impact (explain if not budgeted):*

None, other than potential efficiencies that may occur from eliminating manual processes.

**Prior Board Action:**

On September 18, 2019, the Board of Directors approved the amended Fiscal Year 2019/20 Annual Audit Plan. The original Fiscal Year 2019/20 Annual Audit Plan was approved on June 19, 2019. This follow-up review was scheduled in the Annual Audit Plan.

On December 19, 2018, the Board of Directors reconfirmed the approved Audit Committee and the Internal Audit Department Charters.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The Interfund Transactions Follow-Up Review is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by providing an independent evaluation of disclosures and presentations about interfund transfers, suggesting recommendations for improvements, monitoring the internal control environment of the Agency, and assisting Agency management in achieving organizational goals and objectives.

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**Attachments:**

Attachment 1 - Interfund Transactions - Follow-Up Review Report  
Attachment 2 - PowerPoint






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[www.ieua.org](http://www.ieua.org)

DATE: May 21, 2020

TO: Shivaji Deshmukh  
General Manager

FROM:   
Teresa V. Velarde  
Manager of Internal Audit

**SUBJECT: Interfund Transactions – Follow-Up Review**

**Audit Authority**

The Inland Empire Utilities Agency Internal Audit Department (IA) has performed a follow-up review of two recommendations from the Interfund Transactions Audit. The review was performed under the authority given by the Board of Directors (Board) in the approved Fiscal Year 2019/20 Annual Audit Plan and the Internal Audit (IA) Department's Charter. The Charter states that follow up reviews will be performed on IA recommendations to ensure corrective actions are taken.

**Audit Scope**

The objectives of the follow-up review were to:

- Determine whether the recommendations have been implemented
- Determine compliance with Agency policies and procedures
- Identify opportunities for improvements

**Executive Summary**

The Interfund Transactions Audit Report, dated August 30, 2018, provided recommendations for the Agency to provide more descriptive information in the Notes to the Financial Statements included in the Comprehensive Annual Financial Report (CAFR) and to make an annual presentation about Interfund Transactions to the Board. The intent of the recommendations is to ensure the information about Interfund Transactions is complete and clearly documented in the CAFR and to the Board. This follow-up review found that the Agency provided additional clear and comprehensive information in the Notes to the 2019 CAFR about Interfund Transactions and that the Finance and Accounting Department (FAD) provided a complete and clear oral and written report to the Board as part of the presentation of the audited CAFR, both as recommended by IA.

The original audit report is available on the Agency intranet website or by contacting IA.

***Water Smart - Thinking in Terms of Tomorrow***

**Kati Parker**  
President

**Jasmin A. Hall**  
Vice President

**Steven J. Elie**  
Secretary/Treasurer

**Michael E. Camacho**  
Director

**Paul Hofer**  
Director

**Shivaji Deshmukh**  
General Manager



### **Acknowledgements**

IA would like to extend our appreciation to FAD staff for their cooperation and assistance during this review.

### **Discussion with Management**

IA provided the results of this review to Christina Valencia, Executive Manager of Finance and Administration/Assistant General Manager and Javier Chagoyen-Lozaro, Manager of Finance and Accounting on May 8, 2020 and received comments on May 18, 2020. Where possible, comments have been incorporated prior to finalizing the report.

If you have any questions or need additional information, please contact me at Extension 1521 or at [tvelarde@ieua.org](mailto:tvelarde@ieua.org).

*The Interfund Transactions – Follow-Up Review 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:ps

## **Interfund Transactions – Follow-Up Review**

### **Background**

The CAFR is the Board-approved document that communicates the overall fiscal health of the Agency. The Financial Statements are audited annually by external CPAs to provide assurance that they are free from material misstatements. The Financial Statements are relied upon by financial institutions, creditors, grantors, etc. The Notes to the Financial Statements provide additional details about the Financial Statements and serve to clarify and further explain what the financial information includes.

The Governmental Accounting Standards Board (GASB) issued an Exposure Draft on February 11, 2020 called: *“Communication Methods in General Purpose External Financial Reports That Contain Basic Financial Statements: Notes to Financial Statements”* where the GASB describes the importance of the Notes to the Financial Statements in paragraph 7:

The purpose of notes to financial statements is to provide information that (a) explains, describes, or supplements the financial statements and (b) is essential to users in making economic, social, or political decisions or assessing accountability. Notes to financial statements are integral to basic financial statements; they are necessary to make the basic financial statements complete.

And, in paragraph 9 the GASB describes the types of information included in the notes to the financial statements:

- a. Descriptions of the accounting and finance-related policies underlying amounts recognized in financial statements
- b. More detail about or explanations of amounts recognized in financial statements
- c. Information about financial position or inflows and outflows of resources that does not meet the criteria for recognition
- d. Other finance-related information associated with the accountability of the government.

Notes to financial statements may be narrative or quantitative with appropriate explanations and may include measures other than dollars.

The Agency has seven funds representing different Agency programs with different purposes. Inter-fund transfers are transactions to transfer funds between the different Agency Funds and are recorded as increases or decreases within the Agency's accounting records. Although they have an impact on the Statement of Net Position and Statement of Revenues, Expenses and Changes in Net Position for the individual Agency Funds, they offset one another and do not impact the overall net position of the Agency. Transfers are processed to transfer funds from revenue generating funds to offset the related expenses of other funds that support those programs and vice versa.

Sufficient, complete, detailed information about Interfund Transactions is necessary to ensure that readers of the Financial Statements fully understand the revenue and expense sources of the Agency's individual funds and can make educated decisions about the Agency's financial health.

The Interfund Transactions Audit Report dated August 30, 2018 included three Recommendations:

1. ***FAD should provide additional, detailed information in the Notes to the Financial Statements to clarify what the inter-fund transfers represent, including the reasoning/methodology used to calculate and determine the amounts of the transfers. Although, complete information is provided through various financial and budget documents, the Financial Statements should stand alone to provide sufficient information that a reader can understand the details of the transfers.***
2. ***FAD should document a Standard Operating Procedure and/or Inter-Fund Transfer policy that provides clear guidance as to the methodology applied to calculate and process inter-fund transfers, including the purpose, authorization procedures and methodology applied.***
3. ***FAD should take the lead to provide an annual informational written and oral presentation for the Board of Directors that describes the reasons for past and/or anticipated inter-fund transfers, the amounts, how those amounts were calculated and how inter-fund transfers compare to prior years.***

This follow-up review examines the implementation of Recommendations #1 and #3.

### **Evaluation**

#### **Recommendation #1:      Implemented**

IA performs an annual quality control review of the Agency's CAFR. During the 2018 CAFR review, IA recommended staff evaluate the information and include additional details to ensure readers of the CAFR have comprehensive information about the interfund transactions. The Audit Committee supported the value of having additional information documented and presented related to the transactions. FAD staff agreed with IA's recommendation and noted they would provide additional information to the Note to the Financial Statements and their communications/presentations to the Board. During the 2019 CAFR review IA noted that the wording of the Financial Statement Note about Interfund Transactions had been revised and additional information was included.

IA performed a follow-up review to assess the revised wording to determine whether the revised Note to the Financial Statements provides sufficient information to inform a reader of the details of the transfers, IA performed the following procedures:

1. Analyzed the information in the Note to the Financial Statements to determine whether transfers in or out of each fund or fund group describes the amount and the reasons for the transfer.
2. Compared the descriptive information in the Note to the Financial Statements to the accompanying financial Table of dollar amounts to and from the individual funds and fund groups for consistency and comparability.
3. Compared the information in the Note to the Financial Statements to the dollar amounts shown in the financial statements themselves.

Based on IA's review, IA determines the additional information is sufficient to identify the interfund transfers made to and from each fund or fund group, provides sufficient

information for readers to understand the reasons for the interfund transfers and that the information agrees to the presentation in the financial statements themselves.

IA considers this recommendation as “Implemented” and is available to discuss or perform additional steps, if requested.

**Recommendation #2:**      **Deferred to a later date**

**Recommendation #3:**      **Implemented**

The most recent annual CAFR was presented to the Board by FAD staff on December 18, 2019. At that presentation FAD staff provided the Board with information about Interfund Transactions. IA performed a follow-up review to assess the completeness of information provided to the Board. IA performed the following procedures:

1. Reviewed the information about Interfund Transactions included in the Board packet from the December 18, 2019 Board meeting including the written information and the PowerPoint presentation.
2. Compared the information in the presentation to the information included in the Note to the Financial Statement for consistency.

Based on IA’s review, IA determines the presentation to the Board provided sufficient information to identify the interfund transfers made to and from each fund or fund group, provided sufficient information for the Board members to understand the reasons for the interfund transfers and that the information presented agreed to the presentation in the financial statements themselves.

IA considers this recommendation as “Implemented” and is available to discuss or perform additional steps, if requested.

**Attachment 1:**  
**2019 CAFR NOTE DISCLOSURE ABOUT INTERFUND TRANSACTIONS**  
**(Including additional information recommended by IA)**

**NOTE 15: INTERFUND TRANSFERS**

The Regional Wastewater Capital Improvement Fund received capital support from the Regional Wastewater Operations & Maintenance Fund in the amount of \$5,359,000 for project expenses. These projects were EN17006-CCWRF Headworks and Odor Control Replacement, EN19006-RP-5 Biosolids Facility, EN24001 RP-1 Liquids Treatment Expansion, and EN24002 RP-1 Solids Treatment Expansion.

The Regional Wastewater Operations & Maintenance Fund received \$1,800,000 from the Recycled Water Fund for reimbursement of EN13016 SCADA Enterprise/Wineville project costs. It also received \$4,787,221 from the Regional Wastewater Capital Improvement Fund, \$4,481,429 to support regional wastewater system management and expansion, and \$305,792 for debt service support.

The Recycled Water Fund received transfers in the amount of \$2,474,869 from the Regional Wastewater Fund for the fund's share of the 2017A debt service payment and \$83,697 from the Administrative Services Fund for Southern California Edison receipts. It transferred a total of

\$1,136,702, to the Water Fund, Recharge Fund, and Administrative Services Fund amounting to \$436,414, \$645,767, and \$54,521 respectively.

The Water Resources Fund received \$436,414 in Water Connection Fee transfers from the Recycled Water Fund for capital support of water resource management, water expansion, and conservation projects.

Non-Major enterprise funds received transfers in the amount of \$2,998,649. These included capital support transfers totaling \$1,932,946 from the Regional Wastewater Capital Improvement Fund to Non-Reclaimable Wastewater Fund, the Recharge Fund, and the Administrative Services Fund amounting to \$166,347; \$473,421; \$1,293,178 respectively, and operations support totaling \$319,700 from Regional Wastewater Operations & Maintenance Fund to the Administrative Services Fund. The Administrative Services Fund also received \$45,715 from the Non-Reclaimable Wastewater Fund.

The following table reflects the interfund transfer balances in and out by fund as of June 30, 2019.

Transfers Out:	Transfers In:					Total						
	Regional Wastewater Capital Imprv Fund	Regional Wastewater O & M Fund	Recycled Water	Water Resources	Non-Major Enterprise Funds							
Regional Wastewater Capital Improvement Fund	\$	\$	4,787,221	\$	2,474,869	\$	-	\$	1,932,946	\$	9,195,036	
Regional Wastewater Operations & Maintenance Fund	5,359,000								319,700		5,678,700	
Recycled Water Fund			1,800,000				436,414		700,288		2,936,702	
Non-Major Enterprise Funds					83,697				45,715		129,412	
Total Transfers	\$	5,359,000	\$	6,587,221	\$	2,558,566	\$	436,414	\$	2,998,649	\$	17,939,850

**Attachment 2:**  
**2018 CAFR NOTE DISCLOSURE ABOUT INTERFUND TRANSFERS**  
**(Note disclosure prior to IA review)**

**NOTE 15: INTERFUND TRANSFERS**

The Regional Wastewater Capital Improvement Fund received capital support from the Regional Wastewater Operations & Maintenance Fund in the amount of \$1,825,921 for project expenses. These projects were EN17006-CCWRF Headworks and Odor Control Replacement, EN19001-RP-5 Expansion to 30 mgd, and EN19006-RP-5 Biosolids Facility.

The Recycled Water Fund received transfers in the amount of \$2,396,979 from the Regional Wastewater Fund for the fund's share of the 2017A debt service payment.

The Water Resources Fund received \$321,152 in Water Connection Fee transfers from the Recycled Water Fund for capital support of water resource management, water expansion, and conservation projects.

Non-Major enterprise funds received transfers in the amount of \$4,387,007. These included capital support transfers totaling \$3,036,664 from the Regional Wastewater Capital Improvement Fund to Non-Reclaimable Wastewater Fund, the Recharge Fund, and the Administrative Services Fund amounting to \$107,447; \$450,811; \$2,478,406 respectively, and operations support totaling \$648,768 from Regional Wastewater Operations & Maintenance Fund to the Administrative Services Fund. Administrative Service Fund projects were for replacement of assets such as headquarters roofing (EN18055), conference rooms audio-visual upgrades (EN16049), and Agency vehicle replacement (EP17004).

The Recycled Water Fund transferred a total of \$613,143, to the Recharge Fund and Administrative Services Fund amounting to \$480,513 and \$132,630 respectively. The Administrative Services Fund also received \$88,432 from the Non-Reclaimable Wastewater Fund.

The following table reflects the interfund transfer balances in and out by fund as of June 30, 2018.

Transfers Out:	Transfers In:				Total
	Regional Wastewater Capital	Recycled Water	Water Resources	Non-Major Enterprise Funds	
Regional Wastewater Capital Improvement Fund	\$ -	\$ 2,396,979	\$ -	\$ 3,036,664	\$ 5,433,643
Regional Wastewater Operations & Maintenance Fund	1,825,921			648,768	2,474,689
Recycled Water Fund			321,152	613,143	934,295
Non-Major Enterprise Funds				88,432	88,432
<b>Total Transfers</b>	<b>\$ 1,825,921</b>	<b>\$ 2,396,979</b>	<b>\$ 321,152</b>	<b>\$ 4,387,007</b>	<b>\$ 8,931,059</b>



# **Audit Committee Meeting**

## **June 8, 2020**

### **Interfund Transactions Follow-Up Report**



# Interfund Transactions Follow-Up Report

**Original Audit Report: August 30, 2018**

## **Audit Scope**

- Determine the status of the 3 prior audit recommendations
- Determine compliance with Agency policies and procedures
- Identify opportunities for improvements



# Interfund Transactions Follow-Up Report

## Inter-fund Transfers

Transactions to transfer funds between the 7 different Agency Funds and are recorded as increases or decreases within the Agency's accounting records.

## Purpose of Notes to the Financial Statements:

Sufficient, complete, detailed information about Interfund Transactions is necessary to ensure that readers of the Financial Statements fully understand the revenue and expense sources of the Agency's individual funds and can make educated decisions about the Agency's financial health.

# Interfund Transactions Recommendations

## ***Implemented***

***1. FAD should provide additional, detailed information in the Notes to the Financial Statements to clarify what the inter-fund transfers represent, including the reasoning/methodology used to calculate and determine the amounts of the transfers. Although, complete information is provided through various financial and budget documents, the Financial Statements should stand alone to provide sufficient information that a reader can understand the details of the transfers.***

## ***In Progress***

***2. FAD should document a Standard Operating Procedure and/or Inter-Fund Transfer policy that provides clear guidance as to the methodology applied to calculate and process inter-fund transfers, including the purpose, authorization procedures and methodology applied.***

## ***Implemented***

***3. FAD should take the lead to provide an annual informational written and oral presentation for the Board of Directors that describes the reasons for past and/or anticipated inter-fund transfers, the amounts, how those amounts were calculated and how inter-fund transfers compare to prior years.***

# Discussion & Questions

***The Interfund Transactions – Follow-Up Review 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.***

**INFORMATION  
ITEM  
2F**

**Date:** June 17, 2020

**To:** The Honorable Board of Directors

**Committee:** Audit

**From:** Teresa Velarde, Manager of Internal Audit

06/08/20

**Manager Contact:** Teresa Velarde, Manager of Internal Audit

**Subject:** Report of Open Audit Recommendations

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**Executive Summary:**

The Board-approved Internal Audit Department Charter (Charter) requires the Internal Audit Department (IA) to provide the Audit Committee and the Board with an annual report listing all outstanding recommendations including action plans and expected resolution dates. The Charter also requires IA staff to follow-up on the status of outstanding audit recommendations to determine if corrective action efforts have been made to address the original observation or finding. A recommendation is considered "outstanding" when management agreed with the original recommendation at the time of the audit but the area audited has not yet addressed the recommendation or requires IA's verification. Responses to the recommendations, including any action plans were discussed and incorporated in the original audit report when provided. As of June 2020, a total of 110 recommendations remain outstanding: 31 relate to the Regional Contract Review and 79 are for Agency departments. Attached is a report showing the recommendations and the current status of each. In most cases, IA must perform a follow-up review to verify the implementation efforts and the corrective actions taken. Follow-up review is scheduled according to the proposed Annual Audit Plan or sooner if requested by management, the Audit Committee, the Board, or if risk and/or priority increases for the area reviewed. This report is updated, with the completion of new and follow-up audits.

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**Staff's Recommendation:**

This is an information item.

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**Budget Impact** Budgeted (Y/N): N Amendment (Y/N): N Amount for Requested Approval:

Account/Project Name:

N/A

*Fiscal Impact (explain if not budgeted):*

None, only when additional outside auditing or consulting services are required to provide assistance to IA or fulfill the responsibilities of the Audit Committee. A proposal with proposed fees would be submitted through the Audit Committee for appropriate action. Additionally, some audit projects are intended to identify opportunities for cost containment.

Full account coding (internal AP purposes only):

- - -  
- - -

Project No.:

**Prior Board Action:**

On December 18, 2019, the Board of Directors approved the Audit Committee and the Internal Audit Department Charters.

On June 19, 2019, the Report of Open Audit Recommendations (as of June 1, 2019) was provided to the Board of Directors as an information item.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The Report of Open Audit Recommendations is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices. IA's ongoing monitoring activities are to follow-up on the status of open audit recommendations to determine if the Agency has taken corrective action to address issues identified and to assist the Agency in achieving organizational goals.

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**Attachments:**

Attachment 1 - Report of Open Audit Recommendations

**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
Accounts Payable Follow-Up Audit August 29, 2013	4	AFM should work with the appropriate Agency personnel to update Agency policies and remind employees of the requirements of Agency Policy A-12, Employee Personal Computer Purchase Program; Policy A-37, Reimbursement for Attendance at a Conference, Seminar or Meeting; Policy A-50, Non-Purchase-Order Invoice Approval Procedures; Policy A-55, Agency Credit Cards; and Agency Policy A-14 Vehicle Use.	IA provided the results of the Accounts Payable Follow-Up audit to the Audit Committee in June 2019. <i>Recommendation deferred to another audit related to Agency Policies scheduled for December 2019.</i>
Accounts Payable Follow-Up Audit August 29, 2013	5	Human Resources department, in conjunction with Information Support Systems, should ensure that loans for personal computers are not approved for items not covered by the loan program as described in Agency Policy A-12. Additionally, consider revising Agency Policy A-12 to clarify the applicability of the computer loan program to tablet computers and operating systems other than Microsoft Windows.	IA provided the results of the Accounts Payable Follow-Up audit to the Audit Committee in June 2019. <i>Recommendation deferred to another audit related to Agency Policies scheduled for December 2019.</i>

Regional Contract Review - Final Report December 16, 2015	Overall	Consider legal, political and financial impacts of governing by ordinance vs. contract	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	Overall	Review and revise EDU formula	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	Overall	Resolve identified differences of over/under collected amounts of Connection fees and identified differences of over/under collected amounts of unreported monthly sewerage fees	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.

Regional Contract Review - Final Report December 16, 2015	1	<b><u>Connection Fees:</u></b> Centralize the permitting process OR IEUA provides final sign-off and plumbing permit approval for all nonresidential entities.	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	2	<b><u>Connection Fees:</u></b> IEUA should establish monitoring program to inspect random facilities and those where there is a suspected discrepancy	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	3	<b><u>Connection Fees:</u></b> Contract should include IEUA inspection, verification and recourse rights for under-collected/under-reported Connection Fees	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	4	<b><u>Connection Fees:</u></b> Contract should include IEUA right to audit, full cooperation and access to records and documents upon request	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	5	<b><u>Connection Fees:</u></b> Two tier connection fees process that distinguishes between common features and unique features (i.e., a toilet always costs the same regardless of type of business)	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	6	<b><u>Connection Fees:</u></b> Update Exhibit J regularly to include new/evolving business types	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	7	<b><u>Connection Fees:</u></b> Update & clarify Fixture Unit descriptions of Exhibit J regularly	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	8	<b><u>Connection Fees:</u></b> Standardize calculation worksheet to ensure it is consistent with Exhibit J and consistent region-wide	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	9	<b><u>Connection Fees:</u></b> IEUA should require copies of calculation worksheets for all nonresidential customers along with the monthly Building Activity Reports.	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	10	<b><u>Connection Fees:</u></b> Regular workshops, meetings, plant tours, etc. with staff in Building, Plan Check and Utility Billing/Financial Departments	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.

**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
Regional Contract Review - Final Report December 16, 2015	11	<b><u>Connection Fees:</u></b> IEUA develop fixture count expertise and provide regular/ongoing training for Contracting Agencies - Building Departments	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	12	<b><u>Connection Fees:</u></b> Contracting Agency internal review of Connection Fees as part of preparing the Building Activity Report	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	1	<b><u>Monthly Sewerage:</u></b> Collect monthly sewerage fees for the entire region through County's property tax roll	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	2	<b><u>Monthly Sewerage:</u></b> Evaluate methodology used for billing monthly sewerage fees (residential and commercial) and consider alternatives by water consumption, EDUs purchased or other methodology	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	3	<b><u>Monthly Sewerage:</u></b> Standardize monthly report to provide IEUA automated, itemized listings of non-residential monthly sewerage charges	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	4	<b><u>Monthly Sewerage:</u></b> Establish contract for monthly sewerage payments from Contracting Agencies rather than IEUA issuing monthly invoices	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	5	<b><u>Monthly Sewerage:</u></b> IEUA exercise inspection, verification and recourse rights for under-collected/under-reported monthly sewerage fees	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	6	<b><u>Monthly Sewerage:</u></b> Contract should include IEUA right to audit, full cooperation and access to records and documents upon request	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	7	<b><u>Monthly Sewerage:</u></b> Update 1997 billing memorandum regularly for new business types to provide detailed definitions and descriptions	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	8	<b><u>Monthly Sewerage:</u></b> Create a correlation between monthly sewerage fees and Connection Fees	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	9	<b><u>Monthly Sewerage:</u></b> Add billing guidance for locations with multiple types of businesses serviced by a master meter	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	10	<b><u>Monthly Sewerage:</u></b> Bill commercial businesses at least a minimum of one EDU per month	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	1	<b><u>Public Service Facility:</u></b> Consider legal, political and financial impacts of excluding Public Service Facilities from Connection Fees and monthly sewerage charges.	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	2	<b><u>Public Service Facility:</u></b> Consider legal, political and financial impacts of IEUA assuming responsibility for Connection Fees calculations, collections and CCRA accounts	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	3	<b><u>Public Service Facility:</u></b> Contract should include IEUA inspection, verification and recourse rights for under-collected/under-reported Connection Fees	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	4	<b><u>Public Service Facility:</u></b> Contract should include IEUA right to audit, full cooperation and access to records and documents upon request	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.



**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
Regional Contract Review - Final Report December 16, 2015	5	<b>Public Service Facility:</b> Address difference between "Publicly Owned" vs. "Publicly Used"	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
Regional Contract Review - Final Report December 16, 2015	6	<b>Public Service Facility:</b> Consider cross-departmental approach to the development review process as a regional model	Recommendation to be addressed as part of the Renegotiation of the Regional Contract. IA will follow-up at that time.
IT Equipment August 21, 2012 (February 29, 2016 Follow-Up)	3	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.	Additional time is required for full implementation. IA will re-verify during follow-up evaluation.
IT Equipment November 14, 2012 (February 29, 2016 Follow-Up)	1	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.	Additional time is required for full implementation. IA will re-verify during follow-up evaluation.
Master Trade Contracts September 1, 2016	1	IA recommends that even in instances where a difference department has primary responsibility for the proposal evaluation process, CFS work with the end-user department to ensure the information is communicated to the Board of Directors accurately reflects the signed contract terms. Additionally, CFS should determine the need to request from the evaluating department the evaluation documentation, or a staff memo summarizing the selection process and have it available/filed.	Both CAP and CM stated they would begin steps to implement. IA to verify during a future follow-up evaluation.
Master Trade Contracts September 1, 2016	2	IA recommends that CFS work with BIS to research built-in tools within SAP to implement automated controls necessary to ensure that spending on contracts and groups of contracts do not exceed Board approved limits and determine the cost benefit of implementing those monitoring tools.	Both CFS and BIS stated they would work together to evaluate implementation. IA to verify during a future follow-up evaluation.
Master Trade Contracts September 1, 2016	3	IA supports and encourages the initiative to fully implement the Agency's Enterprise Content Management System (ECMS) - Laserfiche. CFS should continue to work closely with BIS to implement the Agency's ECMS - Laserfiche to assist with the organization and centralizing of contract documents, facilitate research and access to information, streamline recordkeeping and eliminate multiple copies of the same documents.	Both CFS and BIS stated they would work together to evaluate implementation. IA to verify during a future follow-up evaluation.
Master Trade Contracts September 1, 2016	4	IA recommends that CFS enhance communications about the Agency's ethical procurement responsibilities and expectations to all Agency employees as well as Agency vendors and contractors to actively foster an ethical procurement environment. CFS should consider creating an ethics outreach plan and developing an approach with Agency Executive Management and Human Resources about reinforcing the "tone at the top" to actively remind employees and contractors/vendors about the Agency's ethical expectations including once again providing annual notifications of ethical guidelines to vendors and staff. Agency management may also want to incorporate references to the Agency's Ethics Hotline and Ethics Point "FAQs" in that communication.	CFS stated they would research the best approach and begin steps for implementation. IA to verify during a future follow-up evaluation.
Master Trade Contracts September 1, 2016	5	IA recommends CFS staff attend annual training related to ethics in their respective procurement activities.	CFS reported that all staff attended ethics training related to procurement activities shortly after the audit and will plan to attend training annually. IA to verify during a future follow-up evaluation.
Master Trade Contracts September 1, 2016	6	In addition to the cross-training that is already occurring, IA suggests that CFS consider the potential benefits of job rotation within the CFS department as a training and internal control technique with multiple benefits.	CFS stated that they would evaluate and determine the need for rotation since currently there have been various retirements and changes. IA to verify during a future follow-up evaluation.
IT Equipment August 21, 2012 (December 5, 2016 Follow-Up)	15	FMD should implement adequate controls to ensure that the stated capitalization policy for IT equipment is consistently followed to ensure that all items meeting the capitalization threshold are capitalized and to ensure that items not meeting the capitalization threshold are not capitalized.	Additional time is required for full implementation. IA will re-verify during follow-up evaluation.

**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
IT Equipment August 21, 2012 (December 5, 2016 Follow-Up)	17	FMD should implement adequate controls to ensure that asset records established in SAP are accurate and complete, such as ensuring that all data fields in SAP are completed and ensuring that only those items allowed by the capitalization policy are capitalized.	Additional time is required for full implementation. IA will re-verify during follow-up evaluation.
IT Equipment August 21, 2012 (December 5, 2016 Follow-Up)	19	FMD should return incorrect or incomplete Project Closure Authorization Forms to the Project Manager for proper completion. FMD should also provide training to Project Managers on the importance of proper completion and instructions on completing the form.	Additional time is required for full implementation. IA will re-verify during follow-up evaluation.
IT Equipment August 21, 2012 (December 5, 2016 Follow-Up)	22	FMD should document Standard Operating Procedures to address the functions of setting up capital assets such as procedures for completing the SAP asset information, compliance with stated capitalization thresholds, and processing of Project Closure Authorization Forms.	Additional time is required for full implementation. IA will re-verify during follow-up evaluation.
Follow-Up Review - Information Technology Equipment Audit December 5, 2016	1	FAD should take the lead to ensure a physical inventory and inspection of the Agency's IT fixed assets is completed on a periodic basis to verify existence, location, and working condition of assets.	FAD agrees with IA and the External Auditors recommendation and would evaluate implementation. IA to verify during a future follow-up evaluation.
Follow-Up Review - Information Technology Equipment Audit December 5, 2016	2	FAD should evaluate the Agency's current capitalization thresholds for IT equipment and determine if these need to be increased to ensure current practice meets policy and are consistent with current trends.	IA to verify during a future follow-up evaluation.
Audit of Master Service Contracts December 5, 2016	1	Emergency projects are classified according to three levels. Level 3 emergencies are the least urgent and the work can be scheduled on a time-table set by the Agency. E&CM and CFS should consider establishing clear criteria that differentiate between a "Level 3" emergency procurement and routine minor construction and repairs procurements and/or determine and document whether the "Level 3" designation is necessary.	CM stated they would begin implementation. IA to verify during a future follow-up evaluation.
Audit of Master Service Contracts December 5, 2016	2	To ensure that the Agency communicates sufficient information about emergency procurement activity, E&CM and CFS should consider developing and providing a comprehensive monthly update of emergency procurements for the Board. The information to consider could include the current month emergency procurement activity and a year-to-date total. It may also be useful to compare current year-to-date emergency procurement activity in dollars and numbers of task orders to prior years and to the total budget. Trends can be analyzed and comparisons can be made to ensure that the Agency's infrastructure is well maintained and emergency procurements are kept to a minimum.	CM stated they would begin implementation. IA to verify during a future follow-up evaluation.
Audit of Master Service Contracts December 5, 2016	3	To ensure that contracts for Repairs and Minor Construction operate as intended, E&CM and CFS should consider developing specific criteria and/or additional guidance and definitions about what constitutes repairs or minor construction as compared to projects for prequalified contractors for contracts less than \$2 million. An additional control would be to consider establishing dollar maximums within the contract or the group of contractors to provide assurance that the contracts are being utilized as intended and spending is constrained.	CM stated they would begin implementation. IA to verify during a future follow-up evaluation.
2017 Petty Cash Audit & Follow-up Review June 5, 2017	1	FAD should reinforce the guidelines of the petty cash fund, including custodian responsibilities and internal controls over petty cash accountability and record-keeping.	IA to verify during a future follow-up evaluation.
2017 Petty Cash Audit & Follow-up Review June 5, 2017	2	FAD should consider updating the "Monthly Mileage Log and Reimbursement Request" to add a designated signature area for when the petty cash funds are utilized as a reimbursement for mileage.	IA to verify during a future follow-up evaluation.
2017 Petty Cash Audit & Follow-up Review June 5, 2017	3	FAD should take the lead to communicate changes to the Petty Cash policy and forms immediately after implementation, to ensure employees understand the policy and utilize the updated forms.	IA to verify during a future follow-up evaluation.
2017 Petty Cash Audit & Follow-up Review June 5, 2017	4	Petty cash custodians should only accept the appropriate forms and inform the requestor of the most appropriate procurement methods if the requestor's petty cash request does not conform to Agency policies.	IA to verify during a future follow-up evaluation.

**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
2017 Petty Cash Audit & Follow-up Review June 5, 2017	5	FAD should take the lead to review and determine if the Petty Cash limit of \$50 is adequate or if it should be updated (increased or decreased), or determine if there is a threshold that will require Executive Manager/General Manager authorization (i.e., anything over \$50).	IA to verify during a future follow-up evaluation.
2017 Petty Cash Audit & Follow-up Review June 5, 2017	6	Human Resources and FAD should work together to formally document or communicate the policy on the purchase and gifting of Gift Cards to ensure compliance with Federal requirements. The policy should be communicated to all Agency employees and be reminded periodically.	IA to verify during a future follow-up evaluation.
2017 Petty Cash Audit & Follow-up Review June 5, 2017	7	Human Resources and FAD should continue to work with the appropriate personnel in making revisions and updates to the following Agency policies that relate to cash reimbursements and controls: A-75 Employee Recognition Rewards Program, A-68 Meal Reimbursement and Unscheduled Overtime, and A-34 Vehicle Maintenance.	IA to verify during a future follow-up evaluation.
Water Use Efficiency Programs Audit June 5, 2017	1	<b><u>Turf Removal Programs</u></b> While many retail customers received rebates, the range of customers could have been broader. Outreach to customers about WUE measures is a primary responsibility of member agencies, but IEUA may want to consider establishing a forum to discuss the goals and results of WUE Programs. The purpose of the discussions would be to evaluate and develop approaches to help (or consider joint efforts to) publicize, target and follow-up with entities in IEUA's service area when WUE opportunities become available, and tailor outreach towards specific and/or different entities in the region that match those characteristics and/or potentially maintain a database of the region's entities by unique characteristics (schools, churches, large lots, etc.).	IA to verify during a future follow-up evaluation.
Water Use Efficiency Programs Audit June 5, 2017	2	Finance and Accounting (FAD) staff have already taken several practical measures to review and reduce the amounts included in Work in Process (WIP) to ensure only capital projects are capitalized. FAD may want to consider prioritizing additional efforts to ensure that prior period adjustments are eliminated, such as: <ul style="list-style-type: none"> <li>• Developing a cross-departmental team including representatives from Engineering, Operations and FAD to approve items in advance for capitalization in WIP.</li> <li>• Establishing an automated log, register or report to be reviewed regularly that tracks project codes, amounts and purpose for FAD review to ensure accurate accounting of projects.</li> <li>• Engaging an outside consultant, accounting firm or additional temporary resources to make a thorough examination of WIP to: <ul style="list-style-type: none"> <li>o Ensure only capital projects are included</li> <li>o Recommend policies and procedures for establishing projects to ensure only capital projects are capitalized</li> <li>o Develop written examples and guidelines of what constitutes a capital project and what constitutes an O &amp; M project.</li> </ul> </li> </ul>	IA to verify during a future follow-up evaluation.
Water Use Efficiency Programs Audit June 5, 2017	3	The Agency may want to consider utilizing the Annual Water Use Efficiency Programs Report as an evaluative tool to compare actual results to those projected in the Regional WUE (five year) Business Plan. The Annual WUE Programs Report could discuss reasons for variances from that plan, document changes being made to the plan and describe progress on any other initiatives that expect to yield water savings in future years.	IA to verify during a future follow-up evaluation.
Water Use Efficiency Programs Audit June 5, 2017	4	information in the body of the Annual WUE Programs Report to describe the differing sources of information used to provide member agency information vs. regionwide information or alternatively (and/or in addition), presenting both the summary and member agency information on the same basis.	IA to verify during a future follow-up evaluation.
Water Use Efficiency Programs Audit June 5, 2017	5	IEUA may want to consider expanding the "Highlights" commentary and providing subheadings and organizing the section to match the order of the Summary Charts to align the descriptions to the charts that follow.	IA to verify during a future follow-up evaluation.
Water Use Efficiency Programs Audit June 5, 2017	6	WR staff may want to consider developing a desk procedure or other document to guide the preparation of the Annual WUE Programs Report for internal staff to follow.	IA to verify during a future follow-up evaluation.

**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
Contracts and Procurement Follow-Up August 30, 2017	1	CAP should review the SAP assigned roles and transaction codes and ensure that good internal controls are followed and no conflicts exist. IA recommends CAP consider eliminating or reducing the ability to Create PRs and Receive Goods, for CAP buyers in order to strengthen internal controls and further reduce risks.	IA to verify during a future follow-up evaluation.
Payroll Operations Audit August 30, 2017	1	IA recommends that HR consider evaluating alternatives to the manual files used to maintain employee information, for example:  --Working with Business Information Systems (BIS) to develop or acquire a self-service portal for employees to make updates and changes to certain information that currently requires a hard-copy document, such as withholding information, beneficiary information, address changes, or for adding or deleting a family member from their policies, and contribution amounts to various accounts.  --The Agency is in the process of implementing ECMS. HR may want to consider whether the new ECMS would provide an automated approach to maintaining and updating employee information or whether another automated approach would be possible.	IA to verify during a future follow-up evaluation.
Payroll Operations Audit August 30, 2017	2	As part of the Agency's disaster preparedness effort, IA recommends that HR consider maintaining manual/hard-copy files in fire proof/water proof cabinets.	IA to verify during a future follow-up evaluation.
Payroll Operations Audit August 30, 2017	3	FAD should update Standard Operating Procedure No. CR PR-08 to reflect the new payroll bank reconciliation process, communicate the procedure to all department employees and ensure the SOP is in the format outlined in accordance with Agency Policy A-51.	IA to verify during a future follow-up evaluation.
Payroll Operations Audit August 30, 2017	4	FAD should ensure bank reconciliations are prepared monthly and supervisory review occurs in a timely manner to ensure all outstanding and reconciling items are researched, investigated and resolved.	IA to verify during a future follow-up evaluation.
Payroll Operations Audit August 30, 2017	5	As part of moving into a paperless, automated environment, HR should take the lead to promote and encourage having all payments made more efficiently through direct deposits instead of manually writing paper checks.	IA to verify during a future follow-up evaluation.
Payroll Operations Audit August 30, 2017	6	Both HR and FAD should encourage employees with payroll related functions to attend ethics/fraud awareness training specific to their job responsibilities to stay informed about new developments, risks and safeguards (for example, safeguards for potential payroll fraud, safeguarding personnel files and employee confidential information, etc.)	IA to verify during a future follow-up evaluation.

**Recommendations that do not require follow-up at this time:**

Procurement Card Audit March 1, 2018	1	Agency Policy A-89, Procurement Card Program should be updated to reflect desired internal controls and provide clearer guidelines about the proper use of P-Cards. The policy should provide greater clarity about the purchases that are allowed or not allowed (i.e.: food, restaurant, meals, training registrations, membership payments, etc.). Additionally, the policy should provide instructions for users to follow when there are situations that are unusual and note the additional written justification that is necessary. Lastly, A-89, should direct users to seek CAP's guidance when there is a unique need, keeping the Agency's need in mind and ensuring adequate controls are maintained.	IA to verify during a future follow-up evaluation.
Procurement Card Audit March 1, 2018	2	The P-Card Administrator role should be clarified in Policy A-89 and expanded to include greater oversight responsibilities to ensure compliance. The role should include duties to fully utilize the various on-line tools available through US Bank for reports, alerts, training and other controls for reviewing and monitoring activity. Additionally, the P-Card Administrator should provide assistance and give advice on the best procurement method and periodically review statements and identify purchases and transactions that are not aligned with policy and request additional information.	IA to verify during a future follow-up evaluation.

**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
Procurement Card Audit March 1, 2018	3	CAP should update Department-specific SOP CAP-0012 to incorporate any changes in Agency Policy A-89 Procurement card Program, including any updates to the P-Card Administrator's role and responsibilities. Additionally, CAP should ensure the SOP CAP-0012 complies with the guidelines and format set forth in Agency Policy A-51.	IA to verify during a future follow-up evaluation.
Procurement Card Audit March 1, 2018	4	CAP and FAD should work together to utilize any in-house tools and/or online tools available through US Bank to make the review, approval, reconciliation and upload of P-Card purchases more efficient with adequate oversight.	IA to verify during a future follow-up evaluation.
Procurement Card Audit March 1, 2018	5	CAP should take the lead to evaluate the benefits of consolidating credit card programs to utilize P-Cards for all purchases (other than fuel) and to eliminate other vendor-specific credit card or credit programs. At a minimum, the Agency should ensure all Credit Card programs are governed by an approved Agency Policy.	IA to verify during a future follow-up evaluation.
Procurement Card Audit March 1, 2018	6	CAP should maximize the use of the US Bank online tools for downloading/reviewing reports, creating blocks and alert notices for unusual activity, streamlining the approval, reconciliation and upload/posting process and training end users and approvers.	IA to verify during a future follow-up evaluation.
Procurement Card Audit March 1, 2018	7	FAD should evaluate ways for the Agency to increase and/or maximize any rebates received.	IA to verify during a future follow-up evaluation.
Wire Transfers Audit March 1, 2018	1	As the Agency moves towards automated recordkeeping using Laserfiche and possibly other tools, the Agency should consider utilizing electronic signature technology and implementing digital approval documentation.	IA to verify during a future follow-up evaluation.
Wire Transfers Audit March 1, 2018	2	FAD should finalize the new SOPs in the format provided in Agency Policy A-51.	IA to verify during a future follow-up evaluation.
Wire Transfers Audit March 1, 2018	3	The Agency should evaluate the cost/benefit of obtaining additional coverage and consider a per occurrence limit greater than \$2 million to ensure the Agency has adequate insurance coverage to address the Agency's risk tolerance. In addition, to address potential uncovered losses, the Agency should consider reducing the threshold for a bank call-back to any amounts that exceed the Agency's chosen limit for Fraud Transfer Insurance.	IA to verify during a future follow-up evaluation.
Wire Transfers Audit March 1, 2018	4	FAD should develop standards for documentation of transactions in SAP and a process of reviewing transactions once posted to ensure that the information in the accounting records is consistent and complete.	IA to verify during a future follow-up evaluation.
Wire Transfers Audit March 1, 2018	5	FAD should document or revise a separate SOP that describes the steps in the wire transfer process for investment transactions to provide guidelines for the processing of investment transactions.	IA to verify during a future follow-up evaluation.
Garden in Every School® May 31, 2018	7	Agency staff should develop a post-implementation evaluation of gardens after they have been in existence for an agreed upon amount of time. The purpose would be to gather feedback and information about the materials and equipment used for installing the garden and ensure these meet the school's needs or if anything needs to change. All parties involved in the installation, including Agency staff and most importantly	IA to verify during a future follow-up evaluation.
Inter-fund Transactions Audit August 30, 2018	1	FAD should provide additional, detailed information in the Notes to the Financial Statements to clarify what the inter-fund transfers represent, including the reasoning/methodology used to calculate and determine the amounts of the transfers. Although, complete information is provided through various financial and budget documents, the Financial Statements should stand alone to provide sufficient information that a reader can understand the details of the transfers.	IA to verify during a future follow-up evaluation.
Inter-fund Transactions Audit August 30, 2018	2	FAD should document a Standard Operating Procedure and/or Inter-Fund Transfer policy that provides clear guidance as to the methodology applied to calculate and process inter-fund transfers, including the purpose, authorization procedures and methodology applied.	IA to verify during a future follow-up evaluation.

**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
Inter-fund Transactions Audit August 30, 2018	3	FAD should provide an annual informational written and/or oral presentation for the Board of Directors that describes the reasons for past and/or anticipated inter-fund transfers, the amounts, how those amounts were calculated and how inter-fund transfers compare to prior years.	IA to verify during a future follow-up evaluation.
Agency Vehicle Operational Follow-up audit: Review of Vehicle Inventory Procedures November 29, 2018	1	Facilities Management should continue to work with the appropriate departments to make necessary updates, and/or consolidate Agency policies and procedures for Agency vehicles and ensure the revised policy(ies) address refueling and washing procedures, security, safety items, insurance, license requirements, etc. The new and final policy should be approved by Executive Management and made available to all Agency employees for their reference.	IA to verify during a future follow-up evaluation.
Agency Vehicle Operational Follow-up audit: Review of Vehicle Inventory Procedures November 29, 2018	2	Facilities Management should perform regular vehicle inspections on all Agency vehicles. Vehicle inspections should evaluate the overall operational condition of the vehicle and determine whether all safety-related items are current and operational, such as the first aid kit, fire extinguisher, glove compartment contents, flashlight, etc. Inspections should be documented. Additionally, employees should be reminded of their responsibilities for vehicle maintenance through training and/or policy updates.	IA to verify during a future follow-up evaluation.
Agency Vehicle Operational Follow-up audit: Review of Vehicle Inventory Procedures November 29, 2018	3	Facilities Management should work with Finance and Accounting to ensure periodic reconciliations of vehicle records are performed between Agency recordkeeping systems, reports and/or databases, such as SAP (financial system), GIS, etc.	IA to verify during a future follow-up evaluation.
Water Connection Fees Audit February 25, 2019	2	Planning should take the lead to continue to work with the contracting agencies and water districts to ensure the water connection fees information in the Agency's systems is reconciled to the building permits and/or water meters that have been issued by the contracting agencies and water districts (ideally quarterly, but at least semi-annually).	IA to verify during a future follow-up evaluation.
Water Connection Fees Audit February 25, 2019	4	Based on their experience in collecting fees Planning staff should provide Executive Management and the Board their suggestions and proposed updates for revised wording to the water connection fee Ordinance and Resolution for their consideration.	IA to verify during a future follow-up evaluation.
Water Connection Fees Audit February 25, 2019	5	Planning staff should work to update and finalize their draft SOP to document various tasks and procedures associated with the water connection fee process, including the processes to work with FAD and the contracting agencies/water districts.	IA to verify during a future follow-up evaluation.
Water Connection Fees Audit February 25, 2019	6	Planning should continue to work with the Agency's executive management to pursue all possible approaches, including establishing agreements or other methods to ensure water connection fees are collected as intended by the Board approved Ordinance.	IA to verify during a future follow-up evaluation.
Water Connection Fees Audit February 25, 2019	7	FAD should take the lead and work to pursue the collection of delinquent fees through various methods, including the lien process as provided under the Board approved Ordinance.	IA to verify during a future follow-up evaluation.
Accounts Payable Follow-Up Audit May 30, 2019	1	In evaluating access controls over all IEUA staff that have some level of AP authorization, IA noted that some staff members have transferred to other departments at IEUA or to different functions within FAD. There is a need to implement additional controls to regularly evaluate and monitor employees' SAP roles and authorizations to prevent the risk of conflicts of duties. Business Information Systems (BIS) should work with Finance and Accounting Department (FAD) and Human Resources (HR) to implement additional controls to regularly evaluate and monitor employees' SAP roles and authorizations to prevent the risk of conflicts of duties. Options include: - Business Information Systems (BIS) working closely with IA and FAD to perform regular (at minimum annual) reviews and evaluations of roles and authorizations to search for conflicts of duties. - BIS working with HR to establish a formal notification method/checklist when changes occur as a result of employees changing job duties and responsibilities that may present a risk and potential conflict of duties. - BIS determining the feasibility of seeking to implement an automated program or service to scan SAP for conflicts of duties on a regular basis, either through SAP or another third-party vendor.	IA to verify during a future follow-up evaluation.

**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
Accounts Payable Follow-Up Audit May 30, 2019	2	FAD should take the lead and work with BIS to implement efficiencies by fully utilizing automated workflows to process and approve invoices to migrate to a paperless environment, eliminate printing, manual/handwritten approvals, manual duplicate scanning of invoices/documents and additional emailing of documents. FAD should consider the process changes (to current largely manual procedures) necessary to efficiently utilize an automated process.	IA to verify during a future follow-up evaluation.
Accounts Payable Follow-Up Audit May 30, 2019	3	FAD should perform a comprehensive review of all existing VMD records (particularly older records and those created by the conversion to SAP) and ensure all vendor information is complete and up-to-date and includes a verified physical address.	IA to verify during a future follow-up evaluation.
Accounts Payable Follow-Up Audit May 30, 2019	4	FAD should perform a comprehensive review of the VMD to ensure only active vendors remain active and those with no activity in the previous 3-5 years are blocked appropriately. Additionally, vendors created through the conversion process to SAP and never used should be deleted.	IA to verify during a future follow-up evaluation.
Accounts Payable Follow-Up Audit May 30, 2019	5	FAD should update all SOPs to reflect business process changes resulting from the implementation of the Agency's ERP SAP system of mid-2007 and any enhancements to internal controls since then.	IA to verify during a future follow-up evaluation.
Voyager Fuel Card Audit May 30, 2019	1	Operations & Maintenance Department should develop and document goals and objectives, Key Performance Indicators (KPIs), and/or other metrics for the Agency's fleet operations for measurement, analysis, tracking and reporting the fleet program's effectiveness. Goals should be aligned with the Division's overall mission and could include cost of fuel, fuel usage/consumption, cost of maintenance, asset value of the fleet by type of vehicle, etc. Goals should be measured, evaluated and updated periodically.	IA to verify during a future follow-up evaluation.
Voyager Fuel Card Audit May 30, 2019	2	Operations & Maintenance should work with US Bank to evaluate the reporting tools and features that are available to provide useful information about the Agency's fleet to identify inefficiencies, areas of improvement, and instances of unusual card usage where follow-up is required and reduce potential risks of misuse.	IA to verify during a future follow-up evaluation.
Voyager Fuel Card Audit May 30, 2019	3	The Fuel Card Administrator role should be clarified and enhanced, either in Agency Policy A-86 and/or other related policy. The Fuel Card Administrator role should be enhanced to include greater oversight roles and responsibilities, to include:  - Responsibilities to maximize the use of online reports and tools available through the US Bank Fleet Commander® Online system.  - Analysis and evaluation reports and communications to provide Operations & Maintenance information about the fuel card program.	IA to verify during a future follow-up evaluation.
Voyager Fuel Card Audit May 30, 2019	4	Operations & Maintenance should establish a process to periodically review the use of fuel cards and ensure cards no longer needed or used are deactivated to reduce risks to the Agency.	IA to verify during a future follow-up evaluation.
HR audit: Hiring and Promotions Operations Review December 2, 2019	1	Human Resources should include additional justification information for the final selection made in the recruitment file to close out the recruitment file and ensure it stands alone.	IA to verify during a future follow-up evaluation.
HR audit: Hiring and Promotions Operations Review December 2, 2019	2	Human Resources should take the lead and work with Business Information Services and determine ways to implement automated workflows for recruitment documents and forms and utilize electronic files.	IA to verify during a future follow-up evaluation.

**Outstanding Audit Recommendations  
as of June 1, 2020**

<b>Audit Performed</b>	<b>Rec #</b>	<b>Internal Audit Recommendation</b>	<b>Target for Implementation &amp; Comment</b>
HR audit: Hiring and Promotions Operations Review December 2, 2019	3	Human Resources should take the lead to install fireproof and waterproof filing cabinets to safeguard manual personnel, recruitment, and other HR related files, in the event of a disaster.	IA to verify during a future follow-up evaluation.
HR audit: Hiring and Promotions Operations Review December 2, 2019	4	Human Resources should take the lead to ensure all Agency policies related to hiring and recruitment, as well as the department's SOPs are updated to include the most recent and accurate requirements for the processes and Agency formats.	IA to verify during a future follow-up evaluation.
HR audit: Hiring and Promotions Operations Review December 2, 2019	5	Human Resources should work with Executive Management to determine the best approach to ensure compliance with the Agency Policy A-20 on completing timely performance appraisals for employees.	IA to verify during a future follow-up evaluation.
HR audit: Hiring and Promotions Operations Review December 2, 2019	6	Human Resources should work with Executive Management to determine an approach/method on how to address: having an Agency-wide Ethics Policy, the requirement for a Confidentiality Agreement for selected employees, and Conflict of Interest policy and related training that covers all topics. Any requirement should be documented and be clearly communicated to all Agency employees.	IA to verify during a future follow-up evaluation.
HR audit: Hiring and Promotions Operations Review December 2, 2019	7	IA recommends that Human Resources and Contracts and Procurement work together to establish written contracts for all vendors used by HR to document the scope, terms and conditions and prices for the services. The contracts should establish what information is included in the invoices for payment and what information needs to be maintained separately and confidentially.	IA to verify during a future follow-up evaluation.

**Note:** As of June 2020, 40 recommendations highlighted in gray do not require follow-up as the issuance date is within the last 18 months.



**INFORMATION  
ITEM  
2G**

**Date:** June 17, 2020

**To:** The Honorable Board of Directors

**Committee:** Audit

**From:** Teresa Velarde, Manager of Internal Audit

06/08/20

**Manager Contact:** Teresa Velarde, Manager of Internal Audit

**Subject:** Internal Audit Department Quarterly Status Report for June 2020

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**Executive Summary:**

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

During this quarter, Internal Audit (IA) staff completed the Fiscal Year 2020/21 Annual Audit Plan and various audits and reviews, including Recycled Water Revenues Audit, Human Resources Workload Indicators Review, Interfund Transactions Follow-up Review and the Approvals and Disbursement Automation Follow-up Review, and the list of open recommendations. IA will continue to work on another review related to HR's Training, Education, and Development program. Lastly, IA worked on various on-going and required administrative items such as the budget process tasks and completed training as required by the IA Department's Charter, among other duties and responsibilities, as specified in the Annual Audit Plan. IA continues to assist with any requests for audit work, review of Agency policies, and provide recommendations to improve internal controls.

The attached report provides details and information of the audit projects.

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**Staff's Recommendation:**

This is an information item.

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**Budget Impact** *Budgeted (Y/N): Y    Amendment (Y/N): N    Amount for Requested Approval:*

*Account/Project Name:*

N/A

*Fiscal Impact (explain if not budgeted):*

N/A

**Prior Board Action:**

On December 18, 2019, the Board of Directors approved the Audit Committee and the Internal Audit Department Charters.

On September 18, 2019, the Board of Directors approved the amended FY 2019/20 Annual Audit Plan. The original FY 2019/20 Annual Audit Plan was approved on June 19, 2019. The plan was in accordance with auditing standards and the Charter.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

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

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**Attachments:**

Attachment 1 - Internal Audit Department Quarterly Status Report for June 2020

Attachment 2 - Association of Certified Fraud Examiners - 2020 Report to the Nations

**Internal Audit Department  
Quarterly Status Report for June 2020**

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***Projects Completed This Period***

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**Project:**            **Recycled Water Revenues**

**Scope:**

Recycled water revenues were approximately \$13.9 million in FY 2018/19, and almost \$16.9 million in FY 2017/18. Internal Audit (IA) performed a limited review to evaluate whether internal controls over revenue recognition comply with Agency policies and legal and regulatory requirements, revenues are collected and recorded accurately in the Agency's accounting records and financial statements and to identify opportunities for improvements. The Planning & Environmental Resources, Engineering and Finance and Accounting departments were the primary contact departments. This was a request by the Audit Committee to move this audit up in priority.

**Status:**            **Complete**

IA completed a limited review of Recycled Water Revenues and makes the following recommendations:

- Consider whether a formal review and verification of member agency records and processes would be beneficial and appropriate as allowed under the Ordinance.
- Ensure that all periodic review and reconciliation processes are complete, well-documented, reviewed, provide clear information and are kept on file for future reference to ensure oversight over the information obtained from member agencies and that the review procedures are documented in a departmental SOP or desk procedure.
- Work together with the member agencies to develop standardized information reporting of recycled water usage to the Agency for billing.
- Update the Engineering Department's Standard Operating Procedure to provide current step-by-step instructions for recording and reporting recycled water usage information received from the member agencies.

IA extends our appreciation to Planning & Environmental Resources, Engineering and Finance and Accounting Department staff for their cooperation and assistance.

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**Project:**            **Approvals and Disbursements Automation – Follow-Up Review**

**Scope:**

The objectives of the review were to:

- Ensure adequate internal controls are in place
- Determine whether the automation process has been implemented
- Determine compliance with Agency policies and procedures
- Identify opportunities for improvements

**Status:**            **Complete**

IA has made several related recommendations about automating approvals and disbursements at the Agency. As a result of the mandate to work remotely, a new emphasis has been placed on automating processes and creating ways to complete Agency business that do not require manual data entry and manual signatures. IA's review indicates that the internal controls for the digital signature authorization are adequate and provide a sufficient audit trail to support Agency operations and that there are not significant risks to the Agency. IA also believes the new processes should be implemented permanently and not just on a temporary basis during the "safer at home" mandate.

IA also found that the internal controls that the Agency has in place for automating disbursements through direct deposit and ACH payments are adequate and provide a sufficient audit trail to support Agency operations and that there are not significant risks to the Agency. IA suggests that the direct deposit of payroll transactions be made permanent and that the Agency continue to automate as many other disbursements as possible. IA will continue to monitor disbursements to verify that the Agency continues to reduce the number of manual checks until manual checks are issued only in exceptional, non-routine circumstances.

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## Internal Audit Department Quarterly Status Report for June 2020

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**Project:**           **Interfund Transactions – Follow-Up Review**

**Scope:**

The objectives of the follow-up review were to:

- Determine whether the recommendations have been implemented
- Determine compliance with Agency policies and procedures
- Identify opportunities for improvements

**Status:**           **Complete**

The Interfund Transactions Audit Report, dated August 30, 2018, provided recommendations for the Agency to provide more descriptive information in the Notes to the Financial Statements included in the Comprehensive Annual Financial Report (CAFR) and to make an annual presentation about Interfund Transactions to the Board. The intent of the recommendations is to ensure the information about Interfund Transactions is complete and clearly documented in the CAFR and to the Board. This follow-up review found that the Agency provided additional clear and comprehensive information about Interfund Transactions in the Notes to the 2019 CAFR and that the Finance and Accounting Department provided a complete and clear oral and written report to the Board as part of the presentation of the audited CAFR, as recommended by IA.

IA's review is included in the attached report, which is presented under a separate cover.

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**Project:**           **Human Resources Audit: Workload Indicators Review**

**Scope:**

The purpose of this review was to evaluate the workload indicators to determine whether those are met, adequate documentation is retained to support the information reported, and to compare those with other similar agencies. This review is part of the multi-phase Human Resources (HR) Operational Audit, and to-date three audits have been completed including the attached report.

**Status:**           **Completed**

IA completed a limited review of the HR Department's Workload Indicators as reported in the Agency's *Operating and Capital Program Budget* (Budget document). HR currently reports 13 Workload Indicators, and four indicators were chosen for detailed evaluation and analysis. Based on IA's review, inconsistencies were observed in the methodology used to calculate the indicators and there is no comparison of actual to target results. Two recommendations were provided for consideration by the department.

- Evaluate the HR Department's Workload Indicators as reported in the Agency's Budget document and consider additional and/or different Workload Indicators that provide information about the various activities of the department and ensure they are aligned to the department's goals.
- Document a Standard Operating Procedure or desk procedures to ensure consistency in the data collected and the method in calculating Workload Indicator results.

A report has been completed and included as an attached report, which is presented under a separate cover.

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**Project:**           **Report on Open Recommendations as of June 2020\***

**Scope:**

The IAD Charter requires IA to follow-up on the status of outstanding recommendations to determine if corrective actions have been implemented. Follow-up reviews are scheduled through the Board-approved Annual Audit Plan. Executive Management supports the implementation efforts of the recommendations previously provided and/or the development of alternative controls to address the original risks identified.

**Status:**           **Complete & On-going-** Status of outstanding recommendations as of March 2020.

## Internal Audit Department Quarterly Status Report for June 2020

The table below provides the number of recommendations outstanding as of this Status Report. Additional details about each of the outstanding recommendations is 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 as well as 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. The audited business units are encouraged to submit additional information for IA review if they determine the recommendation has been satisfied.

As shown on the following table, of the 79 recommendations:

- 19 recommendations are planned to be reviewed in the current fiscal year (approximately 24%)
- 20 recommendations are expected to be reviewed in the following fiscal year (approximately 25%)
- 40 recommendations that are highlighted in gray do not require follow-up as the issuance date is within the last 18 months (approximately 51%).

Area Audited	Report Issued Date	No. of Recs. Remaining to be Verified by IA*	Planned Follow-Up
Accounts Payable Follow-Up (Deferred Recommendations related to Agency Policies)	August 29, 2013	2	FY 2021
Follow-Up – IT Equipment Audit – ISS	February 29, 2016	2	FY 2021
Master Trade Contracts	September 1, 2016	6	FY 2021
Follow-Up – IT Equipment Audit – FAD	December 5, 2016	6	FY 2021
Audit of Master Services Contracts	December 5, 2016	3	FY 2021
2017 Petty Cash Audit & Follow-Up Review	June 5, 2017	7	FY 2021
Water Use Efficiency Programs Audit	June 5, 2017	6	FY 2022
Contracts and Procurement Follow-Up Audit	August 30, 2017	1	FY 2022
Payroll Operations Audit	August 30, 2017	6	FY 2022
Procurement Card Audit	March 1, 2018	7	FY 2022
Wire Transfers Audit	March 1, 2018	5	FY 2022
Garden in Every School	May 31, 2018	1	FY 2022
Inter-fund Transactions Audit	August 30, 2018	3	FY 2023
Agency Vehicle Operational Follow-up audit: Review of Vehicle Inventory Procedures	November 29, 2018	3	FY 2023
Water Connection Fees Audit	February 25, 2019	5	FY 2023
Accounts Payable Follow-Up Audit	May 30, 2019	5	FY 2024
Voyager Fuel Card Audit	May 30, 2019	4	FY 2024
Human Resources Audit: Hiring and Promotions Operations Review	December 2, 2019	7	FY 2024
<b>Total Outstanding Audit Recommendations</b>		<b>79</b>	

Recommendations related to the Regional Contract Review (these recommendations are planned for full implementation with the renegotiation of the Regional Contract IA will not follow up on these items until the renegotiation has been finalized)			
Regional Contract Review – Final Audit Report	December 16, 2015	31	Pending – Renegotiation of the Regional Contract

\*The Outstanding Recommendations Table does not update the status of recommendations resolved by follow-up audits during the current quarter or add any new recommendations resulting from the projects completed during this quarter (as noted in this Status Report). The table is revised for those changes once all items have been received by the Audit Committee and the Board of Directors which is when items are determined to be final.

## Internal Audit Department Quarterly Status Report for June 2020

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**Project:**        **FY 2020/21 Annual Audit Plan**

**Status:**        **Completed**

**Scope:**        According to the Board-approved Internal Audit Department Charter, IA must annually submit a documented plan of proposed audit projects. The Annual Audit Plan is prepared in accordance with recommendations and best practices provided by the Institute of Internal Auditors. The Plan allows the Manager of IA to carry out the responsibilities of the Internal Audit function by prioritizing projects and allocating necessary resources. The proposed projects are scheduled based on a risk assessment to target the areas of highest risk in terms of impact and likelihood. The audits, and resulting recommendations are intended to assist Agency management and the Board in achieving organizational goals and objectives.

For the FY 2020/21 Annual Audit Plan, IA proposes the following audit projects: Human Resources Operations Audit – additional areas, Disbursements and accounts payable, including potential FEMA reimbursements. These projects are proposed, in addition to on-going and required projects, such as the annual CAFR review. In addition IA will be coordinating the RFP process for external auditors, since the current contract will be expiring after five years. The Annual Audit Plan is considered a flexible plan and projects can change or other projects with higher risks can take greater priority. Any changes or amendments to the Plan are communicated to the Audit Committee through the status report or other amendment document. The annual audit plan is provided under separate cover.

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### ***Projects in Process***

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**Project:**        **Human Resources Audit: Employee Training and Development**

**Scope:**

IA is performing an operational audit of the HR Department that will be completed in phases. The purpose of the audit is to evaluate that goals and objective documented for employee training and development are being met and provide recommendations to improve practices.

**Status:**        **On-going** - IA continues to work with HR through this audit, anticipated for completion Sept 2020.

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**Project:**        **FY 2019/20 Financial Audit by External Auditors LSL**

**Scope:**

IEUA's Fiscal Ordinance requires that a financial audit be completed by a CPA Firm by December 31<sup>st</sup> (6 months after the close of the fiscal year). LSL performed their interim work virtually in May and will begin year-end fieldwork in the fall. LSL will attend the Audit Committee Meeting on June 8 to discuss the scope of the financial audit and provide an opportunity to meet and discuss any concerns and the required communications.

IA stays involved and has on-going communication and coordination with LSL and Accounting staff working directly with the auditors. As required by the IA Charter, IA performs a quality control review of the Comprehensive Annual Financial Report (CAFR) documents and financial documents prior to finalizing the audit and the CAFR for Board approval.

This is the fifth and final year that LSL will be performing the required financial audit. State law requires that the engagement partner be rotated. The Agency will advertise for audit proposals through a Request for Proposal beginning in January 2021. IA takes the lead on evaluating potential audit firms. IA will continue to keep the Audit Committee informed of the process.

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## Internal Audit Department Quarterly Status Report for June 2020

### ***Planned/Future/Additional Projects***

**Project:**            ***Management Requests***

**Scope:**

Assist Agency Management with requests for analysis, evaluations and verification of information, assist with the interpretation of policies and procedures, and/or provide review and feedback on new policies or procedures. These services are provided according to the IAD Charter, the Annual Audit Plan, and best practices. The management request projects are short-term projects, typically lasting no more than 60–75 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. 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 Executive Management.

During this quarter, IA was working on the following “Management Requests”:

- Continued to assist with review of Agency policies.
- Participated in Safety Committee and IT Security Committee
- Provided analysis and updates about risks and opportunities during the “safer at home” order

**Project:**            ***Special Projects***

**Scope:**

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 and Audit Committee Charters, the Annual Audit Plan, and/or best practices.

Special Projects can be short or long-term projects, typically requiring more than 80 hours of staff time and requiring setting aside or delaying work on scheduled audit projects. The scope of the review is not generally known, and the work must be handled with the highest degree of confidentiality and care, as with all audit projects. Special Projects are usually considered highly confidential.

### ***Internal Audit Department Staffing***

**Internal Audit Staff Professional Development Activities:**

As required by the *International Standards for the Professional Practice of Internal Auditing*, and the IA Charter, auditors must regularly enhance their knowledge, skills, and other competencies through continuing professional development. During the past quarter, IA staff has continued to stay abreast of industry developments through review of industry literature and participation in on-line webinars.

The Internal Audit Manager is a member of the governing board of the Inland Empire Chapter of the IIA. The governing board sets direction for the chapter. One Senior Auditor serves in the same Chapter and holds an officer position, Chapter Secretary.

Two IA members are preparing for the 3-part Certified Internal Auditor (CIA) examination and certification. The CIA is the only globally recognized certification for internal audit professionals and is the highest certification that can be attained by an internal auditor.

The Manager of IA has a Master’s degree in Public Administration. The Manager of IA and One Senior Auditor are Certified Government Audit Professionals (CGAP®). The CGAP® certification program is designed for auditors working in the public sector and demonstrates government knowledge and expertise. One Senior Auditor is a Certified Public Accountant (CPA) and Certified Internal Auditor (CIA).



## Internal Audit Department Quarterly Status Report for June 2020

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The Internal Audit Department is staffed as follows:

- 1 Full-time Manager of Internal Audit
- 2 Full-time Senior Internal Auditors

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**Future Audit Committee Meetings:**

- **September 2020 - Special Audit Committee Meeting (Date to be finalized)**  
*(this year, the regularly scheduled date falls on a Holiday)*
  - *Monday, December 7, 2020 - Regularly Scheduled Audit Committee Meeting*
  - *Monday, March 8, 2021 – Regularly Scheduled Audit Committee Meeting*
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# REPORT TO THE NATIONS<sup>®</sup>

2020 GLOBAL STUDY ON OCCUPATIONAL FRAUD AND ABUSE



**ACFE<sup>®</sup>**

Association of Certified Fraud Examiners



# FOREWORD

The 2020 *Report to the Nations*—the ACFE’s 11<sup>th</sup> study on the costs and effects of occupational fraud—represents the latest in a series of reports dating back to the first edition published in 1996. Collectively, these studies represent countless hours of work by our staff spent gathering, analyzing, and interpreting the data from thousands of cases of fraud committed against organizations of all types and sizes. We have invested so much time and effort into this research because we recognize two simple truths: (1) occupational fraud imposes tremendous costs upon businesses and government agencies throughout the world; and (2) in order to deal with such a problem, we must first understand it. In the 24 years since it was first published, the *Report to the Nations* has arguably contributed more to our understanding of occupational fraud than any other source of information.

The first *Report to the Nation* was launched in 1996 by ACFE Founder, Dr. Joseph T. Wells, CFE, CPA, because he recognized that there was a glaring lack of information about occupational fraud. More importantly, he also recognized that the ACFE was uniquely situated to address this problem because we were sitting on what was probably the greatest source of fraud information in the world—the collective knowledge and experiences of the Certified Fraud Examiners who make up our association.

Over the years, the ACFE has received a great deal of praise and credit for publishing the *Report to the Nations*, which is the most widely quoted source of occupational fraud data in the world. But none of this would be possible without the work of thousands of CFEs who have taken the time to share with us very detailed information about the cases they have investigated and the lessons they have learned. I am reminded that this is why we have an association like the ACFE in the first place—so that our members can share information, contribute to the common body of knowledge, and learn from one another. The ACFE is proud to be the conduit helping to broadcast and transmit that information, but make no mistake: It is our members who are the source of every piece of data contained in these pages. This study is a tribute to the important work they do and their willingness to give back to the profession.

On behalf of the ACFE and all of the CFEs who have contributed to this study, I am proud to present the 2020 edition of the *Report to the Nations*.

A handwritten signature in dark ink, reading "Bruce Dorris". The signature is fluid and cursive, with the first name "Bruce" and last name "Dorris" clearly distinguishable.

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

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## KEY FINDINGS

### OUR STUDY COVERED



**2,504** CASES

from



**125** COUNTRIES

Causing total losses of more than  
**\$3.6 BILLION**



#### TYPICAL FRAUD CASE

lasts  
**14 MONTHS**  
before  
detection

causes a  
loss of  
**\$8,300**  
per month

CFEs ESTIMATE THAT  
**ORGANIZATIONS  
LOSE**

**5%** OF REVENUE  
TO FRAUD  
EACH YEAR

MEDIAN LOSS  
PER CASE:

**\$125,000**

AVERAGE LOSS  
PER CASE:

**\$1,509,000**

#### CORRUPTION

WAS THE  
MOST COMMON  
SCHEME IN EVERY  
GLOBAL REGION

**ASSET MISAPPROPRIATION  
SCHEMES** are the  
most common and least costly

**86%**  
OF CASES

**\$100,000**  
median loss

**FINANCIAL STATEMENT  
FRAUD SCHEMES** are the  
least common and most costly

**10%**  
OF CASES

**\$954,000**  
median loss

Organizations with  
**FRAUD AWARENESS TRAINING**  
for employees were  
**more likely** to gather tips through



#### FORMAL REPORTING MECHANISMS

**56%** of tips with training

**37%** of tips without training



**43%** OF SCHEMES WERE DETECTED BY TIP,

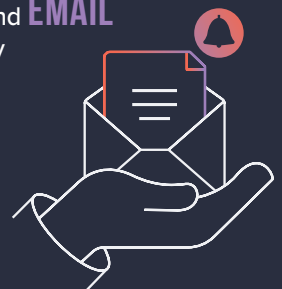
and half of those tips  
came from employees



**TELEPHONE HOTLINE** and **EMAIL**

were each used by  
whistleblowers in

**33%**  
OF CASES





## USE OF TARGETED ANTI-FRAUD CONTROLS HAS INCREASED OVER LAST DECADE

HOTLINE

↑ 13%

ANTI-FRAUD POLICY

↑ 13%

FRAUD TRAINING FOR EMPLOYEES

↑ 11%

FRAUD TRAINING FOR MANAGERS/EXECUTIVES

↑ 9%

A lack of internal controls contributed to nearly



1/3 OF FRAUDS

THE PRESENCE OF ANTI-FRAUD CONTROLS IS ASSOCIATED WITH LOWER FRAUD LOSSES AND QUICKER DETECTION



CERTAIN FRAUD RISKS WERE MORE LIKELY IN SMALL BUSINESSES THAN IN LARGE ORGANIZATIONS:



Billing fraud .....	2X HIGHER
Payroll .....	2X HIGHER
Check and payment tampering .....	4X HIGHER



MALE

\$150,000  
Median loss



FEMALE

\$85,000  
Median loss

Men committed **72%** of all occupational fraud, and also caused larger losses than women

Owners/executives committed only 20% of occupational frauds, but they caused the **largest losses**



MORE THAN HALF of all occupational frauds came from these four departments:



OPERATIONS 15%



ACCOUNTING 14%



EXECUTIVE/UPPER MANAGEMENT 12%



SALES 11%



80% OF FRAUDSTERS

FACED SOME FORM OF INTERNAL DISCIPLINE FROM THE VICTIM ORGANIZATION

46% of victim organizations declined to refer cases to law enforcement because **INTERNAL DISCIPLINE WAS SUFFICIENT**



42% OF OCCUPATIONAL FRAUDSTERS WERE LIVING BEYOND THEIR MEANS



26% OF OCCUPATIONAL FRAUDSTERS WERE EXPERIENCING FINANCIAL DIFFICULTIES

# INTRODUCTION

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



The Association of Certified Fraud Examiners is pleased to present the 2020 edition of the *Report to the Nations*, our 11th study of the impact occupational fraud has on organizations throughout the world. Occupational fraud<sup>1</sup>—fraud committed by individuals against the organizations that employ them—is among the costliest forms of financial crime in existence. There are more than 3.3 billion people in the global workforce,<sup>2</sup> and nearly all of them have access to or control over some portion of their employers' cash or assets. For the ones who decide to seek illegal gains, their workplace is, in many cases, the most logical and convenient target. While the vast majority of those 3.3 billion people will never abuse the trust placed in them by their employers, the small percentage who do can cause enormous damage. As this report illustrates, that damage could amount to trillions of dollars in losses each year.

This study contains an analysis of 2,504 cases of occupational fraud that were investigated between January 2018 and September 2019. This is a tiny fraction of the number of frauds committed each year against millions of businesses, government

**The goal of the *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

organizations, and nonprofits throughout the world. Yet this study represents the most comprehensive examination available of the costs, methods, victims, and perpetrators of occupational fraud. The data presented here was gathered through our 2019 *Global Fraud Survey*. Each Certified Fraud Examiner (CFE) who took part in the survey was presented with

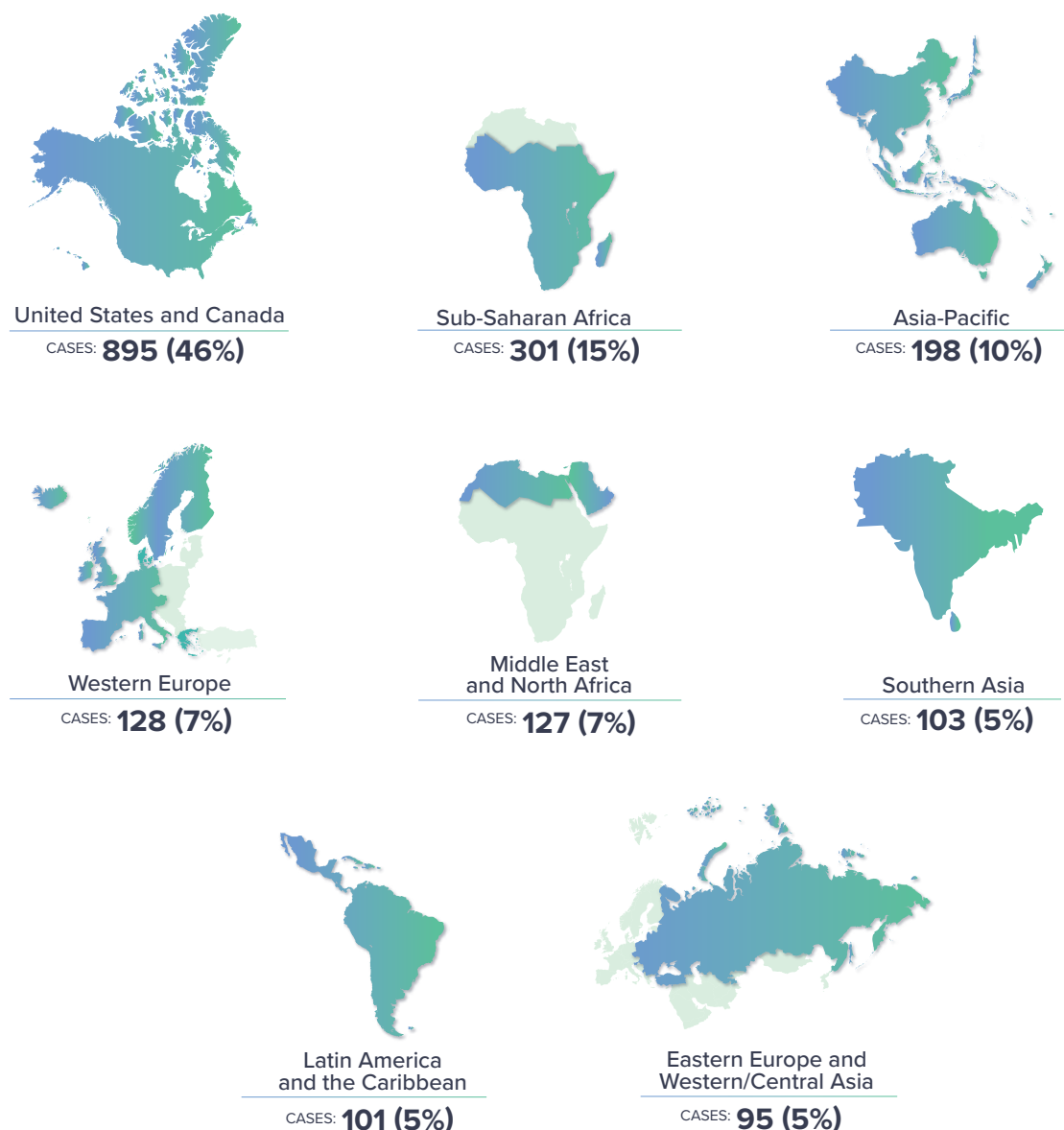
<sup>1</sup> *Occupational fraud* is formally defined as the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets.

<sup>2</sup> United Nations Department of Economic and Social Affairs, *World Economic Situation and Prospects Monthly Briefing*, April 1, 2019.

a detailed questionnaire consisting of 77 questions about a specific case of fraud they had investigated. These CFEs provided information on the method of fraud employed, the loss, the victim organization, the perpetrator, the means of detection, and the response by the victim organization after the fraud had been detected. We are deeply indebted to the CFEs who shared their knowledge and experiences to help us prepare this report.

The information presented in this study is drawn from cases that occurred in 23 different industry categories. These frauds affected large multinational organizations, small nonprofits, and every size and type of business or government agency in between. The fraudsters in these cases ranged from C-suite executives to entry-level employees. The lesson of this and our previous studies is clear: No organization is immune from occupational fraud, and these crimes can originate from anywhere within the organization.

FIG. 1 Reported cases by region





The cases in our study occurred in 125 countries throughout the world, which also helps underscore the global nature of the threat posed by occupational fraud. Figure 1 on page 7 shows the number and percentage of cases from eight major geographical regions. (Because data in our study was gathered through a survey of CFEs, the number of cases in each region largely reflects the geographical make-up of ACFE membership. It should not be read to indicate that fraud is more or less prevalent in any particular region.)

We present this report with the hope that it will be of use to anti-fraud practitioners, organizational leaders, academic researchers, and the public at large. We have compiled a great deal of data about the methods, costs, and indicators of occupational fraud, along with valuable information on how these crimes are detected and how they might be prevented or mitigated. The amount of money lost to occupational fraud each year represents a staggering drain on the global economy. It directly impacts organizations' abilities to create jobs, produce goods and services, and provide public services. The better we can understand how and why these crimes occur and how to fight them, the better we will be at directing the proceeds of commerce and state action toward the goals for which they were intended, rather than into the pockets of the fraudsters who prey on the system. We hope this study will contribute to the public understanding of these crimes; advance the common body of anti-fraud knowledge; and contribute to improved detection, deterrence, and investigation of occupational fraud.

## The Global Cost of Fraud

Fraud is a global problem affecting all organizations worldwide. Because occupational fraud is frequently undetected and often never reported, it is difficult to determine the full scope of global losses. But our data provides insight into the enormity of this issue.



Causing total  
losses of more than

**\$3.6 BILLION**

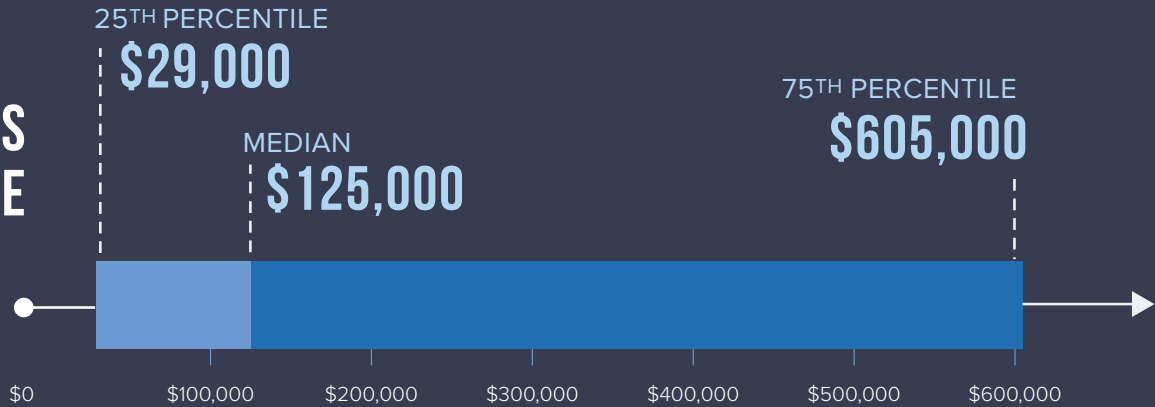
AVERAGE LOSS  
PER CASE:

**\$1,509,000**

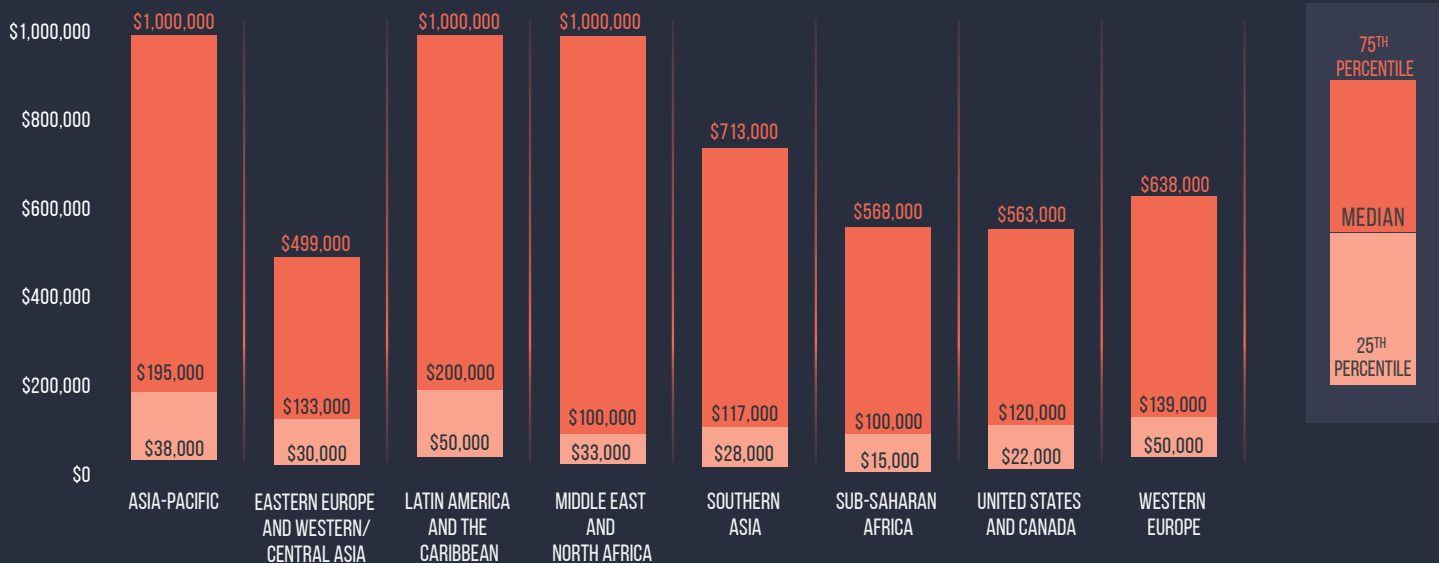




## LOSS PER CASE



## THE TYPICAL LOSS VARIES BY REGION



CFEs ESTIMATE THAT ORGANIZATIONS LOSE



PROJECTED AGAINST 2019 GWP (\$90.52 TRILLION),  
**THAT'S MORE THAN \$4.5 TRILLION**  
LOST TO FRAUD GLOBALLY EACH YEAR

# HOW IS OCCUPATIONAL FRAUD COMMITTED?

Since the inception of the *Report to the Nations* in 1996, we have analyzed more than 18,000 cases of occupational fraud reported to us by CFEs. In each of the 11 studies we have conducted, we have explored the mechanisms used by perpetrators to defraud their employers. In general, we have found that the schemes used by occupational fraudsters have stayed remarkably consistent. Even with the move toward digital payments and technology-based businesses, the means fraudsters use to acquire their ill-gotten gains stand the test of time. A taxonomy of these schemes is provided in the *Occupational Fraud and Abuse Classification System*, also called the *Fraud Tree* (see Figure 3).

## Categories of Occupational Fraud

At the highest level, there are three primary categories of occupational fraud. Asset misappropriation, which involves an employee stealing or misusing the employing organization's resources, occurs in the vast majority of fraud schemes (86% of cases); however, these schemes also 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 (10% of schemes) but costliest category of occupational fraud. 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 financial damage. These schemes occur in 43% of cases and cause a median loss of USD 200,000.

FIG. 2 How is occupational fraud committed?

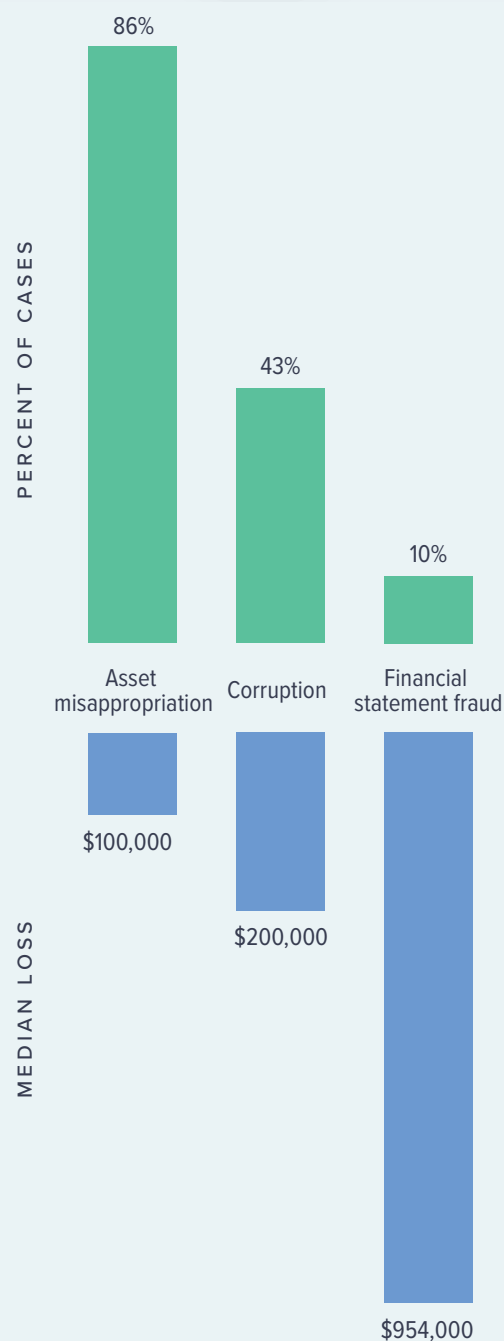
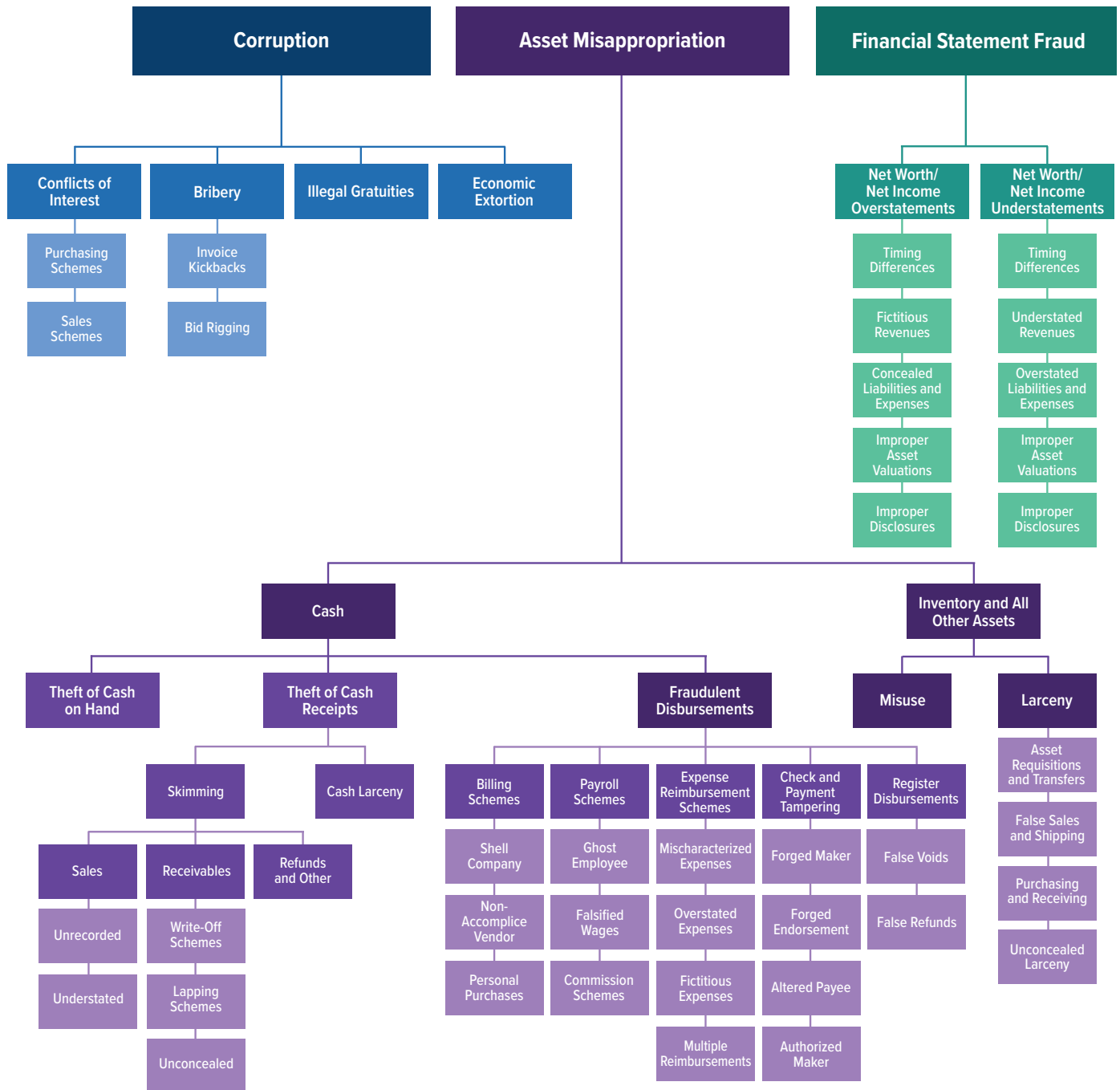


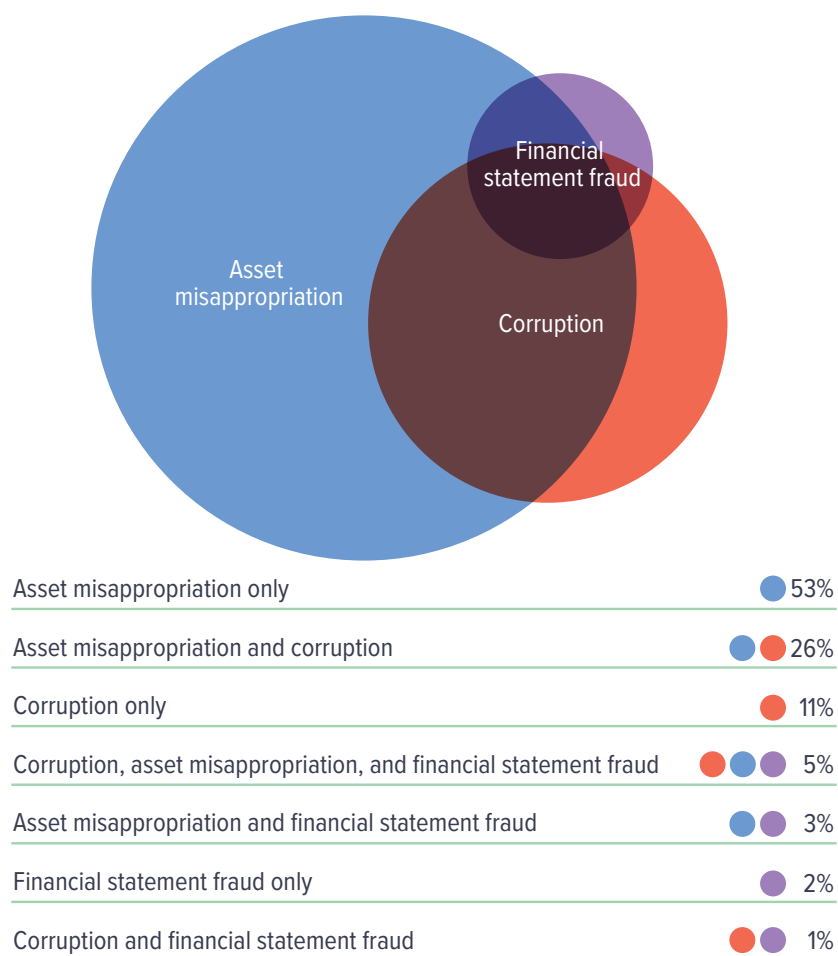
FIG. 3 Occupational Fraud and Abuse Classification System (the Fraud Tree)<sup>3</sup>



<sup>3</sup> The definitions for many of the categories of fraud schemes in the *Fraud Tree* are found in the Glossary of Terminology on pg. 86.

In one-third of the cases in our study, the fraudster committed more than one of the three primary categories of occupational fraud. As noted in Figure 4, 26% of fraudsters undertook both asset misappropriation and corruption schemes, 3% misappropriated assets and committed financial statement fraud, 1% engaged in both corruption and financial statement fraud, and 5% participated in all three categories.

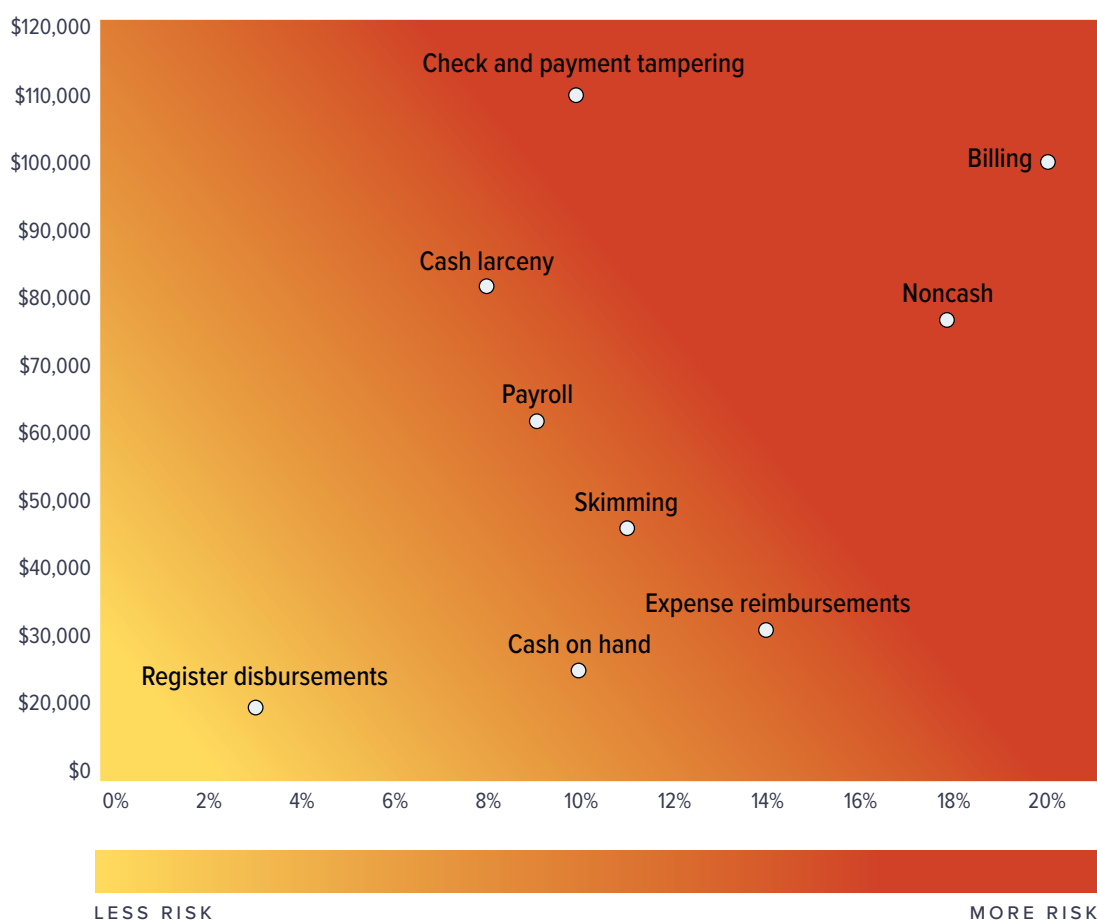
**FIG. 4 How often do fraudsters commit more than one type of occupational fraud?**



## Asset Misappropriation Sub-Schemes

Within the broad category of asset misappropriation, fraudsters use several methods to steal funds and other resources from their employers. Figure 5 is a heat map that shows the frequency and median loss of each category of asset misappropriation sub-scheme (see Glossary on page 86 for definitions of each of these sub-scheme categories). Billing schemes are the most common form of asset misappropriation and also cause a high median loss, making this type of fraud a particularly significant risk. Other high-risk frauds based on the combination of frequency and impact are check and payment tampering, as well as schemes involving the theft of noncash assets.

FIG. 5 What asset misappropriation schemes present the greatest risk?



Category	Number of Cases	Percent of All Cases	Median Loss
Billing	430	20%	\$100,000
Noncash	395	18%	\$78,000
Expense reimbursements	310	14%	\$33,000
Skimming	230	11%	\$47,000
Cash on hand	224	10%	\$26,000
Check and payment tampering	206	10%	\$110,000
Payroll	199	9%	\$62,000
Cash larceny	169	8%	\$83,000
Register disbursements	55	3%	\$20,000

## Duration of Fraud Schemes

Not all fraud can be prevented. Even in the most secure organizations, it is likely that some type of employee fraud will eventually occur. Consequently, quick detection of fraud is vital to protecting an organization from potential damage. Our research indicates that the median duration of a fraud—that is, the typical time between when a fraud begins and when it is detected—is 14 months. Additionally, as Figure 6 indicates, the longer a fraud remains undetected, the greater the financial losses.

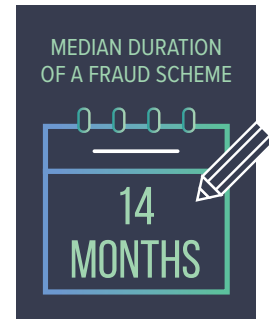
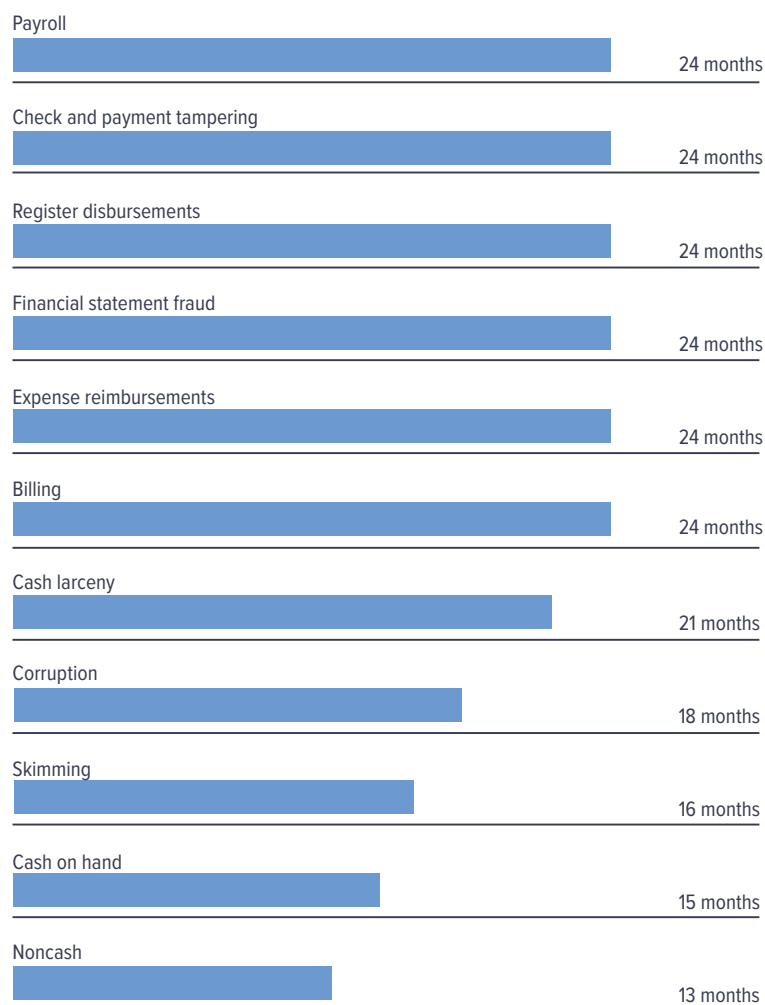


FIG. 6 How does the duration of a fraud relate to median loss?



When designing anti-fraud controls, assessing fraud risks, and enacting proactive detection measures, it is helpful to understand the potential impact of different types of fraud schemes. In addition to analyzing the median loss and frequency of the categories of occupational fraud (see Figures 2 and 5 on pages 10 and 13, respectively), we examined how long cases in each of these categories tend to last. As noted in Figure 7, companies tend to catch noncash schemes the quickest (13 months), while several scheme categories typically last 2 years before being uncovered.

**FIG. 7 How long do different occupational fraud schemes last?**





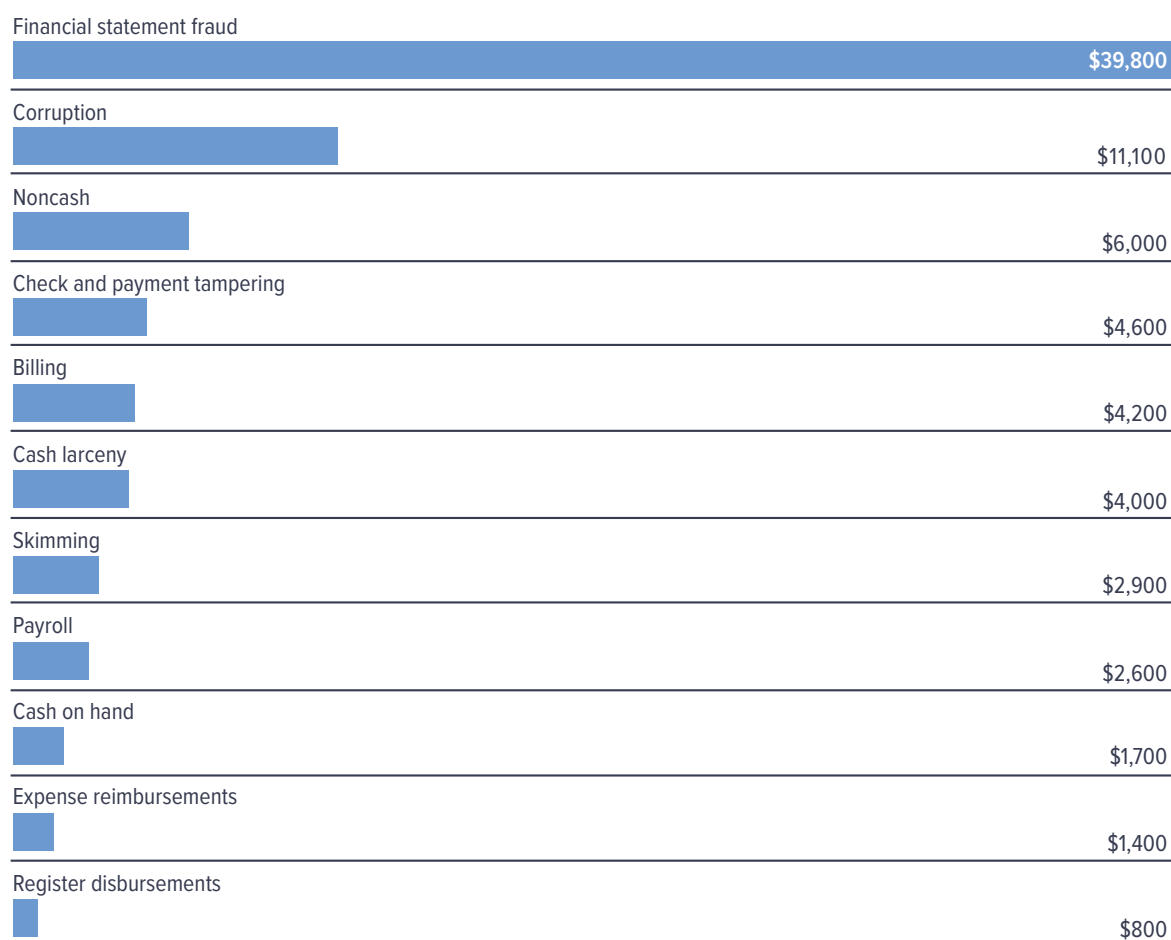
## Velocity of Fraud Schemes

Recognizing that not all fraud schemes affect companies equally and that organizations must make decisions in how and where to direct their anti-fraud efforts, we wanted to know how quickly occupational frauds tend to cause harm. For each case reported to us, we divided the loss amount by the number of months the scheme lasted to determine what we refer to as the scheme's *velocity*. The median velocity for all cases in our study was a loss of USD 8,300 per month.

Analyzing the velocity by scheme type revealed that certain types of occupational fraud schemes cause damage much more quickly than others. As Figure 8

shows, financial statement fraud schemes have the greatest velocity of USD 39,800 per month, followed by corruption schemes, with a velocity of USD 11,100 per month. Because these schemes tend to result in larger losses very quickly, organizations might use this data to prioritize their investments in mechanisms to prevent and quickly detect these types of fraud. On the other end of the spectrum, register disbursement schemes and expense reimbursement schemes tend to grow more slowly, with a velocity of USD 800 and USD 1,400 per month, respectively, meaning organizations typically have more time to uncover these schemes before losses become significant.

FIG. 8 What is the typical velocity (median loss per month) of different occupational fraud schemes?



We also found differences in scheme velocity based on how many perpetrators are involved in a fraud and based on the perpetrator's level of authority. Schemes with three or more perpetrators escalate much more quickly than those with just one or two perpetrators. Schemes committed by an owner/executive have a velocity over three times that of schemes committed by an employee or manager, highlighting how those in the highest positions have the ability to damage the company much more quickly than lower-level personnel.

	Median loss	Median duration	Scheme velocity (loss per month)
One perpetrator	\$90,000	14 months	\$6,400
Two perpetrators	\$105,000	14 months	\$7,500
Three or more perpetrators	\$350,000	15 months	\$23,300
Employee	\$60,000	12 months	\$5,000
Manager	\$150,000	18 months	\$8,300
Owner/executive	\$600,000	24 months	\$25,000

## How Occupational Fraud Is Concealed

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

### TOP 4 CONCEALMENT METHODS USED BY FRAUDSTERS



40%

Created fraudulent physical documents



36%

Altered physical documents



27%

Altered electronic documents or files



26%

Created fraudulent electronic documents or files



12% did not involve any attempts to conceal the fraud



# DETECTION

Detection is an important concept in fraud investigation because the speed with which fraud is detected—as well as the way it is detected—can have a significant impact on the size of the fraud. It is also key to fraud prevention because organizations can take steps to improve how they detect fraud, which in turn increases the staff's perception that fraud will be detected and might help deter future misconduct. Our data revealed several notable trends relating to how fraud is initially detected, when it is detected, and who detects it, all of which can help fraud examiners improve the effectiveness of fraud detection and prevention at their organizations.

## Initial Detection of Occupational Fraud

The foundation to effective detection of occupational fraud is knowing the most common methods by which fraud is discovered. Despite the increasingly sophisticated fraud detection techniques available to organizations, tips were 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 9, more than 40% of cases in our study were uncovered by tips, which is almost three times as many cases as the next-most-common detection method. Therefore, processes to cultivate and thoroughly evaluate tips should be a priority for fraud examiners.



## Tip Sources

Figure 10 breaks down the sources of tips that led to fraud detection. Half of all tips came from employees, while a substantial number of tips came from outside parties, including customers, vendors, and competitors. These findings demonstrate that anti-fraud education and the communication of designated reporting mechanisms should target not only internal staff, but external parties as well.

FIG. 9 How is occupational fraud initially detected?

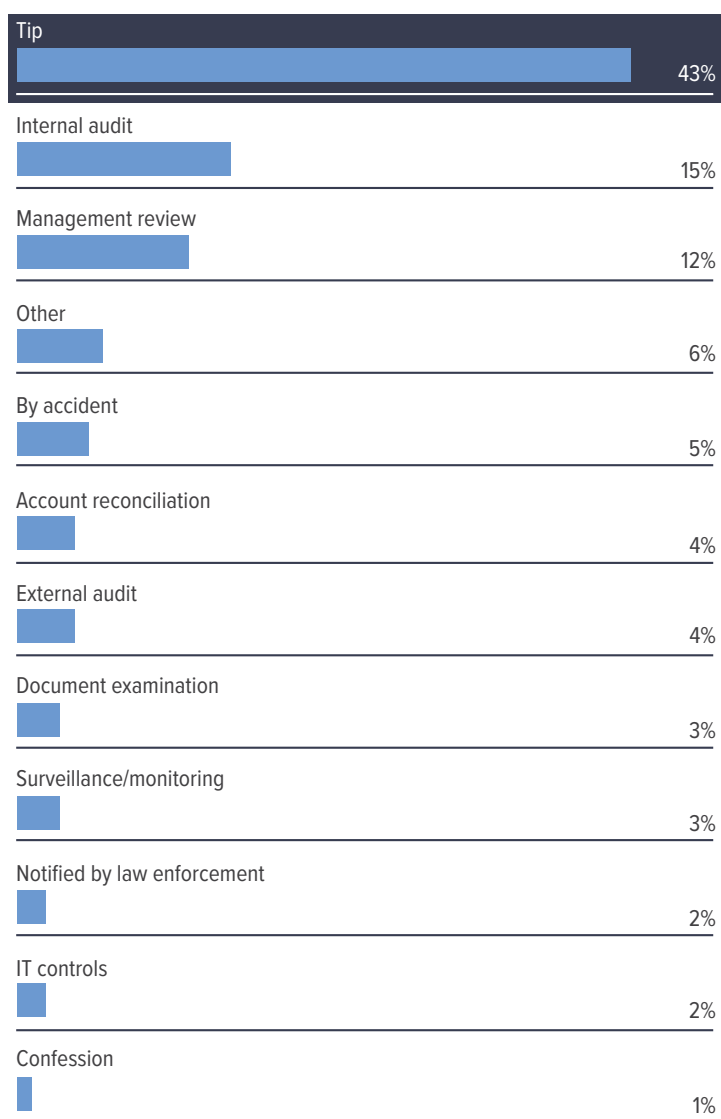


FIG. 10 Who reports occupational fraud?



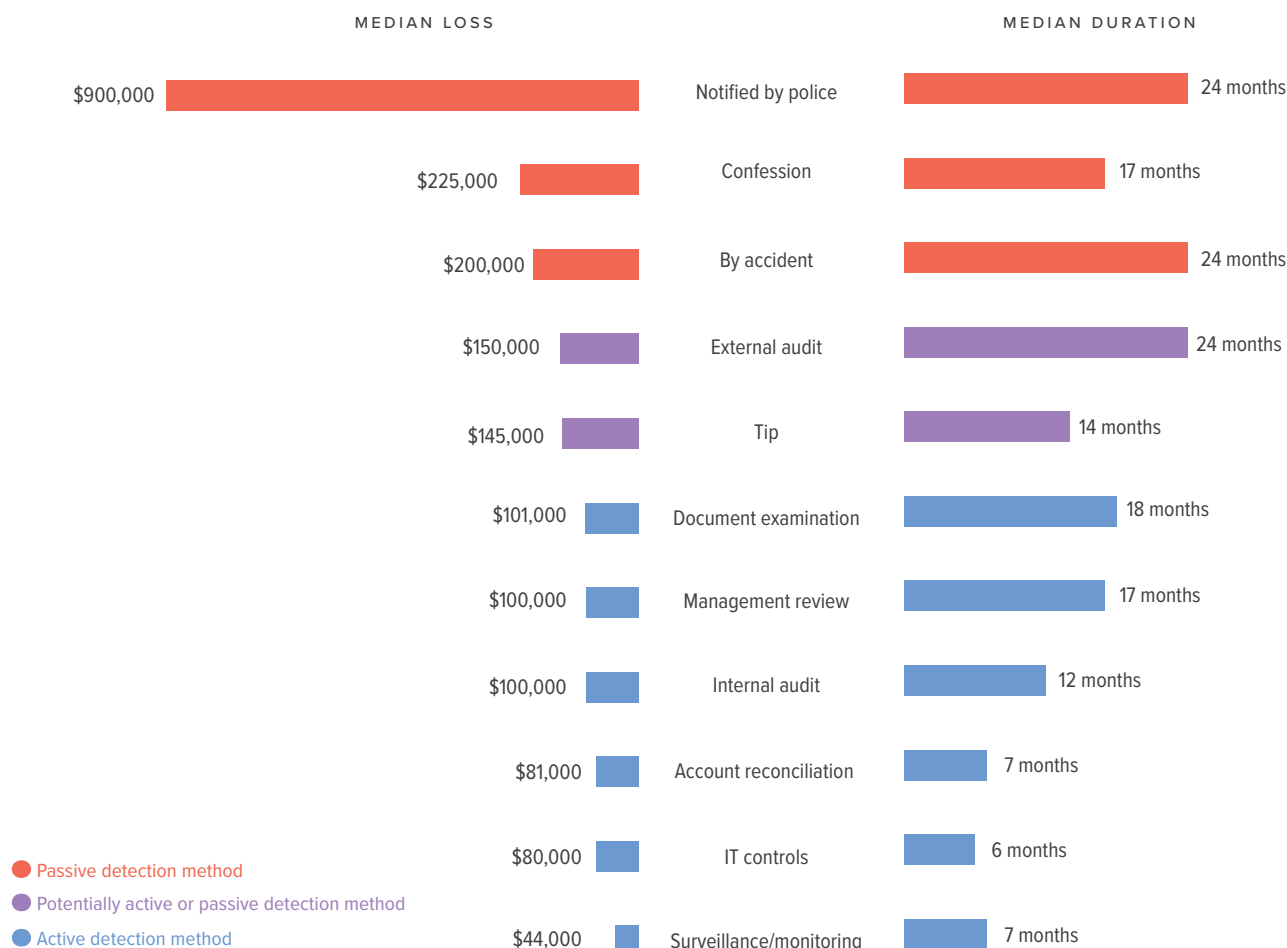
## Median Loss and Duration by Detection Method

Our data also shows that some fraud detection methods are more effective than others in the sense that they correlate with lower fraud losses. Figure 11 shows the relationship between detection method and the associated fraud scheme duration and loss. In this chart, the red bars indicate schemes that were detected by passive methods, meaning the fraud came to the victim's attention through no effort of their own, including notification by police, by accident, or confession. Passively detected schemes tended to last longer and were associated with the highest median losses relative to all other detection methods. The blue bars indicate detection methods that are active, meaning they involved a process or effort designed (at least in part) to proactively detect fraud, such as document ex-

amination or surveillance/monitoring. Our data shows that schemes discovered through one of these active methods were shorter and had lower median losses than those detected passively. The purple bars could potentially be passive or active, including tips and external audit.

What we can learn from this data is that when fraud is detected proactively, it tends to be detected more quickly and thus causes lower losses, while passive detection results in lengthier schemes and increased financial harm to the victim. Anti-fraud controls such as account reconciliation, internal audit departments, involved management review, and active cultivation of tips are all tools that can lead to more effective detection of occupational fraud.

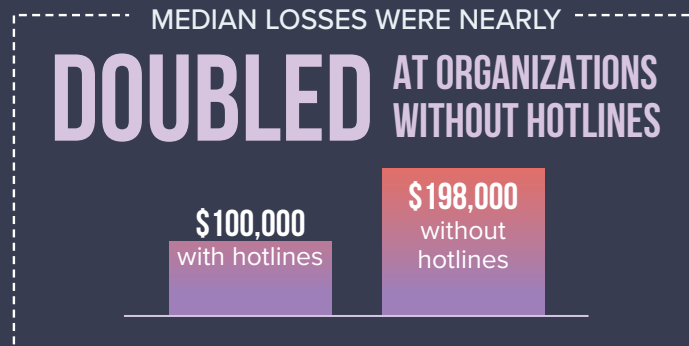
FIG. 11 How does detection method relate to fraud loss and duration?



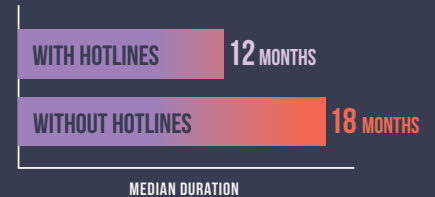
## Hotline and Reporting Mechanism Effectiveness

Maintaining a hotline or reporting mechanism speeds up fraud detection and reduces losses. Fraud awareness training further improves cultivation of tips through reporting mechanisms.

 **64%** OF  
VICTIM ORGANIZATIONS  
had hotlines



Organizations with hotlines detect frauds **MORE QUICKLY** than those without hotlines



### Effect of EMPLOYEE FRAUD AWARENESS TRAINING on hotlines and reporting

Training increases the likelihood of detection by tip

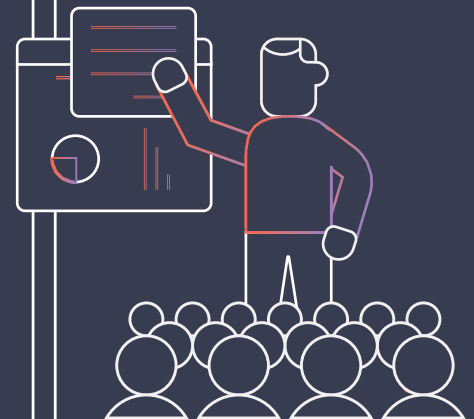
**48%** of cases detected by tip with training

**36%** of cases detected by tip without training

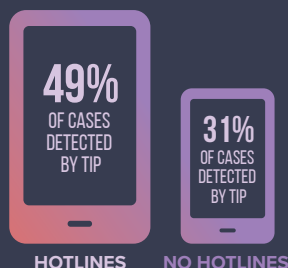
Tips are more likely to be submitted through reporting mechanisms with training

tips with training **56%**

tips without training **37%**



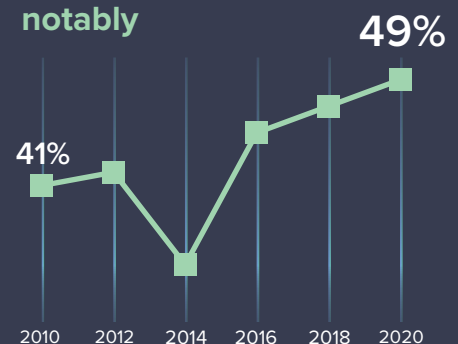
Organizations with hotlines detected fraud by **tip** more often



**Small organizations** are especially likely to detect occupational fraud by tip



Since 2010, the use of hotlines or reporting mechanisms **has increased notably**

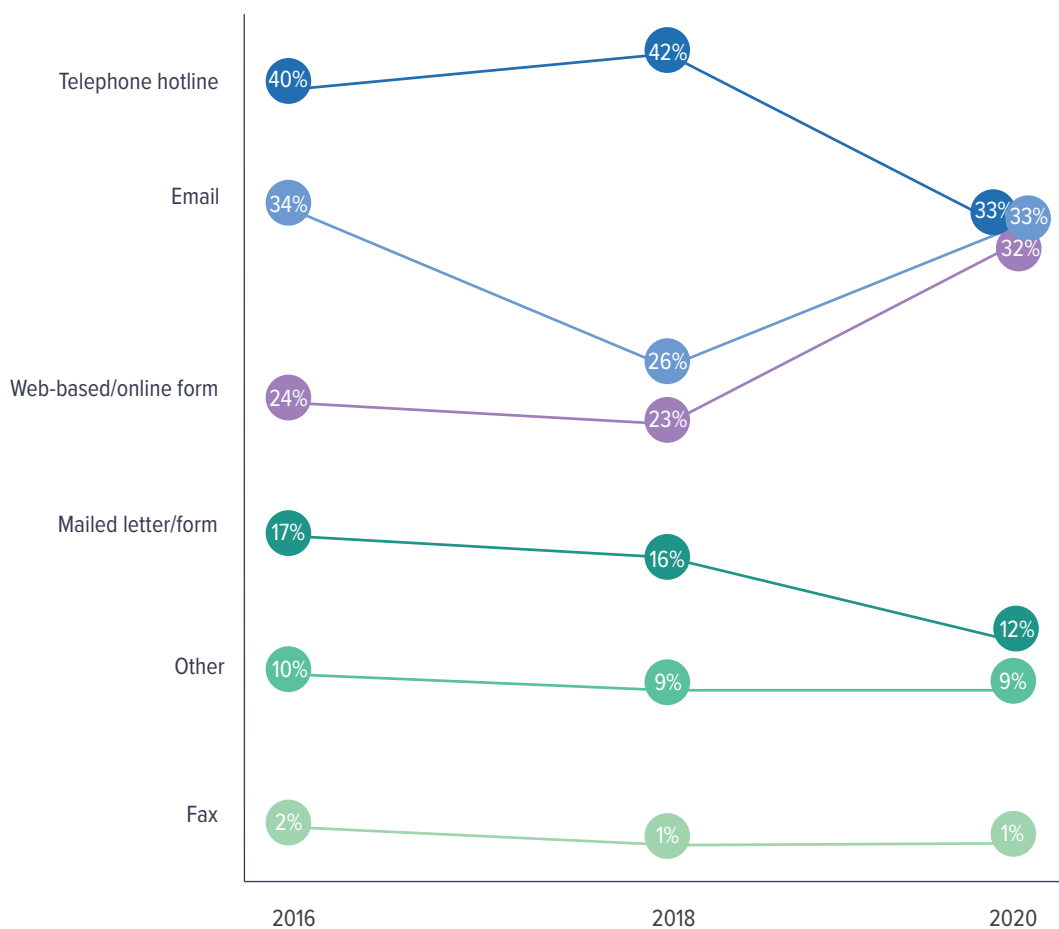


## Reporting Mechanisms

In cases where a reporting mechanism was used to report fraud, we asked respondents to indicate how the tip came in. In our two previous reports, telephone hotlines were the most common mechanism whistleblowers used by a substantial margin. As shown in Figure 12, telephone hotline use declined substantially in this report, while email and web-based/online reporting each rose to become nearly

equal to telephone hotlines. The use of mailed forms has also dropped from 17% to 12% since 2016. These findings indicate that whistleblowers' preferred methods of reporting fraud may be shifting, particularly toward online and in electronic written form. Consequently, organizations should consider maintaining multiple reporting channels to fit the needs of those who submit tips.

FIG. 12 What formal reporting mechanisms did whistleblowers use?



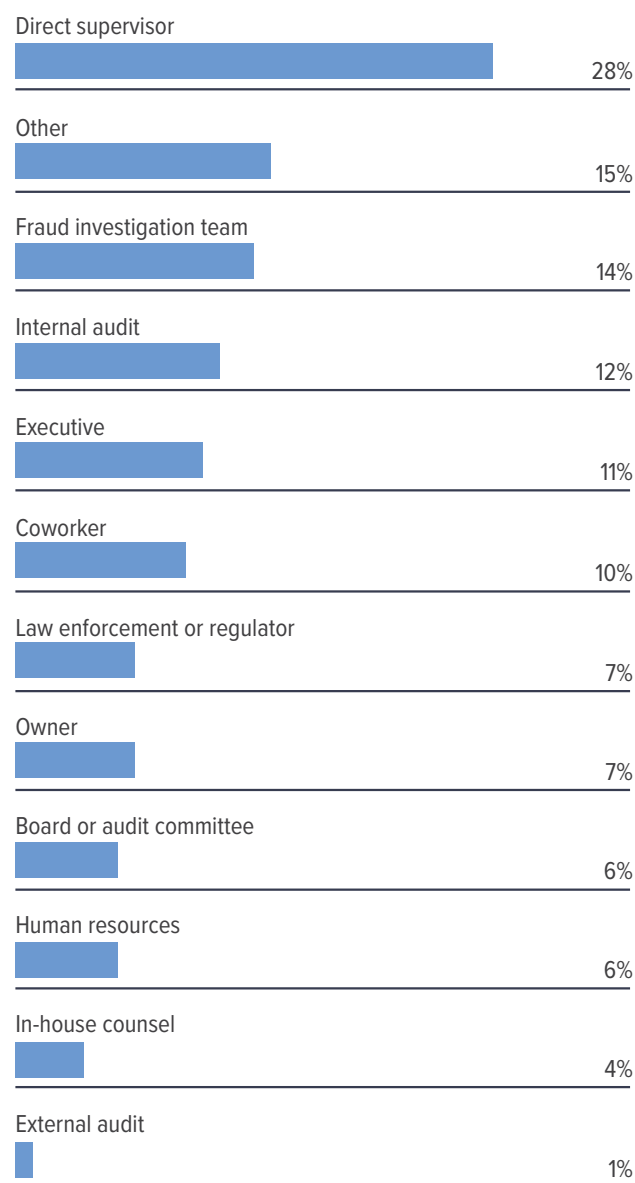
## Parties to Whom Whistleblowers Report

In approximately 33% of cases where a tip was made, the whistleblowers did not use a formal reporting mechanism. Instead, they reported their suspicions directly to supervisors, investigators, or other interested persons. Identifying how often whistleblowers tend to report fraud to various parties can help organizations answer several important questions. Who should be trained to handle a complaint if they receive one? How likely are whistleblowers to report outside of the organization? How should complaints lodged outside a formal reporting mechanism be recorded and escalated? Figure 13 indicates that whistleblowers are most likely to report fraud to their direct supervisors, yet many will go to other parties, such as fraud investigation teams, human resources, or their coworkers. Therefore, it is important to provide all staff with guidance on how fraud allegations should be responded to and escalated.

It is also noteworthy that 7% of reports were made directly to law enforcement or regulators, instead of internally, which is something most organizations would hope to avoid. This illustrates the importance of training staff on how and why they should report fraud internally.



FIG. 13 To whom did whistleblowers initially report?





# VICTIM ORGANIZATIONS

To better understand the victim organizations in our study, we questioned participants about the organizations' type, size, and industry, as well as the mechanisms that the organizations had in place to prevent and detect fraud at the time the schemes occurred.

## Type of Organization

As shown in Figure 14, 70% of frauds occurred in for-profit organizations, with 44% of the victim organizations being private companies and 26% being public companies. Private and public organizations each suffered a median loss of USD 150,000. Nonprofit organizations only reported 9% of fraud cases and suffered the smallest median loss of USD 75,000; however, many non-profits have limited financial resources to begin with, so a loss of this amount can be particularly devastating to these entities (see "Fraud in Non-profits" infographic on page 28).

## Level of Government Organization

Resources and operations vary at different levels of government, which can influence how fraud affects these organizations. To illustrate this, we analyzed the government organizations in our study by level. National-level government entities experienced the greatest number of frauds (45%) and had the highest median loss of USD 200,000, which is more than twice as much as the median loss at state/provincial government entities (USD 91,000). While local governments reported the second-highest number of cases (32%), they suffered a relatively lower median loss of USD 75,000.



FIG. 14 What types of organizations are victimized by occupational fraud?

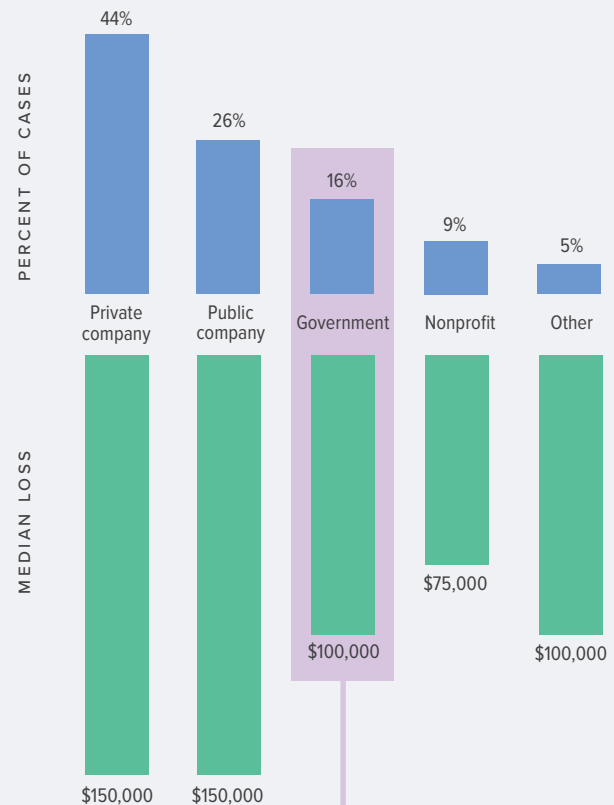
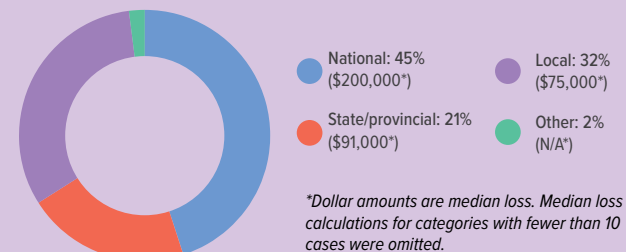


FIG. 15 What levels of government are victimized by occupational fraud?

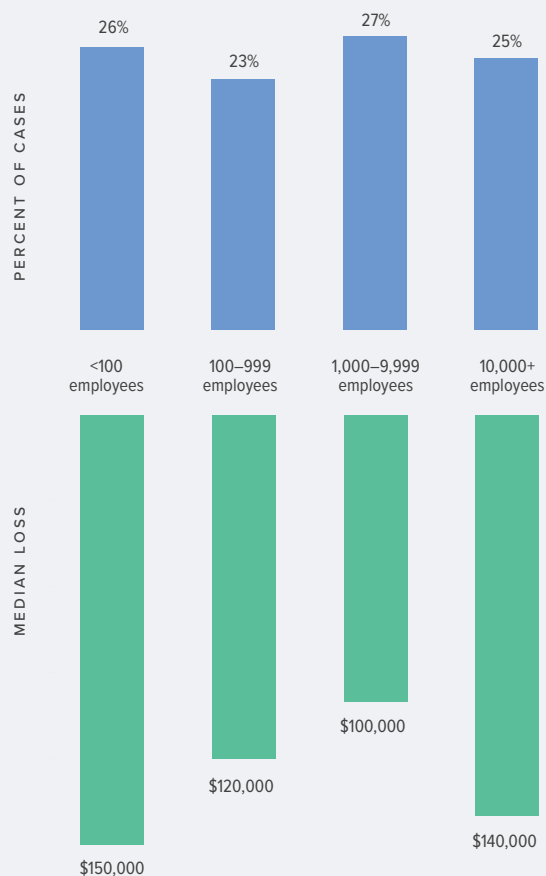


## Size of Organization

In Figure 16, the size of the victim organizations in our study is shown based on the number of employees. The cases reported to us were evenly distributed, with about a quarter in each size category. Small businesses (those with fewer than 100 employees) had the highest median loss of USD 150,000, while large organizations (those with more than 10,000 employees) had a median loss of USD 140,000. It is important to note, however, that a small business likely will feel the impact of a loss this size much more than its larger counterparts.

Figure 17 shows the distribution of victim organizations by annual revenue, with median losses ranging from USD 114,000 in the smallest organizations to USD 150,000 in the largest.

**FIG. 16 How does an organization's size relate to its occupational fraud risk?**



**FIG. 17 How does an organization's gross annual revenue relate to its occupational fraud risk?**

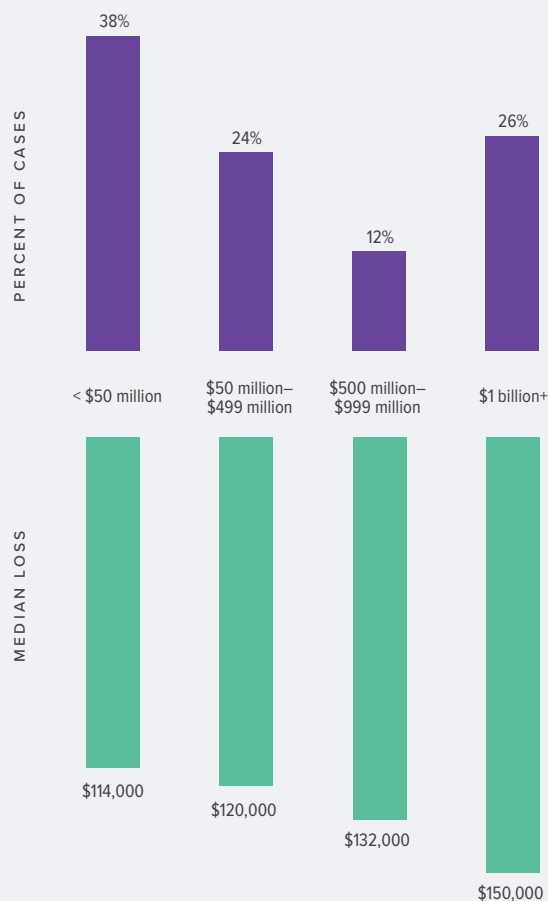
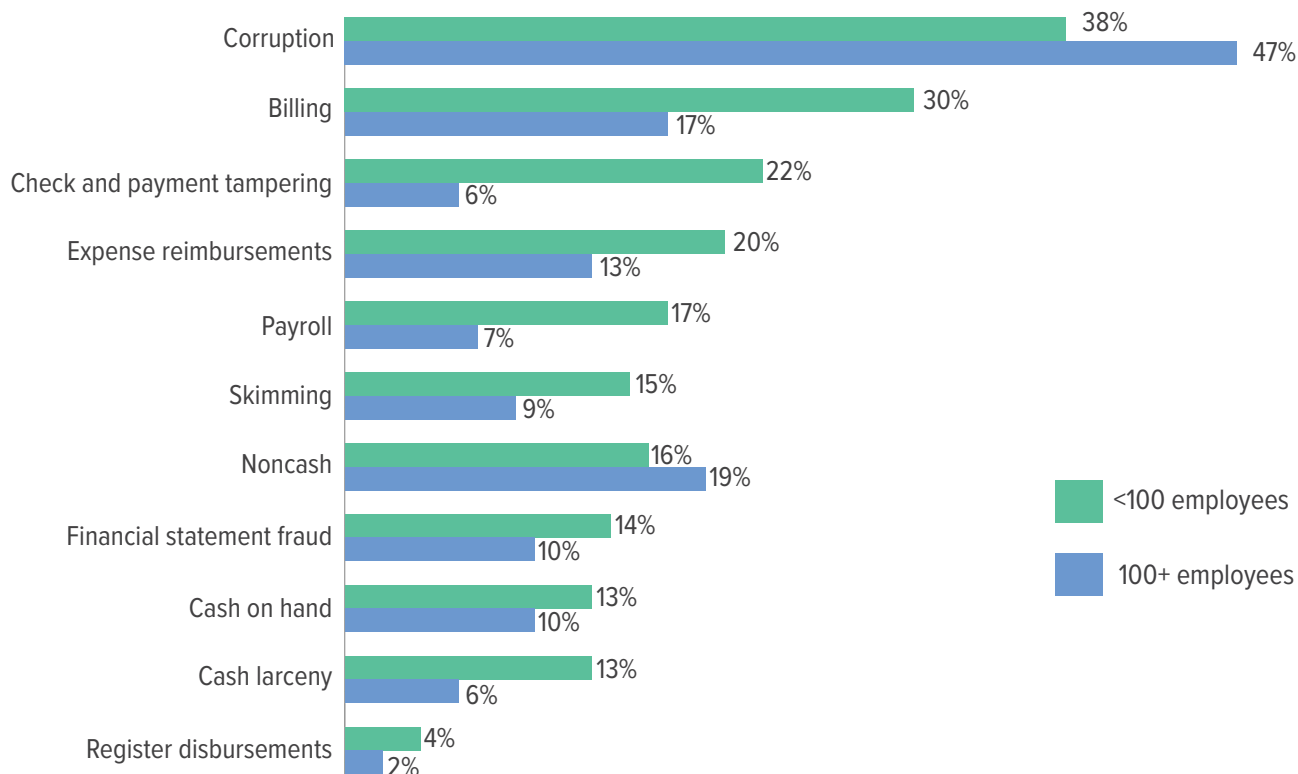


Figure 18 shows the frequency of different types of fraud schemes in small businesses (those with fewer than 100 employees) and larger organizations. Billing schemes occurred at almost twice the rate in small businesses compared to larger organizations, while check and payment tampering was nearly four times more common at small companies. In contrast, corruption and noncash schemes occurred more frequently in larger organizations.

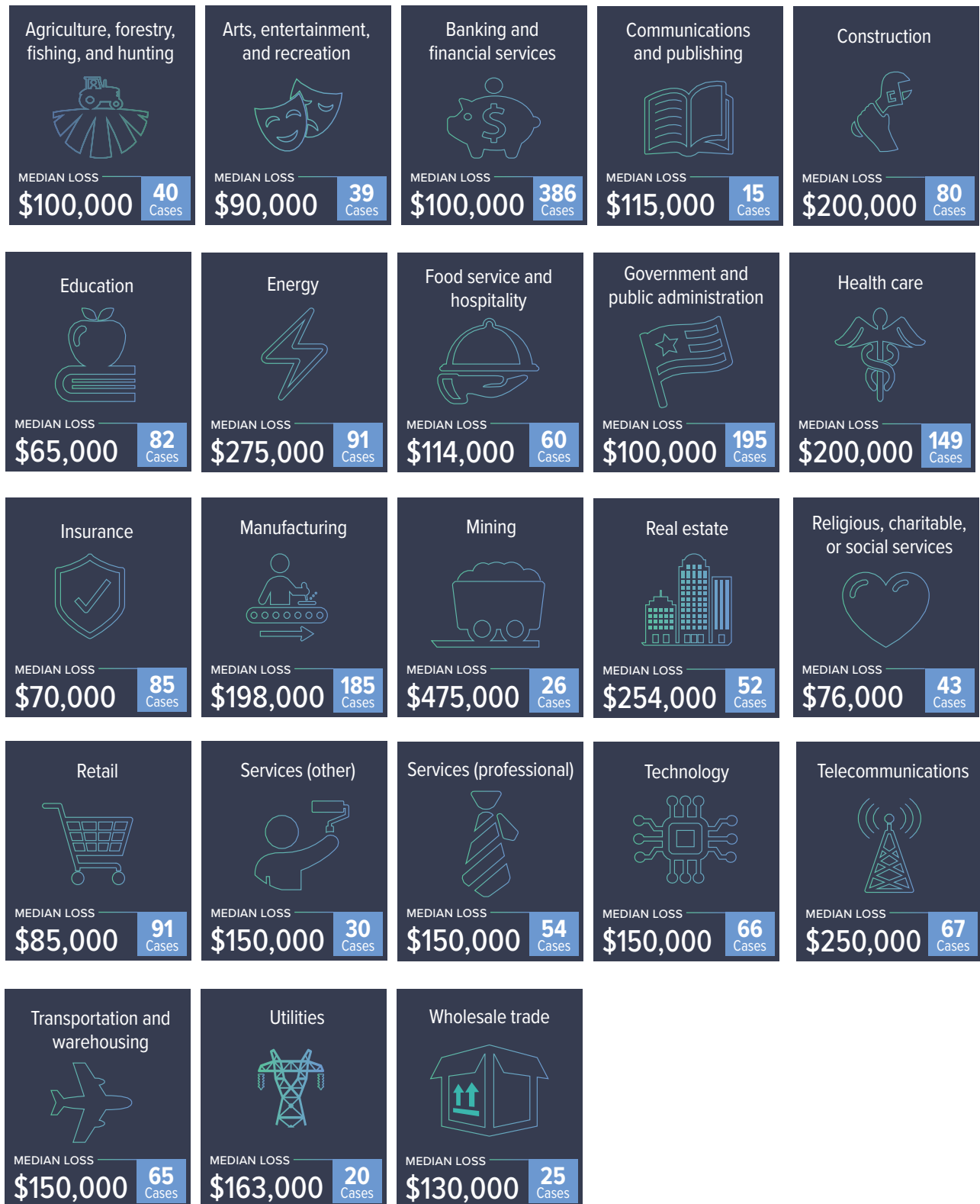
FIG. 18 How do fraud schemes vary by organization size?



## Industry of Organization

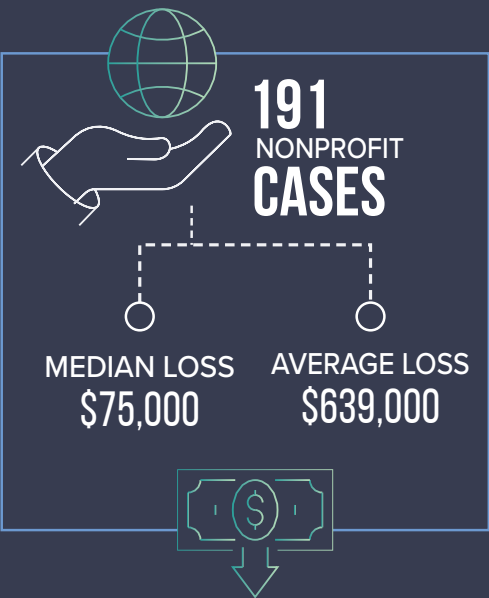
Participants were asked to identify the industry of the victim organization. The most common industries reported to us were banking and financial services, government and public administration, and manufacturing. (It is important to note that this does not necessarily mean that more fraud occurs in these sectors; it might simply indicate that organizations in these industries employ more CFEs than others.) The mining industry suffered the highest median loss of USD 475,000, while frauds in the energy sector had the next-highest median loss of USD 275,000.

FIG. 19 How does occupational fraud affect organizations in different industries?



# Fraud in Nonprofits

Nonprofit organizations can be more susceptible to fraud due to having **fewer resources** available to help prevent and recover from a fraud loss. This sector is particularly vulnerable because of **less oversight** and **lack of certain internal controls**.



## Nonprofit schemes

Percent of cases

Corruption	41%
Billing	30%
Expense reimbursements	23%
Cash on hand	17%
Noncash	16%
Skimming	15%
Check and payment tampering	14%
Cash larceny	12%
Payroll	12%
Financial statement fraud	11%
Register disbursements	3%



Nonprofit organizations have **FEWER ANTI-FRAUD CONTROLS** in place, leaving them



**MORE VULNERABLE TO FRAUD**

### TOP 3 CONTROL WEAKNESSES

35%

LACK OF INTERNAL CONTROLS

19%

LACK OF MANAGEMENT REVIEW

14%

OVERRIDE OF EXISTING INTERNAL CONTROLS



## Detection AT NONPROFITS

TIP OR COMPLAINT

**40%**



INTERNAL AUDIT

**17%**



MANAGEMENT REVIEW

**13%**



BY ACCIDENT

**7%**



EXAMINATION OF DOCUMENTS

**6%**



## Most Common Schemes by Industry

Identifying the most common fraud schemes within industries can help organizations design controls to guard against their most significant threats. In Figure 20, we show the most common occupational fraud schemes in industries with at least 50 reported cases. The risks are shaded from yellow to red, with darker variants representing higher-risk areas. For example, in the health care industry, corruption represents the highest risk (40% of cases), followed by billing schemes (33% of cases).

FIG. 20 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	364	8%	10%	18%	9%	40%	8%	10%	10%	2%	2%	10%
Government and public administration	189	18%	5%	9%	4%	48%	17%	4%	17%	17%	0%	7%
Manufacturing	177	23%	5%	6%	8%	50%	20%	18%	23%	10%	2%	8%
Health care	145	33%	10%	10%	14%	40%	22%	14%	24%	15%	6%	10%
Energy	89	24%	6%	7%	6%	66%	11%	9%	25%	6%	1%	9%
Retail	89	22%	15%	15%	11%	37%	17%	6%	20%	11%	7%	15%
Insurance	82	24%	2%	5%	9%	43%	16%	11%	9%	5%	2%	6%
Education	82	30%	9%	13%	18%	30%	22%	7%	17%	13%	1%	22%
Construction	77	22%	13%	12%	17%	47%	9%	25%	13%	13%	4%	13%
Transportation and warehousing	64	13%	5%	9%	5%	52%	9%	3%	23%	6%	0%	19%
Technology	63	24%	0%	5%	6%	46%	13%	13%	22%	11%	0%	0%
Telecommunications	62	5%	2%	3%	2%	56%	5%	6%	31%	2%	0%	5%
Food service and hospitality	59	22%	20%	10%	12%	39%	8%	8%	25%	12%	10%	14%
Services (professional)	54	37%	0%	9%	20%	26%	24%	15%	11%	22%	2%	11%
Real estate	52	25%	13%	12%	21%	48%	17%	15%	12%	8%	4%	27%



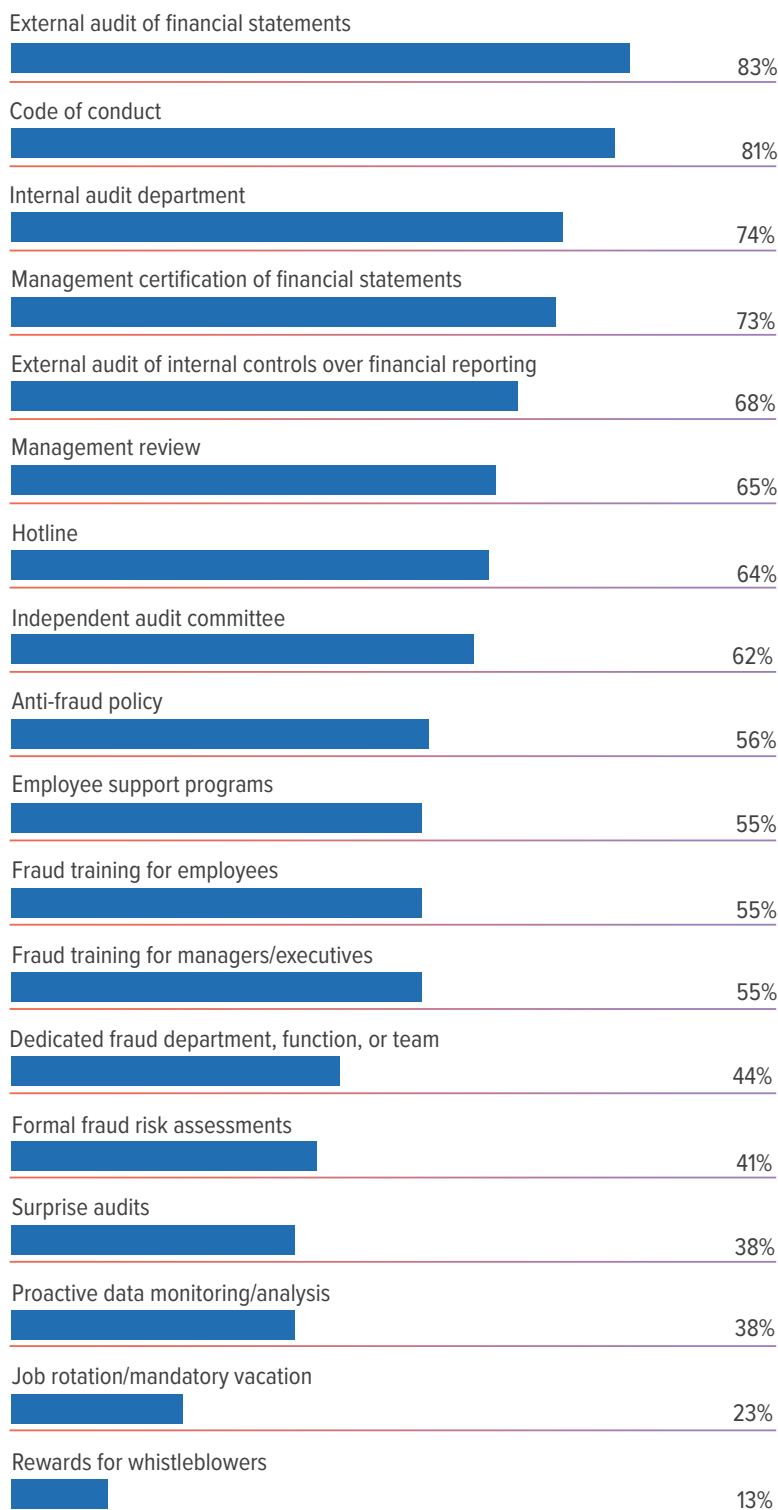
## Anti-Fraud Controls at Victim Organizations

Proactive anti-fraud controls play a key role in an organization's fight against fraud. While the presence of these mechanisms alone does not ensure that all fraud will be prevented, management's commitment to and investment in targeted prevention and detection measures send a clear message to employees, vendors, customers, and others about the organization's anti-fraud stance.

We asked survey respondents which of 18 common anti-fraud controls the victim organization had in place at the time of the fraud. Figure 21 shows that independent external audits of the organization's financial statements are the most common of the controls examined in our study; 83% of the victim organizations had their financial statements audited by an outside auditor. While we classify such audits as an anti-fraud control for purposes of our study, it is important to note that this mechanism is not primarily designed to detect or prevent all frauds. As noted in Figure 9 on page 19, only 4% of the frauds in our study were uncovered through an external audit.

Other common anti-fraud controls include a code of conduct (present in 81% of victim organizations), an internal audit department (74%), and management's certification of the financial statements (73%).

FIG. 21 What anti-fraud controls are most common?





## Effectiveness of Anti-Fraud Controls

While implementing controls to prevent and detect fraud is a necessary part of managing fraud risk, not all anti-fraud controls are created equally. To help organizations understand the potential impact of various controls, we compared the median losses and median durations of the frauds in our study based on whether each specific control was present at the victim organization during the fraud's occurrence.

For every control we examined, organizations that had the control in place experienced smaller fraud losses and detected frauds more quickly than organizations lacking that control. As seen in Figures 22 and 23, four anti-fraud controls in particular were associated

with a 50% or greater reduction in both fraud losses and duration: a code of conduct; an internal audit department; management's certification of financial statements; and regular management review of internal controls, processes, accounts, or transactions. Internal audits and management reviews are both mechanisms that can be used to actively look for fraud, so their correlation with reduced fraud losses and duration stands to reason. In contrast, codes of conduct and management certifications of financial statements are less directly tied to fraud detection, but both mechanisms likely help increase the perception of detection and form the foundation for a holistic anti-fraud culture.

## How has the use of anti-fraud controls changed over the last decade?

Over the last ten years of our studies, four of the controls we've analyzed have seen a consistent and notable increase in implementation rates. These controls are among those most commonly associated with a robust anti-fraud program, which indicates that increasing numbers of organizations are taking the threat of fraud seriously and implementing measures specifically designed to help them mitigate these risks.





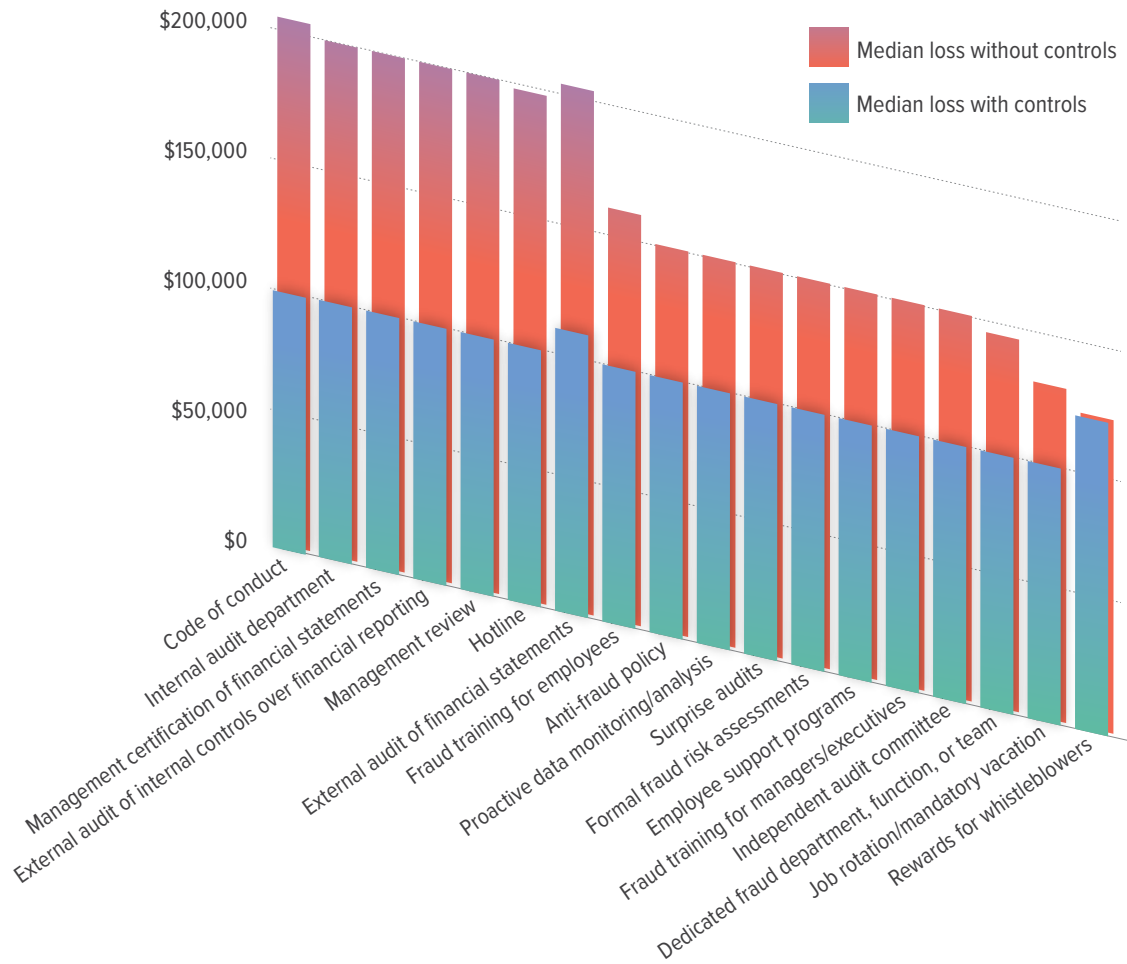
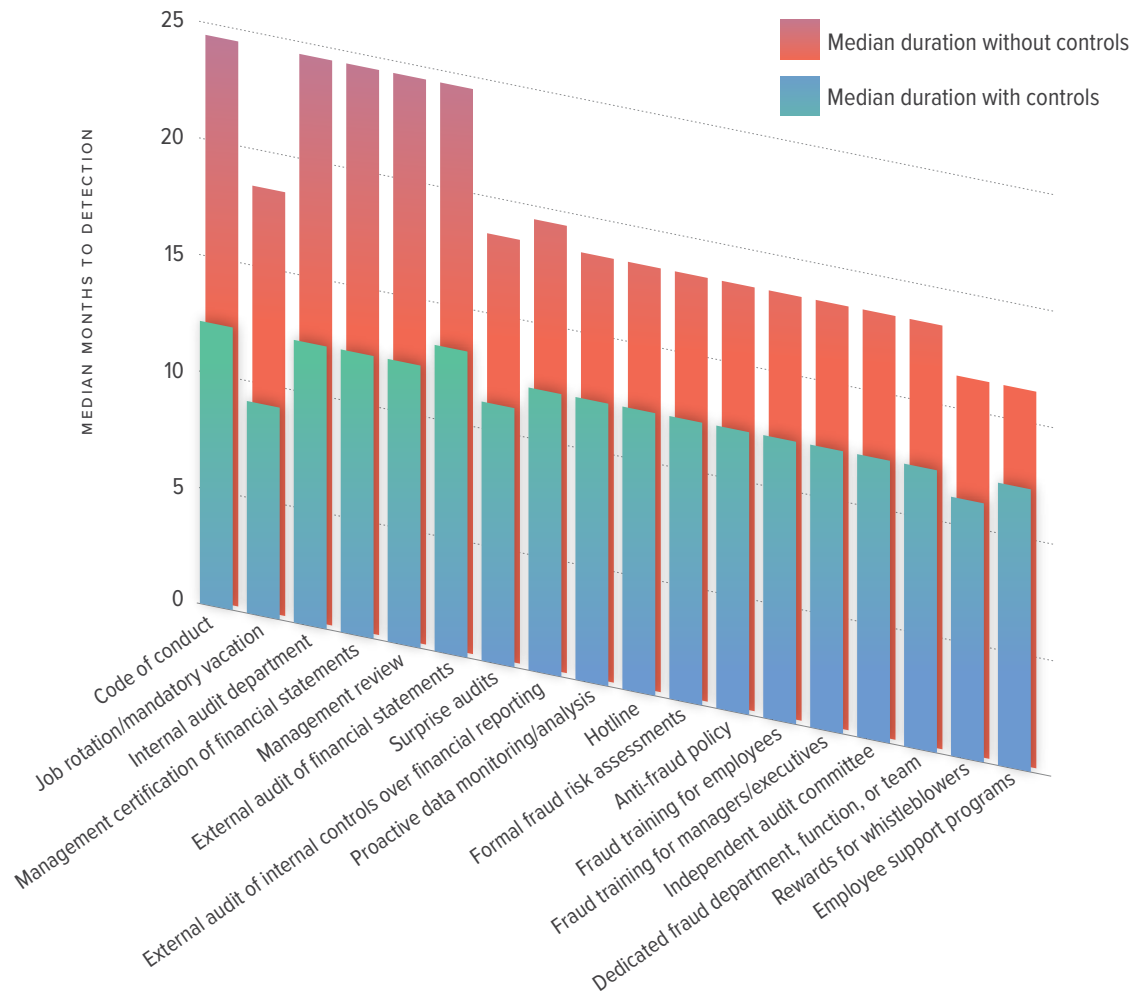
	2010	2020	Increase
 <b>HOTLINE</b>	51%	64%	13%
 <b>ANTI-FRAUD POLICY</b>	43%	56%	13%
 <b>FRAUD TRAINING FOR EMPLOYEES</b>	44%	55%	11%
 <b>FRAUD TRAINING FOR MANAGERS/EXECUTIVES</b>	46%	55%	9%

FIG. 22 How does the presence of anti-fraud controls relate to median loss?



Control	Percent of cases	Control in place	Control not in place	Percent reduction
Code of conduct	81%	\$100,000	\$205,000	51%
Internal audit department	74%	\$100,000	\$200,000	50%
Management certification of financial statements	73%	\$100,000	\$200,000	50%
External audit of internal controls over financial reporting	68%	\$100,000	\$200,000	50%
Management review	65%	\$100,000	\$200,000	50%
Hotline	64%	\$100,000	\$198,000	49%
External audit of financial statements	83%	\$110,000	\$204,000	46%
Fraud training for employees	55%	\$100,000	\$160,000	38%
Anti-fraud policy	56%	\$100,000	\$150,000	33%
Proactive data monitoring/analysis	38%	\$100,000	\$150,000	33%
Surprise audits	38%	\$100,000	\$150,000	33%
Formal fraud risk assessments	41%	\$100,000	\$150,000	33%
Employee support programs	55%	\$100,000	\$150,000	33%
Fraud training for managers/executives	55%	\$100,000	\$150,000	33%
Independent audit committee	62%	\$100,000	\$150,000	33%
Dedicated fraud department, function, or team	44%	\$100,000	\$145,000	31%
Job rotation/mandatory vacation	23%	\$100,000	\$130,000	23%
Rewards for whistleblowers	13%	\$120,000	\$122,000	2%

FIG. 23 How does the presence of anti-fraud controls relate to the duration of fraud?



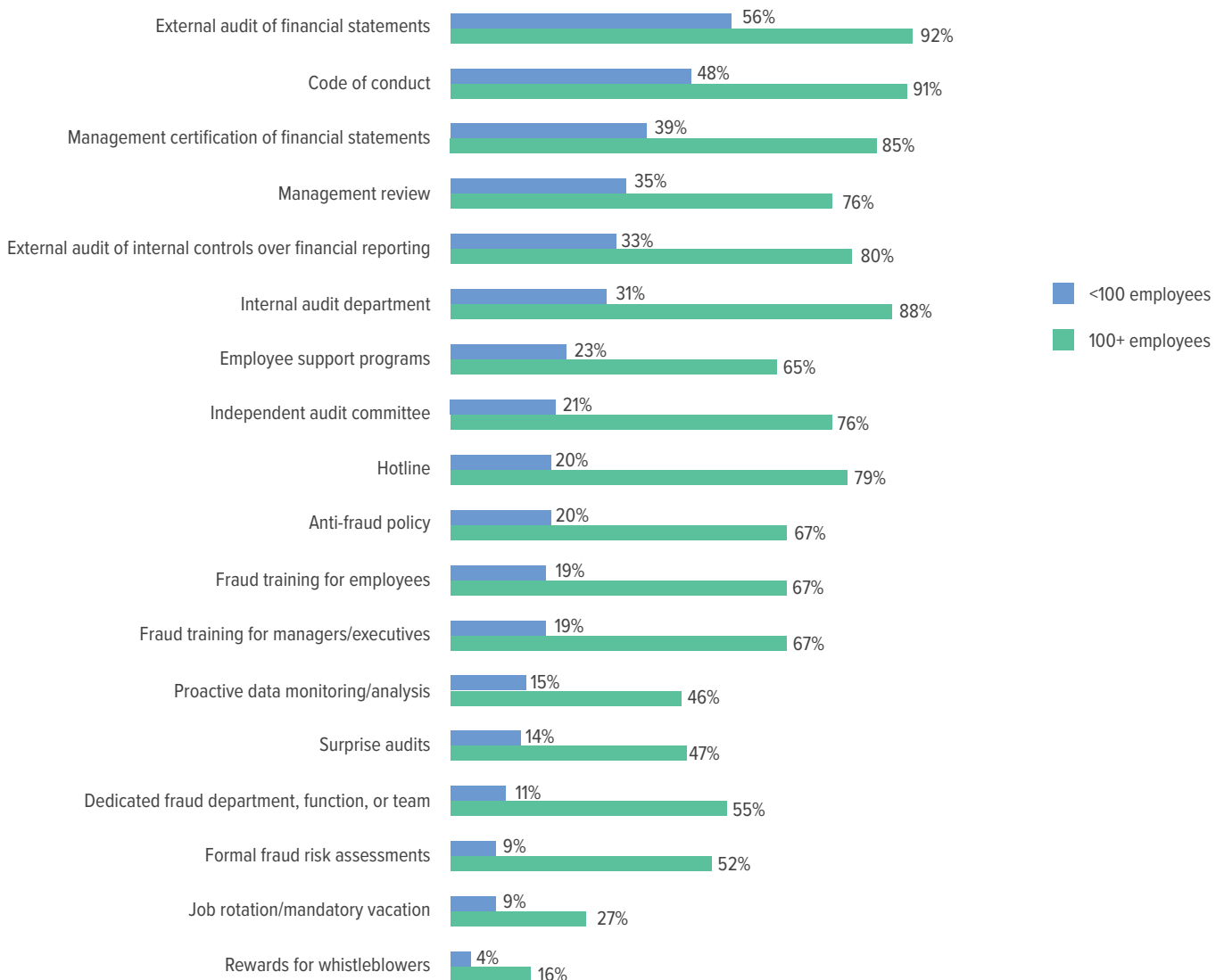
Control	Percent of cases	Control in place	Control not in place	Percent reduction
Code of conduct	81%	12 months	24 months	50%
Job rotation/mandatory vacation	23%	9 months	18 months	50%
Internal audit department	74%	12 months	24 months	50%
Management certification of financial statements	73%	12 months	24 months	50%
Management review	65%	12 months	24 months	50%
External audit of financial statements	83%	13 months	24 months	46%
Surprise audits	38%	11 months	18 months	39%
External audit of internal controls over financial reporting	68%	12 months	19 months	37%
Proactive data monitoring/analysis	38%	12 months	18 months	33%
Hotline	64%	12 months	18 months	33%
Formal fraud risk assessments	41%	12 months	18 months	33%
Anti-fraud policy	56%	12 months	18 months	33%
Fraud training for employees	55%	12 months	18 months	33%
Fraud training for managers/executives	55%	12 months	18 months	33%
Independent audit committee	62%	12 months	18 months	33%
Dedicated fraud department, function, or team	44%	12 months	18 months	33%
Rewards for whistleblowers	13%	11 months	16 months	31%
Employee support programs	55%	12 months	16 months	25%

## Anti-Fraud Controls in Small Businesses

Small businesses face different types of fraud risks than larger organizations (see Figure 18 on page 26), and they also experience unique challenges in combating occupational fraud. Whether it's due to resource limitations, a lack of awareness, or a tendency to place too much trust in their employees, small businesses implement anti-fraud controls at a much lower rate than their larger counterparts. The most common anti-fraud control—external audits of financial statements—was only in place at 56% of small businesses, and only 48% of these companies had a code of conduct, compared to 92% and 91%, respectively, of organizations with more than 100 employees.

Our data shows that there are clear opportunities for small businesses to increase their protection against fraud. Adopting a code of conduct and an anti-fraud policy, having managers review the work of their subordinates, and conducting targeted anti-fraud training for employees and managers are all measures that are correlated with significant reductions in fraud losses (see Figure 22 on page 33), yet each was implemented by fewer than half of the small businesses in our study. Each of these measures can typically be implemented without requiring a significant investment of resources and could help improve the anti-fraud environment of a small organization.

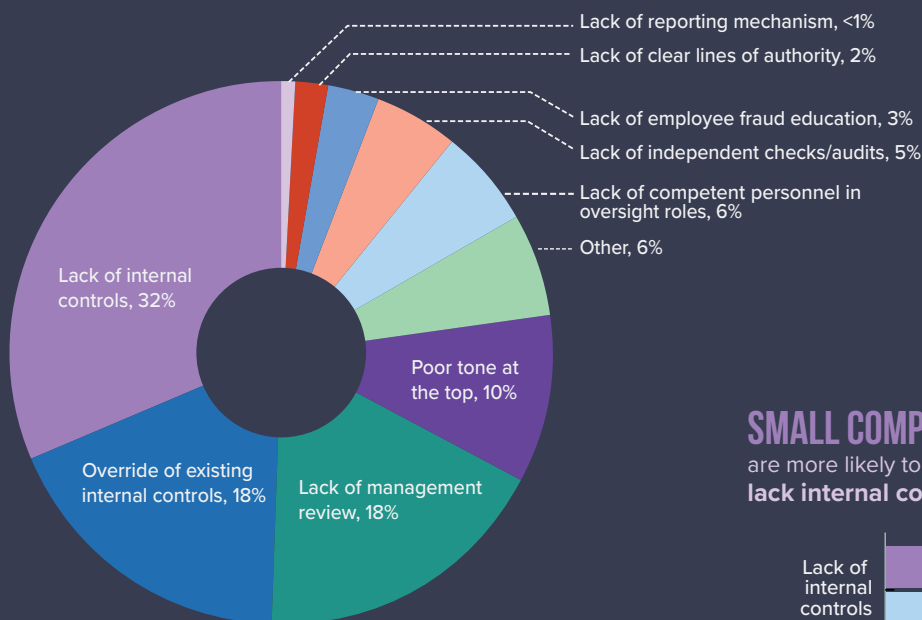
FIG. 24 How do anti-fraud controls vary by size of victim organization?



# Internal Control Weaknesses That Contribute to Occupational Fraud

Various factors can facilitate a perpetrator's ability to commit and conceal an occupational fraud scheme.

What are the primary internal control weaknesses that contribute to occupational fraud?



## MANAGER-LEVEL PERPETRATORS

are more likely than other perpetrators to **OVERRIDE EXISTING CONTROLS**



Employees	15%
<b>Managers</b>	<b>22%</b>
Owner/executives	17%

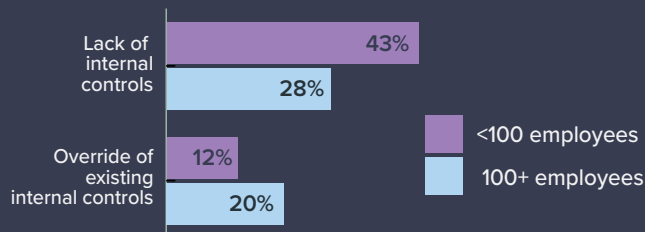
## SMALL COMPANIES

are more likely to **lack internal controls**



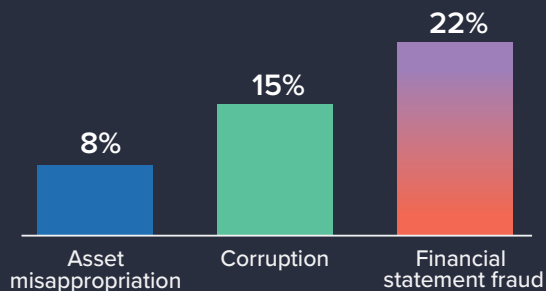
## LARGE COMPANIES

are more likely to have **controls overridden**



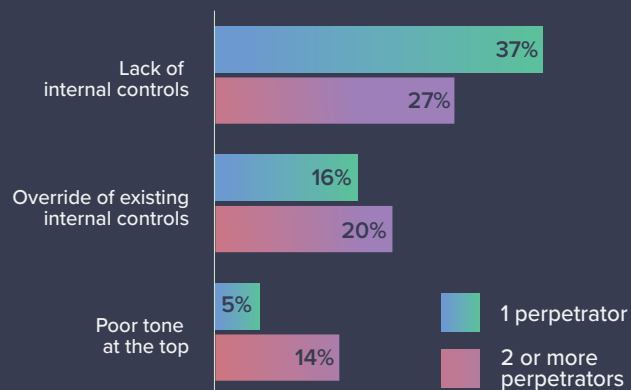
## POOR TONE AT THE TOP

was the primary risk factor in **22%** of all **financial statement frauds**.



## SOLE PERPETRATORS

take advantage of a lack of controls, while schemes involving **COLLUSION** are supported by poor tone at the top and an ability to override controls



### Background Checks Run on the Perpetrators

Although most occupational fraud perpetrators do not have a criminal history (see Figure 39 on page 48), it is still prudent for organizations to run background checks (to the extent legally permissible) during the hiring process to avoid letting known fraudsters in through the front door. As noted in Figure 25, however, only approximately half of the victim organizations in our study undertook this due diligence step when hiring the perpetrator. Interestingly, of the 52% of organizations that did conduct a background check, 13% of them uncovered a red flag in the perpetrator's background and proceeded with the decision to hire them anyway.

When running background checks, organizations might choose to prioritize different aspects of an individual's background. Figure 26 shows that, of the background checks conducted by the victim organizations in our study, 81% included a check on the perpetrator's employment history and 75% included a check of the perpetrator's criminal background.

FIG. 25 Was a background check run on the perpetrator prior to hiring?

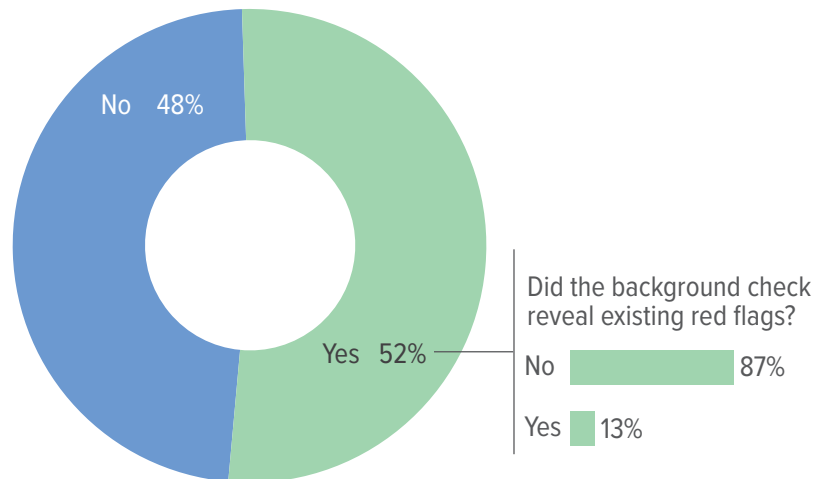
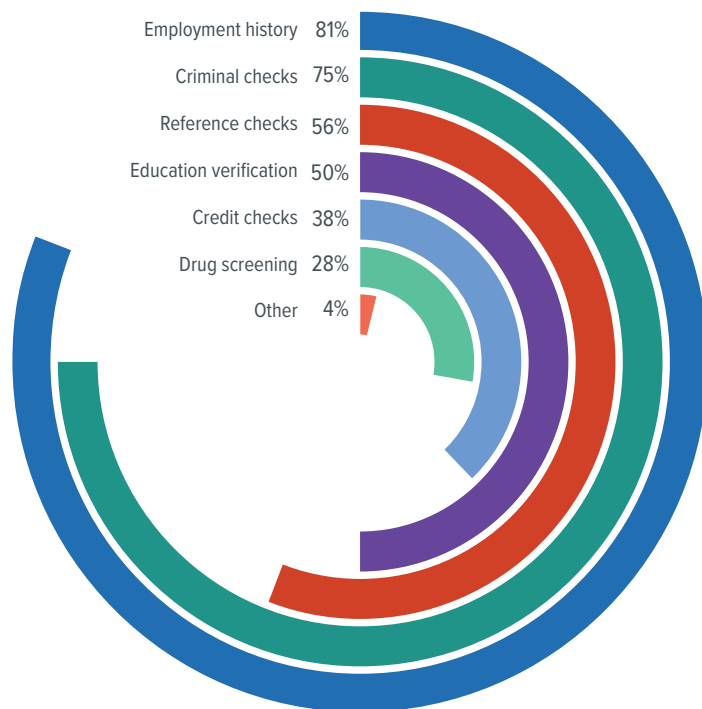


FIG. 26 What types of background checks were run on the perpetrator prior to hiring?





# PERPETRATORS

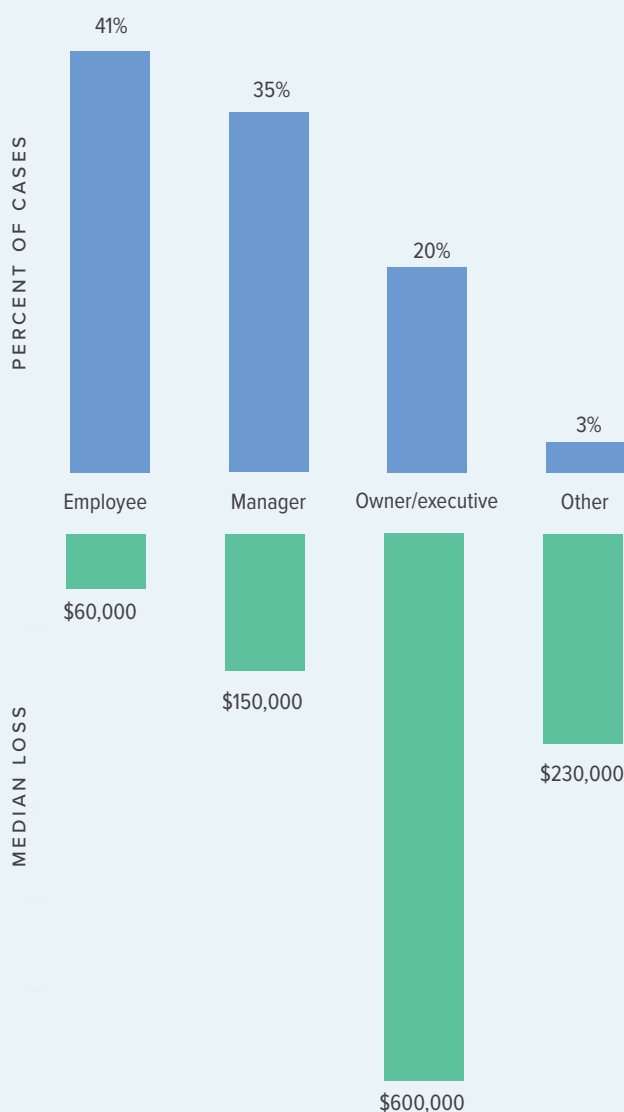
One of the key goals of our study is to identify the common characteristics and risk profiles of those who commit occupational fraud. Our survey included several questions focused on the fraud perpetrators' job details, basic demographics, prior misconduct, and behavioral warning signs. This information was compiled to help organizations better understand and identify the risks and red flags of fraud in their own workforces.



## Perpetrator's Position

The perpetrator's level of authority within an organization tends to strongly correlate with the size of a fraud. Owners/executives accounted for only 20% of the frauds in our study, but the median loss in those cases (USD 600,000) far exceeded the losses caused by managers and staff-level employees. This is consistent with our past studies, all of which found that losses tend to rise in tandem with a fraudster's level of authority. Owners/executives are generally in a better position to override controls than their lower-level counterparts, and they often have greater access to an organization's assets. Both of these facts might help explain why losses attributable to this group tend to be so much larger.

FIG. 27 How does the perpetrator's level of authority relate to occupational fraud?



As seen in Figure 28, the length of fraud schemes also tends to rise in correlation with the perpetrator's authority. The median duration of a fraud committed by an owner/executive was 24 months, compared to 18 months for schemes committed by managers and 12 months for those committed by staff-level employees.

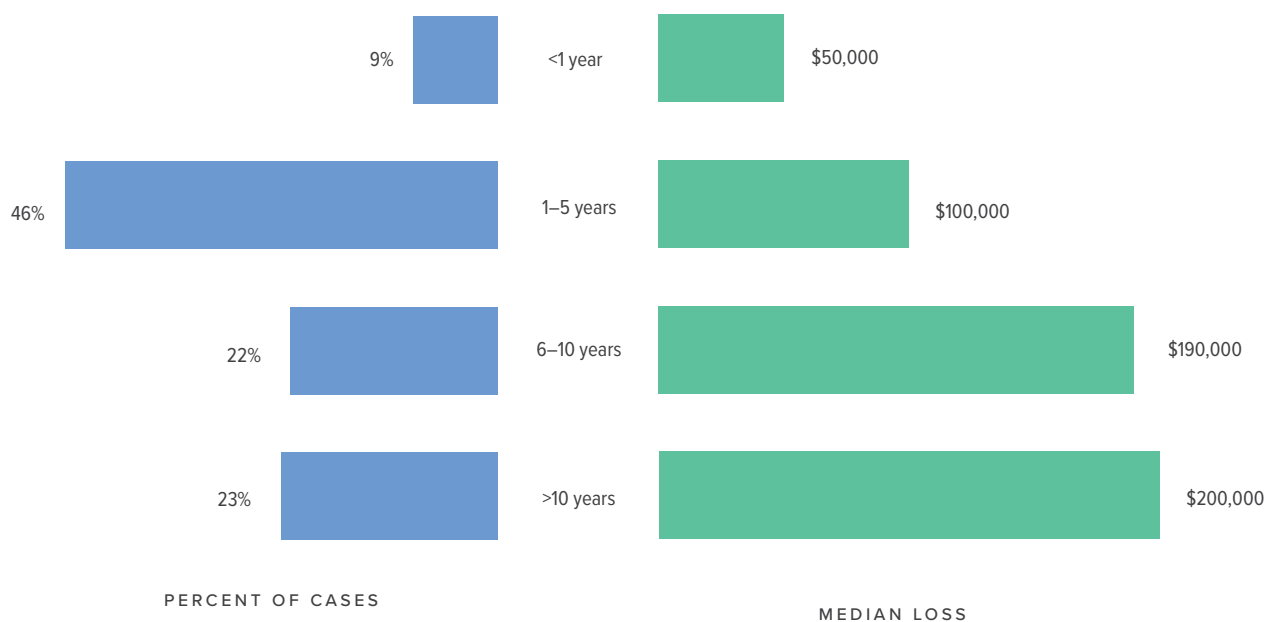
**FIG. 28 How does the perpetrator's level of authority relate to scheme duration?**



## Perpetrator's Tenure

The longer a fraud perpetrator works for a company, the more damage that person's scheme is likely to cause, as shown in Figure 29. Those who had been with the victim organization for at least ten years stole a median USD 200,000, which was four times greater than the median loss caused by employees with less than one year of tenure.

**FIG. 29 How does the perpetrator's tenure relate to occupational fraud?**

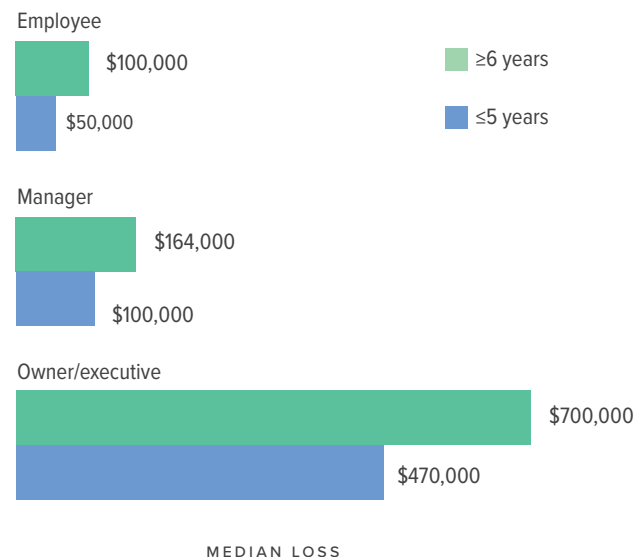




The impact of tenure on fraud losses remains evident even when we control for the fraudster's level of authority. In Figure 30 we divided all fraudsters into two groups: those who had been with their organizations five years or less and those who had been with their organization six years or longer. Next, we compared the median loss caused by these two groups at three levels of authority: owner/executive, manager, and employee. At every level, the longer-tenured fraudsters caused significantly larger losses.

What this tells us is that longer-tenured fraudsters do not steal more merely because they have been promoted over time to higher levels of authority. Instead, their added experience with their organizations seems to improve their skills or abilities related to committing fraud. This might be because they become better at identifying gaps or weaknesses in internal controls, because they become more trusted (and thus are subject to lower levels of review by peers and supervisors), or because they learn over time how others have successfully committed fraud. Regardless, this data indicates that the ability to defraud an organization seems to be something people improve at with experience.

**FIG. 30 How does the perpetrator's tenure relate to median loss at different levels of authority?**



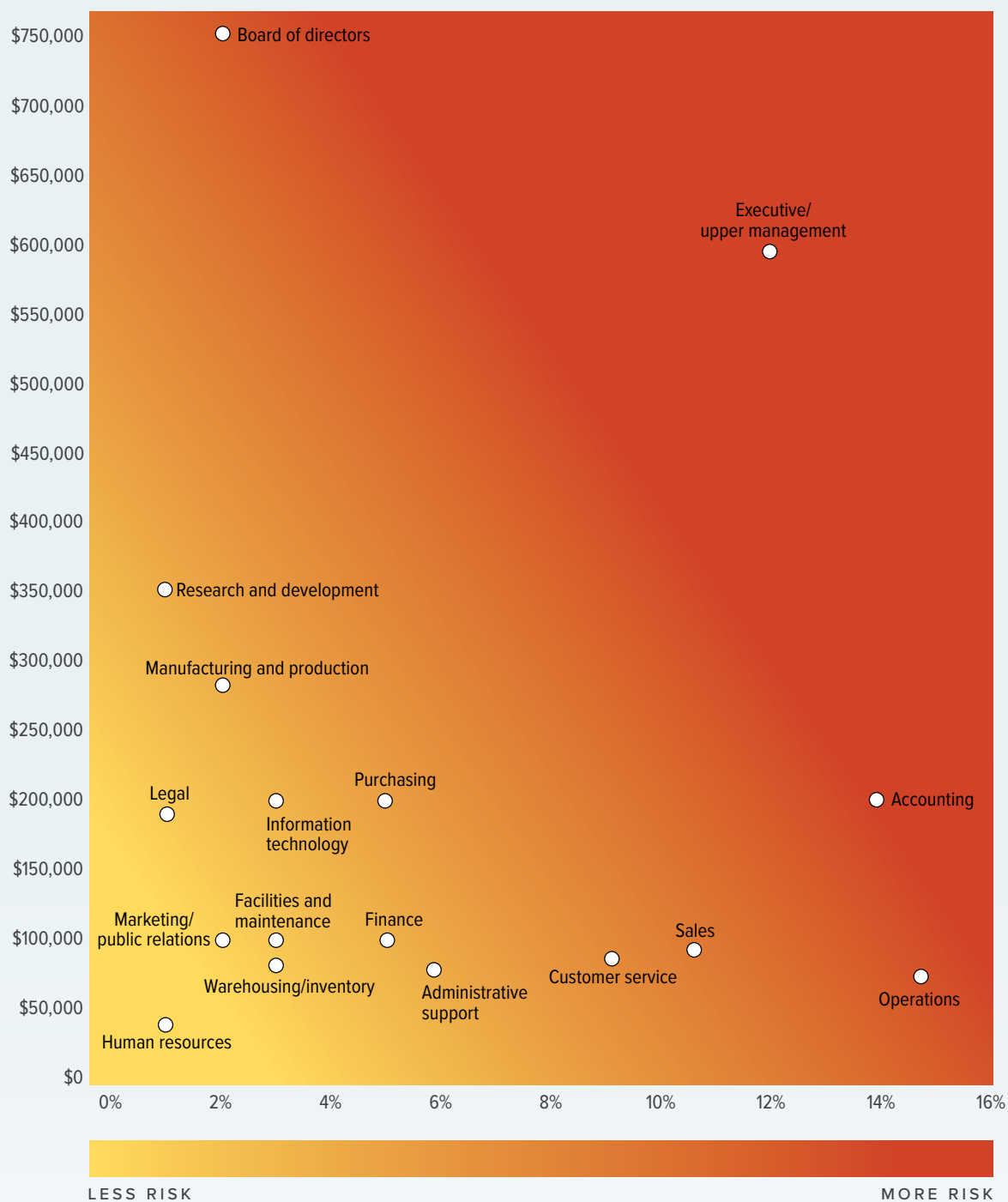
## Perpetrator's Department

Figure 31 is a heat map showing the frequency and median loss of fraud schemes based on the perpetrator's department. This illustrates the relative risks of occupational fraud in the different parts of a typical organization, which may help anti-fraud professionals effectively allocate anti-fraud controls and resources. For example, the executive/upper management team and the accounting department were both associated with high frequency and median loss, which indicates that fraud risks in these areas should be carefully addressed in any anti-fraud program.

Department*	Number of cases	Percent of cases	Median loss
Operations	288	15%	\$72,000
Accounting	277	14%	\$200,000
Executive/upper management	234	12%	\$596,000
Sales	225	11%	\$94,000
Customer service	175	9%	\$86,000
Administrative support	116	6%	\$76,000
Finance	101	5%	\$100,000
Purchasing	96	5%	\$200,000
Information technology	69	3%	\$200,000
Facilities and maintenance	60	3%	\$100,000
Warehousing/inventory	60	3%	\$85,000
Board of directors	45	2%	\$750,000
Marketing/public relations	40	2%	\$100,000
Manufacturing and production	35	2%	\$275,000
Human resources	27	1%	\$40,000
Research and development	14	1%	\$350,000
Legal	13	1%	\$195,000

\*Departments with fewer than 10 cases were omitted

FIG. 31 What departments pose the greatest risk for occupational fraud?



## Schemes Based on Perpetrator's Department

The eight departments shown in Figure 32 accounted for 76% of all occupational frauds in our study. The specific fraud schemes used by perpetrators in these departments are presented to help organizations assess risk and develop effective anti-fraud controls within these high-risk areas. Boxes are shaded from yellow to red, with darker boxes indicating higher-frequency schemes for each department.

FIG. 32 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	288	15%	5%	10%	5%	44%	12%	7%	15%	8%	3%	9%
Accounting	277	32%	14%	12%	27%	24%	18%	15%	11%	21%	5%	19%
Executive/upper management	234	26%	11%	12%	11%	62%	26%	30%	18%	12%	3%	10%
Sales	225	10%	6%	10%	5%	39%	14%	8%	21%	2%	4%	10%
Customer service	175	5%	8%	11%	8%	33%	6%	1%	9%	2%	2%	17%
Administrative support	116	31%	8%	18%	12%	29%	14%	8%	12%	9%	3%	12%
Finance	101	20%	10%	12%	9%	35%	14%	14%	12%	9%	3%	8%
Purchasing	96	22%	4%	4%	2%	81%	7%	7%	18%	2%	0%	4%



## Perpetrator's Gender

As shown in Figure 33, more than 70% of the perpetrators in our study were males. Men also caused a significantly larger median loss (USD 150,000) than women (USD 85,000). This is consistent with our past studies, all of which have found a significant gender disparity in fraud loss and frequency.

### Perpetrator's Gender Based on Region

There was a large variance in the gender distribution of occupational fraudsters based on geographic region. Figure 34 shows that in the United States and Canada, males accounted for only 59% of occupational fraud perpetrators, whereas in Southern Asia and the Middle East and North Africa, men committed more than 90% of occupational frauds.

FIG. 33 How does the perpetrator's gender relate to occupational fraud?

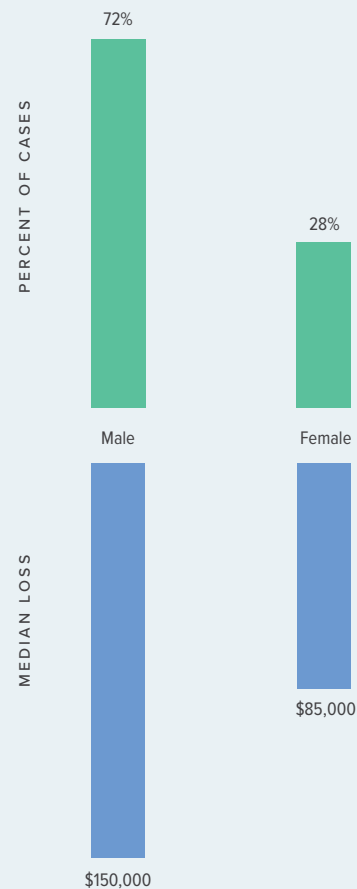
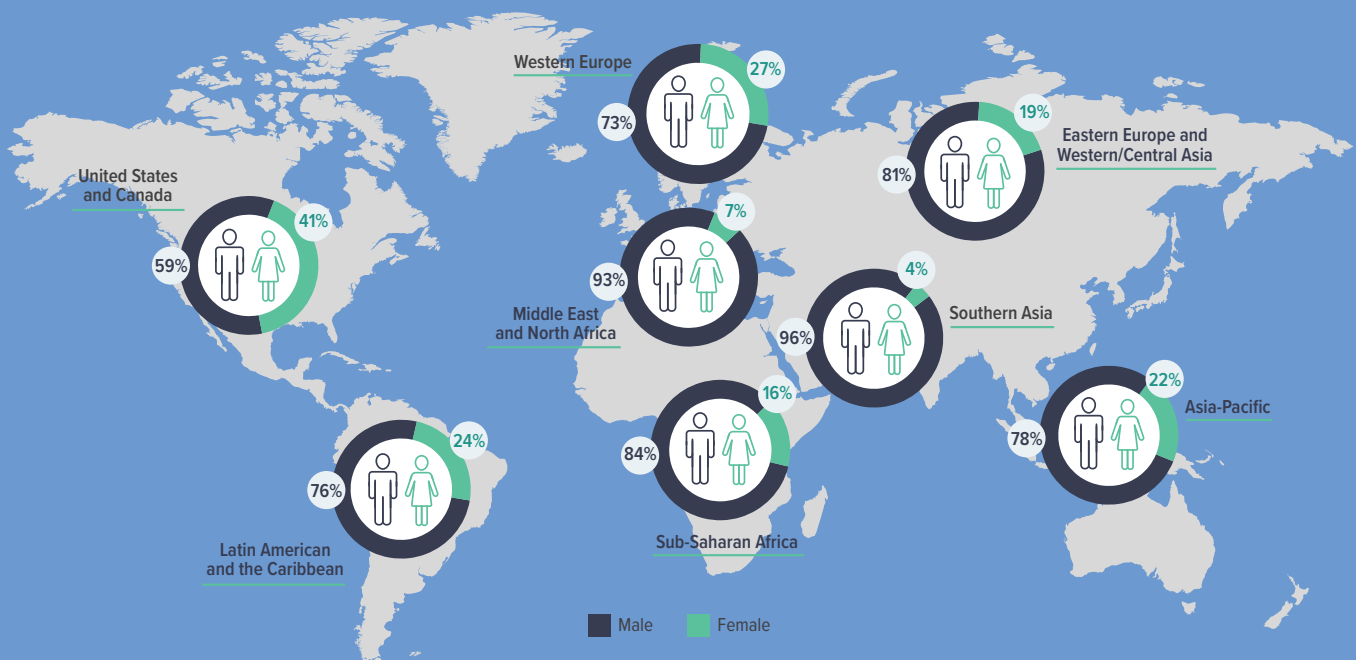


FIG. 34 How does the gender distribution of perpetrators vary by region?



### Position of Perpetrator Based on Gender

We examined gender distribution and median loss data based on the perpetrator's level of authority, as shown in Figure 35. At all levels of authority (employee, manager, and owner/executive), males committed a much larger percentage of frauds than women did. Male owners/executives and managers also accounted for much larger losses than their female counterparts. This was particularly true at the owner/executive level, where the median loss caused by men (USD 795,000) was more than four times larger than the median loss caused by women (USD 172,000). At the employee level, however, losses caused by males and females were equal.

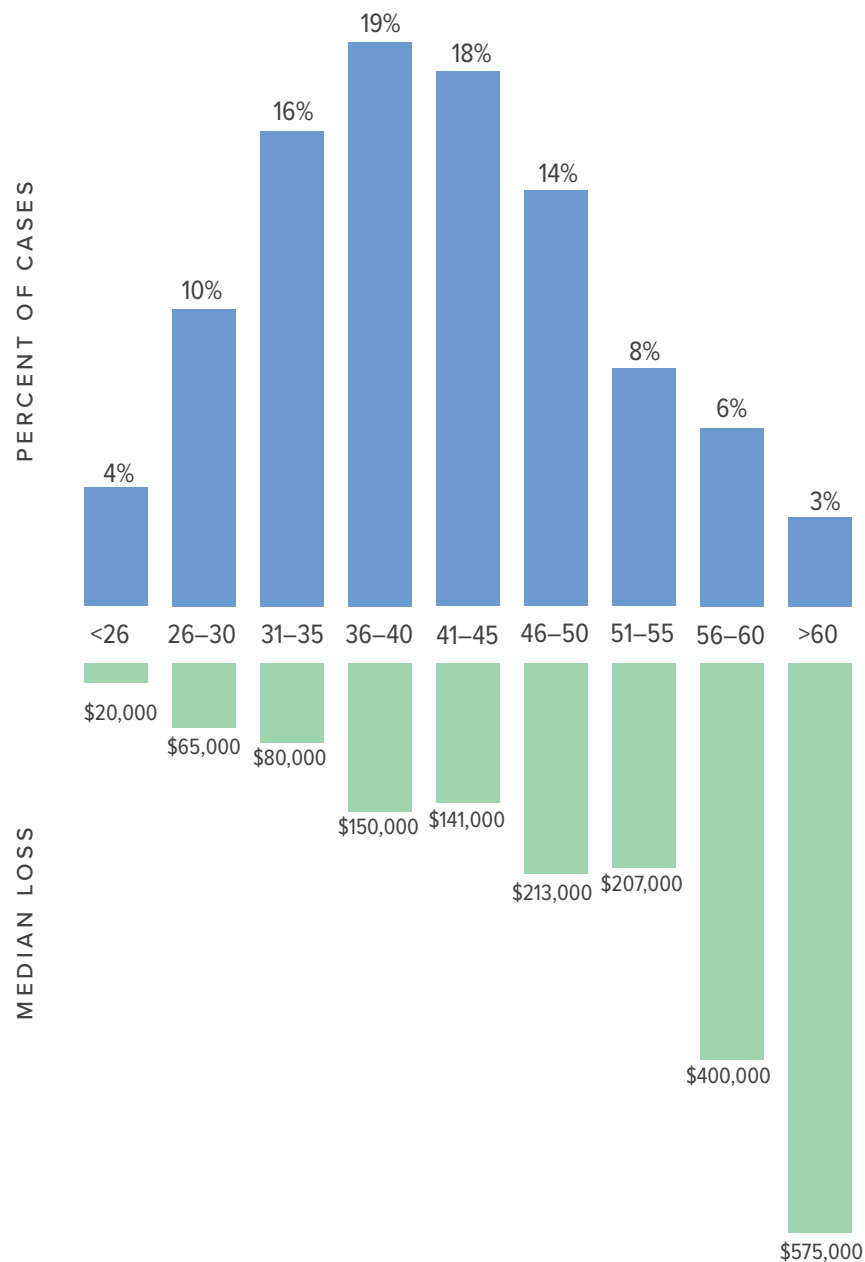
FIG. 35 How do gender distribution and median loss vary based on the perpetrator's level of authority?



## Perpetrator's Age

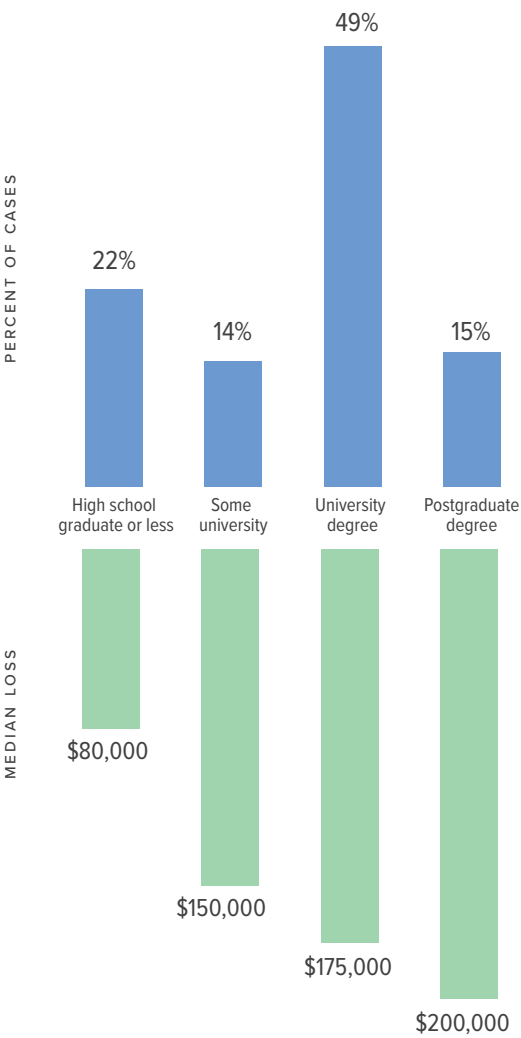
The age distribution of fraud perpetrators in our study was bell-shaped, with 53% of fraudsters between the ages of 31 and 45. Median losses, on the other hand, tended to rise along with the age of the perpetrator. Those in the 56 to 60 and 60+ age ranges together accounted for less than 10% of all cases, but they caused median losses of USD 400,000 and USD 575,000, respectively, which were by far the highest losses in any age range.

FIG. 36 How does the perpetrator's age relate to occupational fraud?



# Perpetrator's Education Level

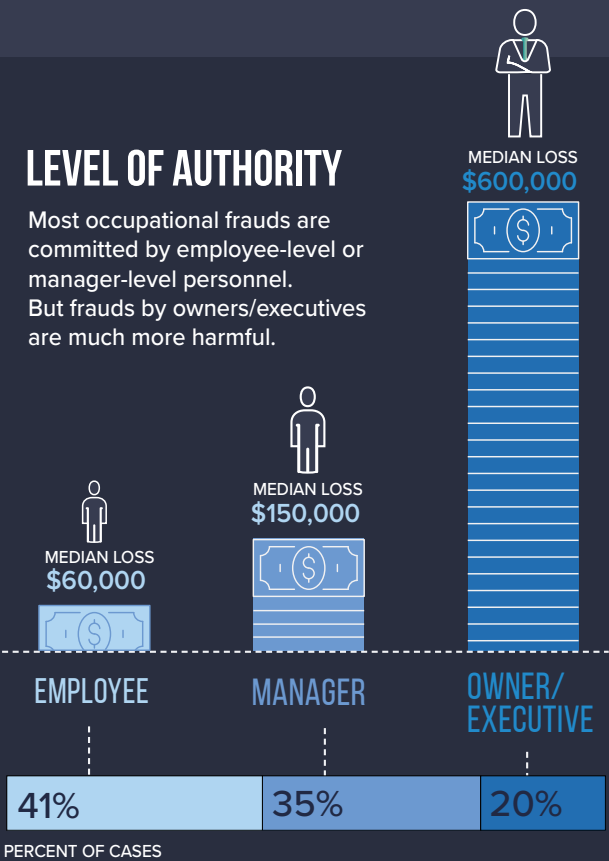
FIG. 37 How does the perpetrator's education level relate to occupational fraud?



We also found a correlation between the perpetrator's education level and median loss. Figure 37 shows that fraudsters with a high school degree or less caused a median loss of USD 80,000, while those with a postgraduate degree caused a median loss of USD 200,000. Generally, we would expect losses to correlate with education because those with higher levels of education tend to hold higher positions of authority and might also have greater technical capabilities for committing fraud.

## LEVEL OF AUTHORITY

Most occupational frauds are committed by employee-level or manager-level personnel. But frauds by owners/executives are much more harmful.



## HIGH-RISK DEPARTMENTS

More than three-fourths of all occupational frauds were committed by employees from these 8 business units:

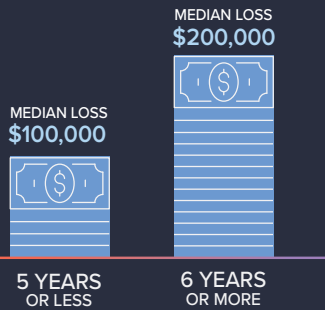
Operations	15%
Accounting	14%
Executive/upper management	12%
Sales	11%
Customer service	9%
Administrative support	6%
Finance	5%
Purchasing	5%

# Profile of a Fraudster

Our study includes perpetrator data from more than 2,000 fraud cases, which can help organizations assess fraud risk in their own workforces.

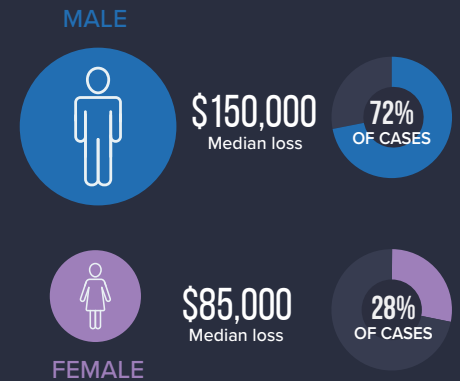
## TENURE

Occupational fraudsters who had been with their organizations at least 6 years caused **TWICE** the loss of less-tenured employees.



## GENDER

**Males** committed more frauds and caused higher losses.



## EDUCATION



**64%** of occupational fraudsters had a university degree or higher.

No university degree	\$100,000	MEDIAN LOSS
University degree or higher	\$195,000	MEDIAN LOSS

## AGE

**Older fraudsters** caused much larger median losses





## Collusion by Multiple Perpetrators

Figure 38 shows that 51% of frauds in our study were committed by two or more fraudsters working in collusion. Losses tended to increase with multiple perpetrators—particularly when three or more individuals conspired to commit fraud. One reason collusive frauds might be more costly is that multiple fraudsters working together might be better able to undermine the systems of separated duties and independent verification that are at the heart of many anti-fraud controls.

## Perpetrator's Criminal Background

Our past studies have shown that most occupational fraudsters have no prior criminal history before they commit their crimes, and our current data reinforces those findings. Only 4% of the perpetrators in this study had been previously convicted of a fraud-related offense. It should be noted that 41% of the occupational frauds in our study were never reported to law enforcement (see Response to Fraud infographic on page 55), which is also consistent with our past research. This indicates that the true number of repeat offenders is probably higher than what can be determined through criminal records.

FIG. 38 How does the number of perpetrators in a scheme relate to occupational fraud?

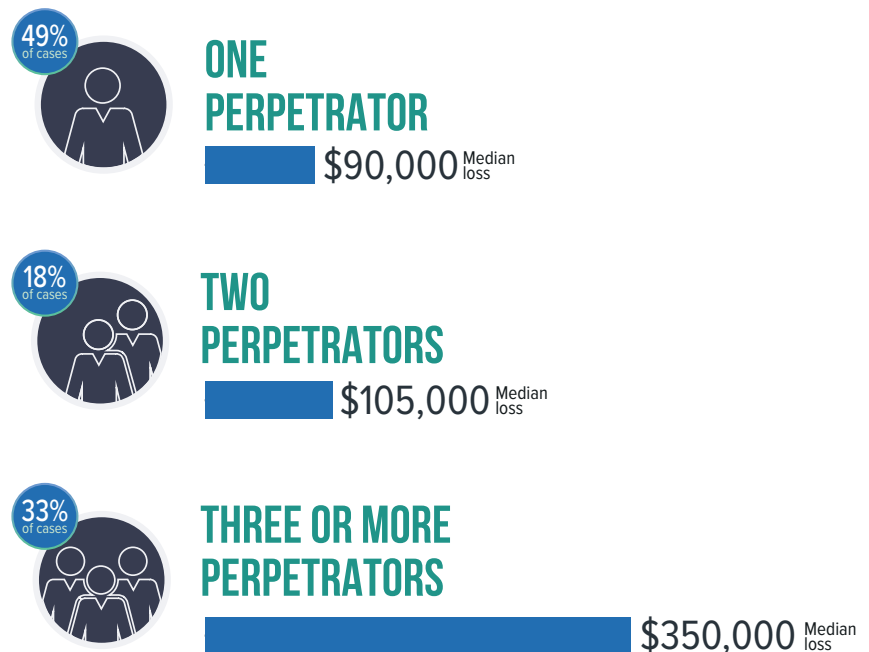
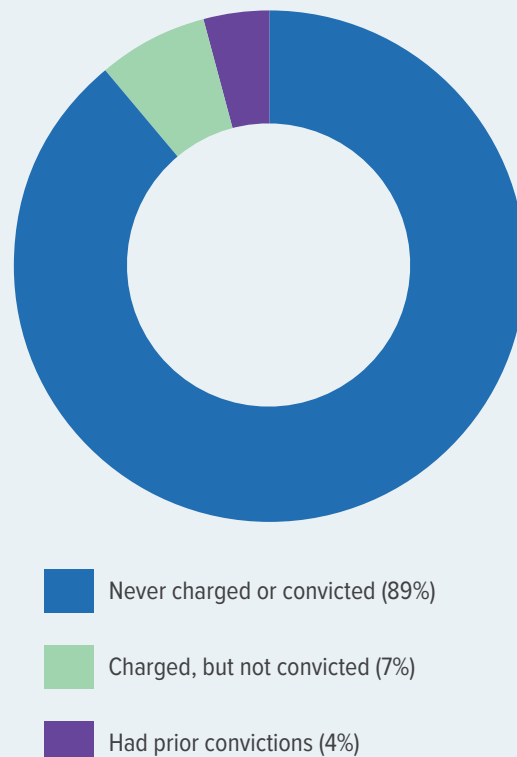


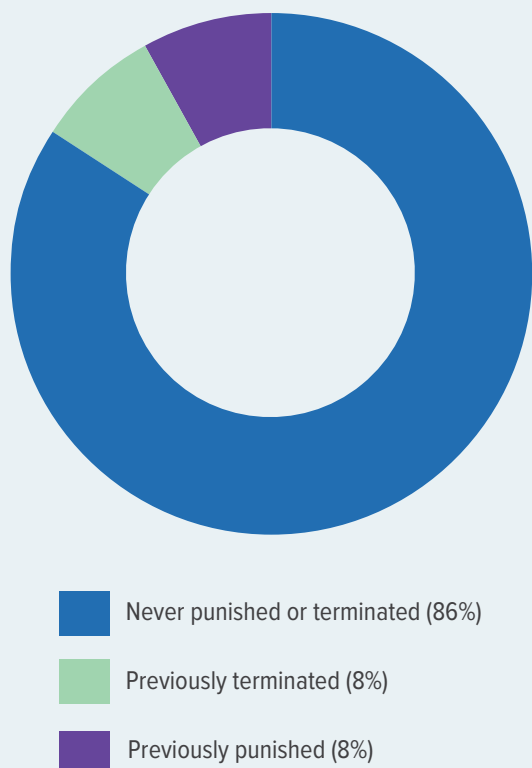
FIG. 39 Do perpetrators tend to have prior fraud convictions?



## Perpetrator's Employment History

Figure 40 shows that 86% of fraudsters had never been punished or terminated for fraud-related conduct prior to the crimes reported in this study. As with the criminal conviction data in Figure 39, this tends to indicate that most occupational fraudsters are first-time offenders. But also like the criminal conviction data, there is reason to believe that this data might understate the true number of repeat fraudsters. According to Figure 44 on page 54, 5% of fraudsters received no internal punishment, 10% were permitted to resign, and 11% signed private settlement agreements with the victim organizations. This suggests that a significant number of occupational fraudsters will have no record of employment-related discipline even after having been caught by their employers.

FIG. 40 Do perpetrators tend to have prior employment-related disciplinary actions for fraud?

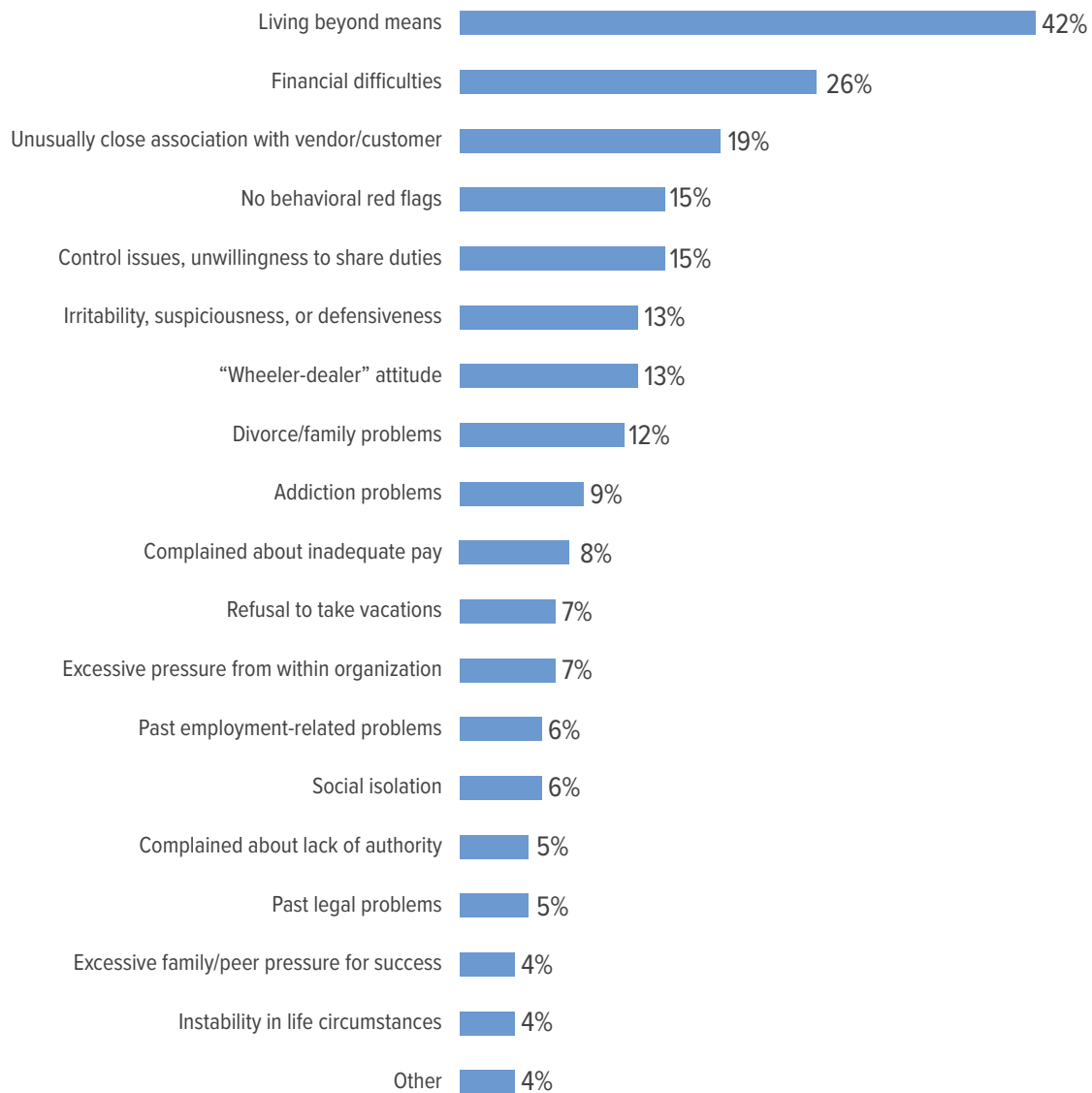


## Behavioral Red Flags Displayed by Perpetrators

The typical occupational fraud scheme lasts 14 months before it is detected; during this time, the perpetrator will often display certain behavioral traits that tend to be associated with fraudulent conduct. Figure 41 on pg. 50 shows the relative frequency of 17 common behavioral red flags. Significantly, all of these red flags had been identified by someone in the respective victim organizations before the frauds were detected.

At least one behavioral red flag was present in 85% of the cases in our study, and multiple red flags were present in 49% of cases. The seven 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) a general "wheeler-dealer" attitude involving shrewd or unscrupulous behavior; and (7) recent divorce or family problems. At least one of these seven red flags had been identified before the perpetrator was caught in 76% of all cases.

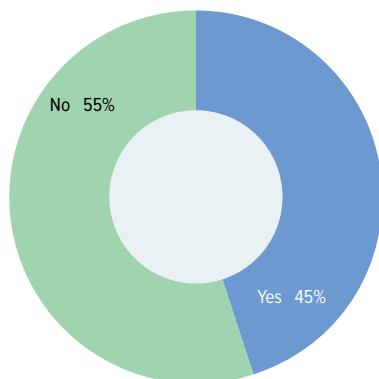
FIG. 41 How often do perpetrators exhibit behavioral red flags?



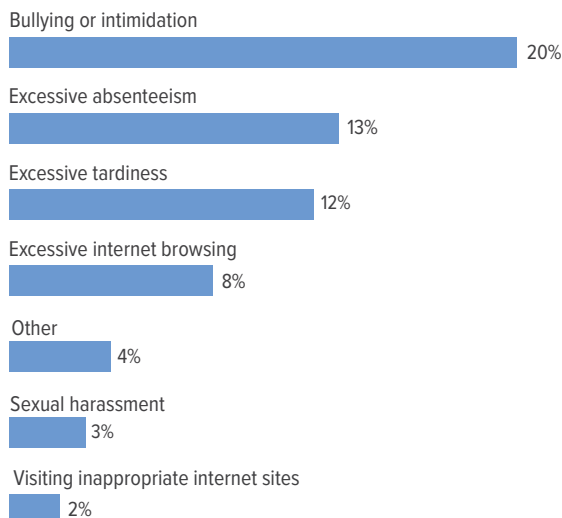
## Non-Fraud-Related Misconduct by Perpetrators

In order to determine if there is a correlation between fraud and other forms of workplace violations, we asked survey respondents whether the fraudster had been engaged in non-fraud-related misconduct prior to or during the time of the frauds. Figure 42 shows that 45% of occupational fraudsters had engaged in some type of non-fraud-related misconduct. The most common was bullying or intimidation (20% of cases), followed by excessive absenteeism (13%) and excessive tardiness (12%).

FIG. 42 Do fraud perpetrators also engage in non-fraud-related misconduct?



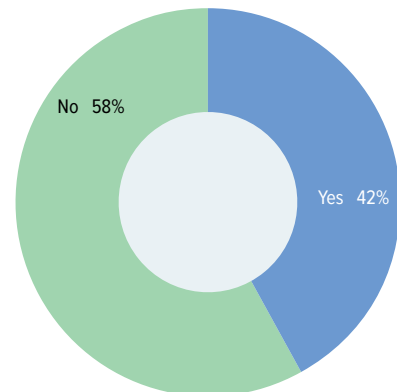
### Which forms of non-fraud misconduct are most common among fraud perpetrators?



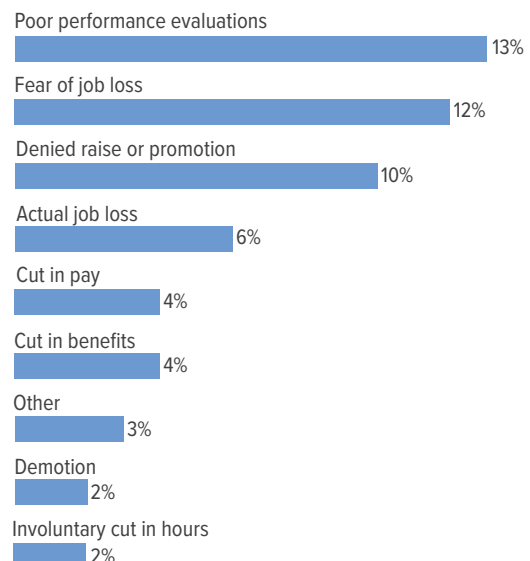
## Human Resources-Related Red Flags

In some circumstances, negative events surrounding a person's conditions of employment (such as poor performance evaluations, loss of pay or benefits, fear of job loss, etc.) can cause financial stress or resentment toward the employer, which might play a role in the decision to commit fraud. We refer to these events as *human resources-related red flags*. As Figure 43 shows, 42% of fraudsters had experienced some form of HR-related red flags prior to or during the time of their frauds. The most common of these were negative performance evaluations (13% of cases) and fear of job loss (12%).

FIG. 43 Do fraud perpetrators experience negative HR-related issues prior to or during their frauds?



### Which HR-related issues are most commonly experienced by fraud perpetrators?



# Behavioral Red Flags of Fraud

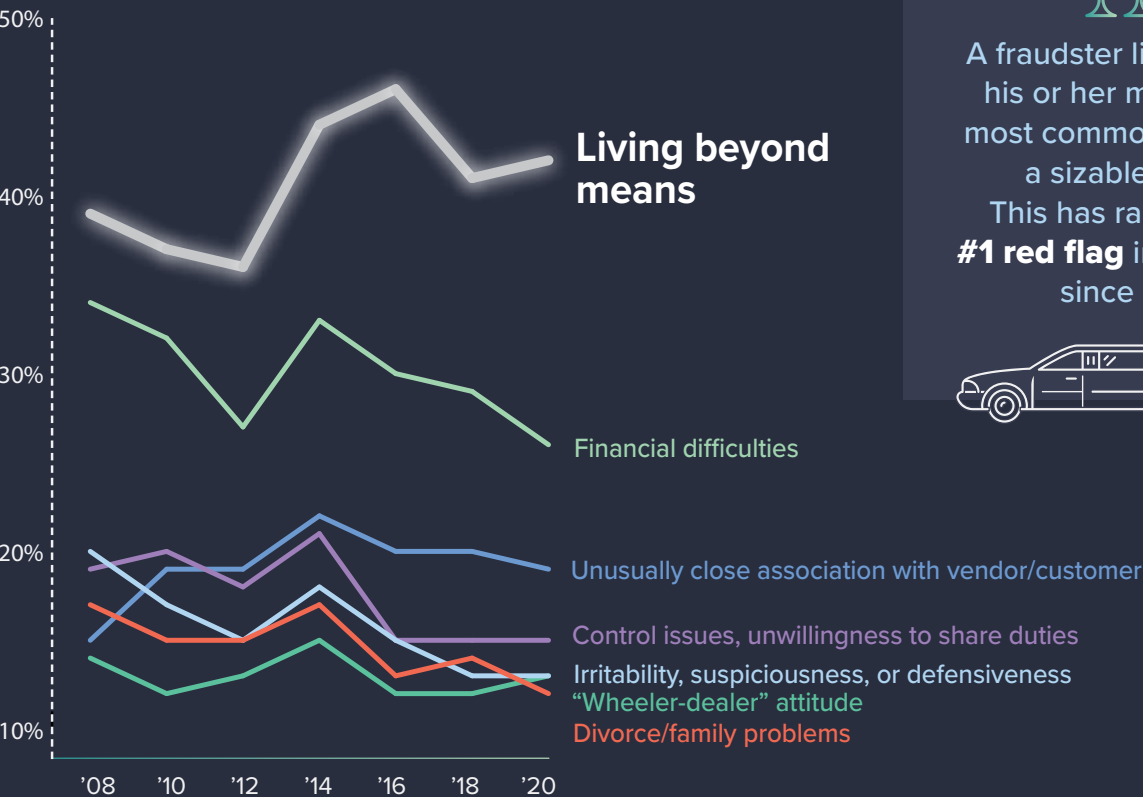
Recognizing the behavioral clues displayed by fraudsters can help organizations more effectively detect fraud and minimize their losses.

**85%** OF ALL FRAUDSTERS displayed at least one **BEHAVIORAL RED FLAG** while committing their crimes.

## 7 KEY WARNING SIGNS



## LIVING BEYOND MEANS



A fraudster living beyond his or her means is the most common red flag by a sizable margin. This has ranked as the **#1 red flag** in every study since 2008.



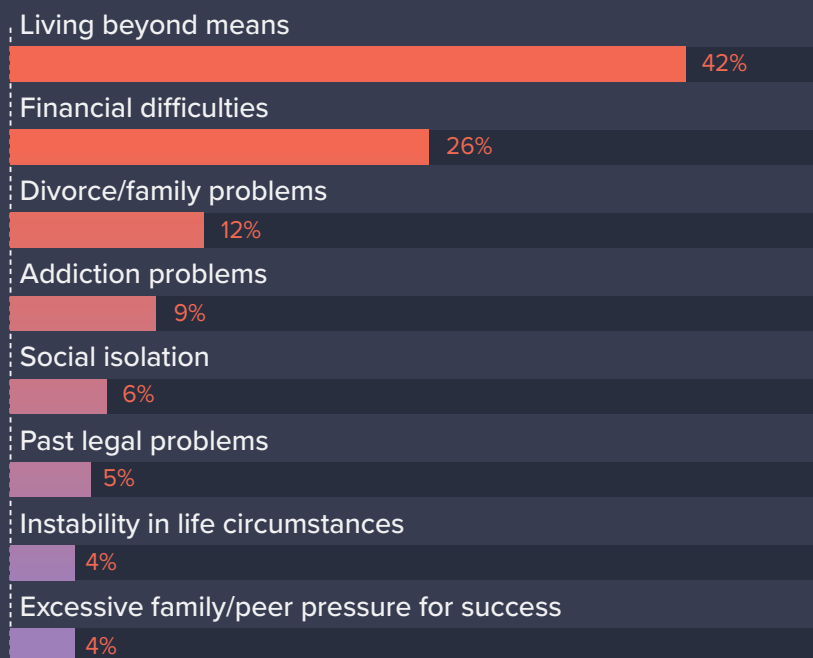


## CLASSIFYING RED FLAG BEHAVIORS

In **52%** of cases, the fraudster exhibited red flags connected to their **work duties**.



In **63%** of cases, the fraudster exhibited red flag behavior associated with his or her **personal life**.



## JOB PERFORMANCE AS A WARNING SIGN

A fraud perpetrator's job performance will often suffer while the scheme is taking place. Each of these performance-related issues were cited in at least 10% of cases.



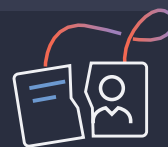
**13%**

**POOR PERFORMANCE EVALUATIONS**



**13%**

**EXCESSIVE ABSENTEEISM**



**12%**

**FEAR OF JOB LOSS**



**12%**

**EXCESSIVE TARDINESS**



**10%**

**DENIED RAISE OR PROMOTION**

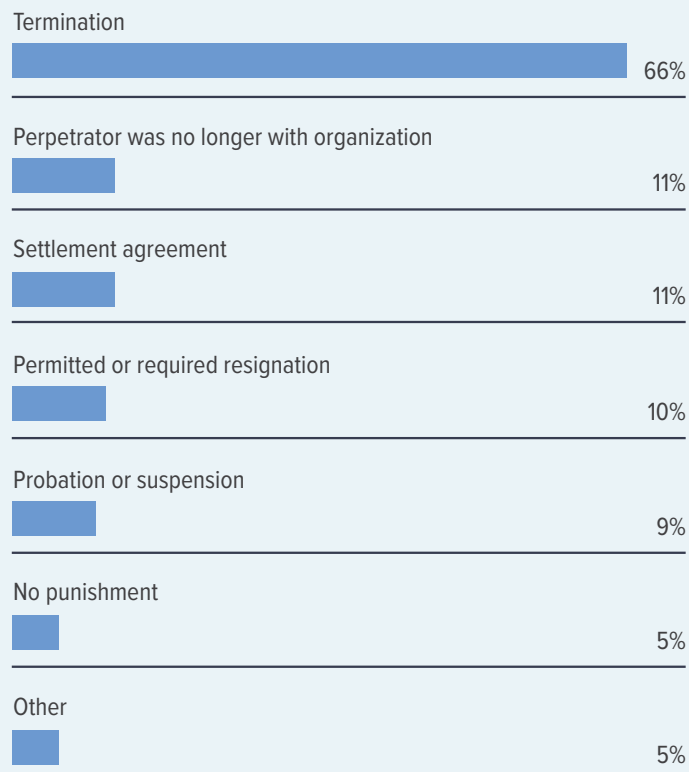
# CASE RESULTS

We asked respondents to identify what consequences fraud perpetrators faced after they had been caught, whether internal, through prosecution, or through civil litigation. This information can be used by organizations to identify the most common results that other victim organizations have experienced. It also can help inform victims about the likelihood of success in pursuing justice or recovery of stolen assets.

## Internal Action Taken Against Perpetrator

Once an internal fraud is substantiated, the victim organization must decide what to do with the perpetrator. Termination was by far the most common response to fraud, but one-third of cases ended with a different internal result. Many cases resulted in relatively light punishments, where the perpetrator had already left the organization (11%), resigned (10%), or received no punishment at all (5%).

FIG. 44 How do victim organizations punish fraud perpetrators?



# Response to Fraud

Organizations can respond to fraud internally, through civil litigation, and by referring the case to law enforcement. These are the results of such efforts.

## INTERNAL PUNISHMENT

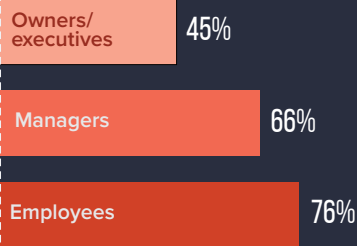
80% OF PERPETRATORS



RECEIVED SOME PUNISHMENT

Owners/executives are less likely to receive punishment

### TERMINATION for FRAUD



### Received NO PUNISHMENT

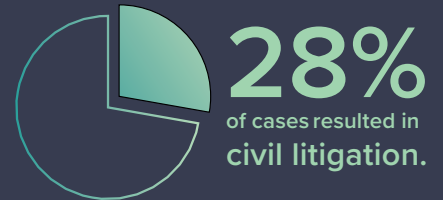


## CIVIL LITIGATION

MEDIAN LOSS  
resulting in  
CIVIL LITIGATION



\$400,000



Of these cases:

41% resulted in judgment for the victim

36% settled

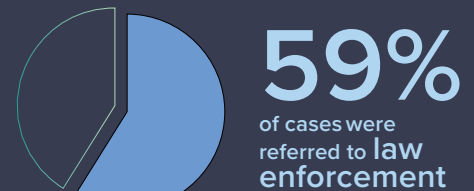
21% resulted in judgment for the perpetrator

## CRIMINAL PROSECUTION

MEDIAN LOSS  
in cases  
referred to  
LAW ENFORCEMENT



\$200,000



Of these cases:

56% pleaded guilty/no contest

23% were convicted at trial

12% were declined prosecution

2% were acquitted



## Reasons for Not Referring Cases to Law Enforcement

As seen on the Response to Fraud infographic on page 55, many victims never report their cases to law enforcement. We asked respondents in those cases to tell us why. Figure 45 shows a timeline comparison of victims' reasons for non-referral; this year's report is the first time that fear of bad publicity was not the primary reason. Instead, 46% of victims determined that their internal discipline was sufficient. Coupled with the findings that private settlements and civil suits have also risen, it appears there may be a general trend of organizations seeking to resolve fraud cases internally or privately rather than through the criminal justice system.

FIG. 45 Why do organizations decline to refer cases to law enforcement?



## Recovering Fraud Losses

For many victim organizations, recovering losses is the key concern once fraud has been detected. However, most organizations (54%) in our study did not recover any of their losses. We also analyzed whether there were regional differences in victim organizations' success in recovering some or all fraud losses, and our findings suggest that recovering lost assets might be more challenging in some regions than others. As shown in Figure 46, Eastern Europe and Western/Central Asia was the most difficult region for recovering fraud losses, with 61% of organizations recovering nothing, followed closely by Latin America and the Caribbean (60%). Western Europe and Southern Asia were the only regions where more than half of victims made at least some recovery of fraud losses.



FIG. 46 How does the recovery of fraud losses vary by region?

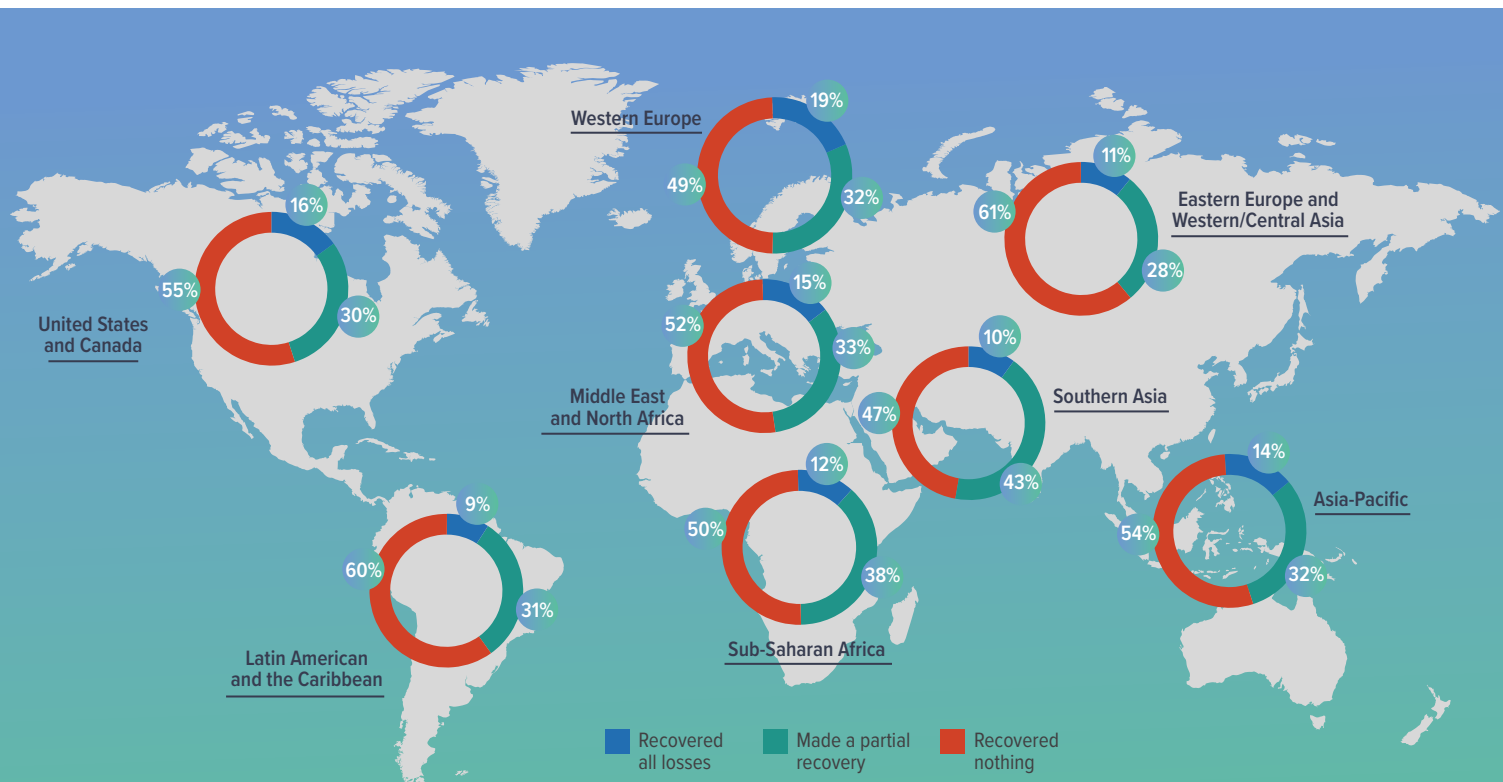
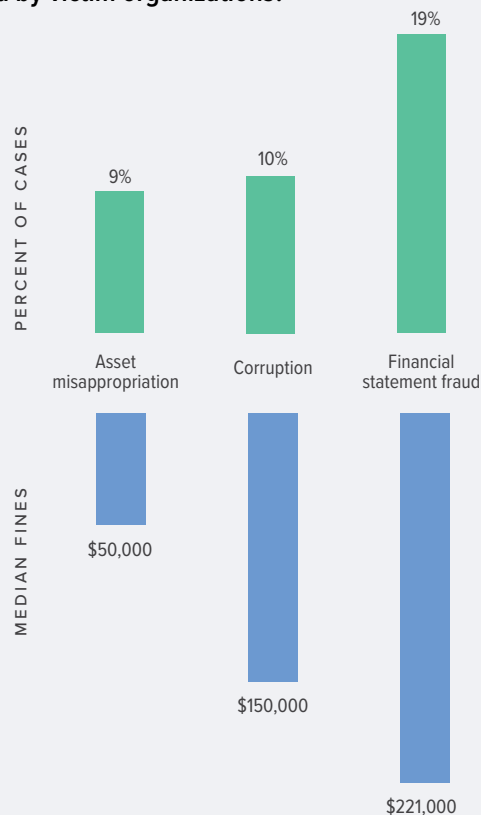


FIG. 47 How does the type of scheme relate to fines incurred by victim organizations?



Fines Against Victim Organizations

Beyond losses directly caused by occupational fraud, some victims also receive fines from authorities resulting from the fraud, such as when the victim failed to take sufficient steps to prevent bribery or violated financial reporting requirements. Our data indicates that financial statement fraud schemes are the most likely to result in a fine against the victim organization (19% of cases); these cases also result in the largest median fine (USD 221,000). While fines resulting from corruption and asset misappropriation schemes occurred at a similar rate (10% and 9%, respectively), the median fine in corruption cases was three times higher (USD 150,000).

The background of the page features a dark blue gradient. In the upper right corner, there are two stylized white clouds. On the left and right sides, there are faint, light blue bar charts with white outlines. The main title 'METHODOLOGY' is centered in the upper half of the page.

# METHODOLOGY

The 2020 *Report to the Nations* is based on the results of the 2019 *Global Fraud Survey*, an online survey opened to 51,608 Certified Fraud Examiners (CFEs) from July 2019 to September 2019. 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 2018. Additionally, after completing the survey the first time, respondents were provided the option to submit information about a second case.

Respondents were then presented with 77 questions regarding the particular 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 7,516 total responses to the survey, 2,504 of which were usable for purposes of this report. The data contained herein is based solely on the information provided in these 2,504 survey responses.

## Cases submitted were required to meet the following four criteria:

1. **The case** must have involved occupational fraud (defined as fraud committed by a person against the organization for which they work).
2. **The investigation** must have occurred between January 2018 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

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—picture of the typical impact of occupational fraud schemes. The statistical appendix to this report (see pages 78-81) provides a more holistic view of the losses in our study, reflecting quartiles and average loss amounts for numerous categories explored throughout the report.

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., 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). 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 under-statement) involved in the scheme. All losses reported for financial statement frauds throughout this report are based on those reported amounts.

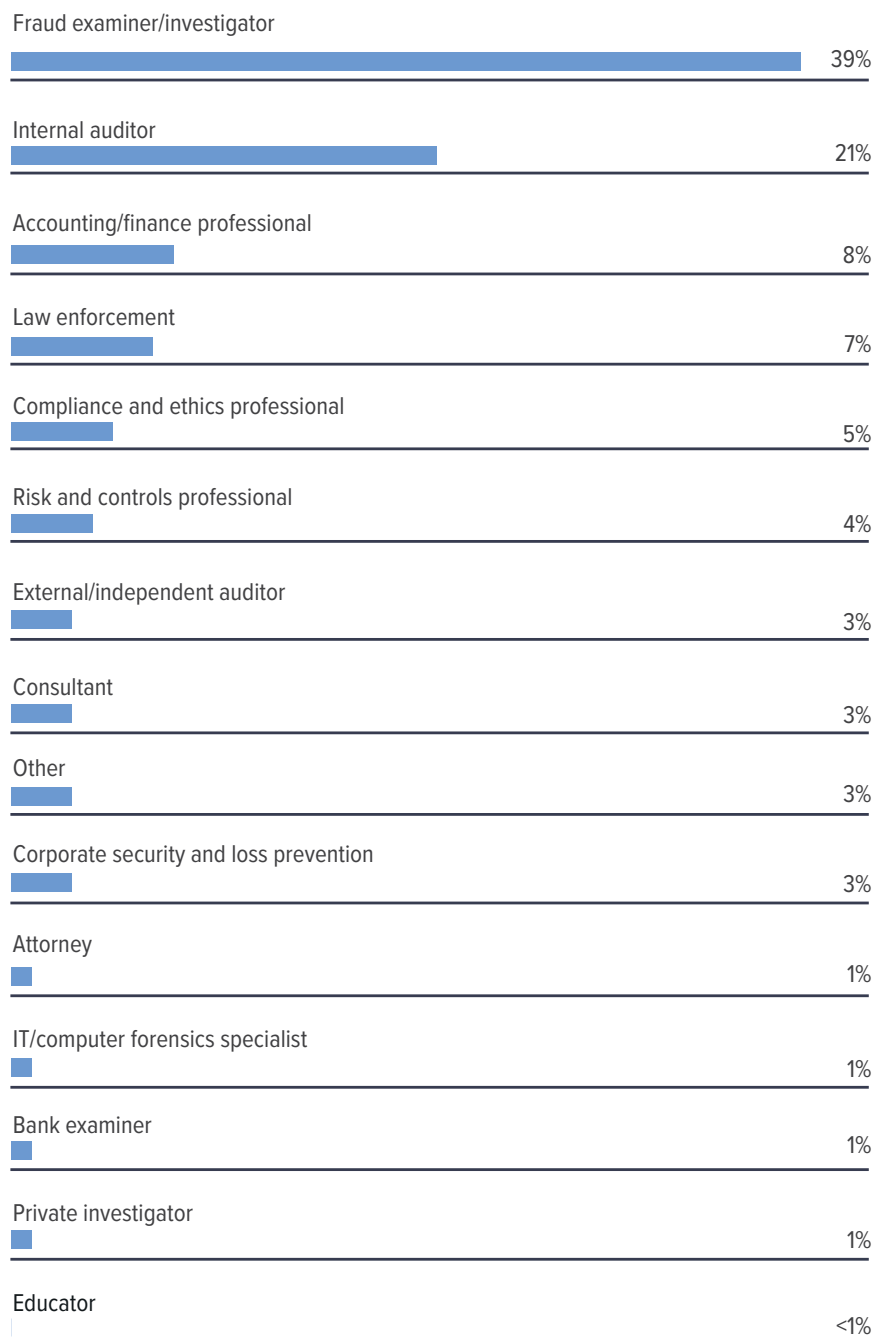
## Survey Participants

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

As noted in Figure 48, 39% of survey respondents indicated that their primary occupation is as a fraud examiner/investigator, followed by 21% who indicated they are internal auditors.

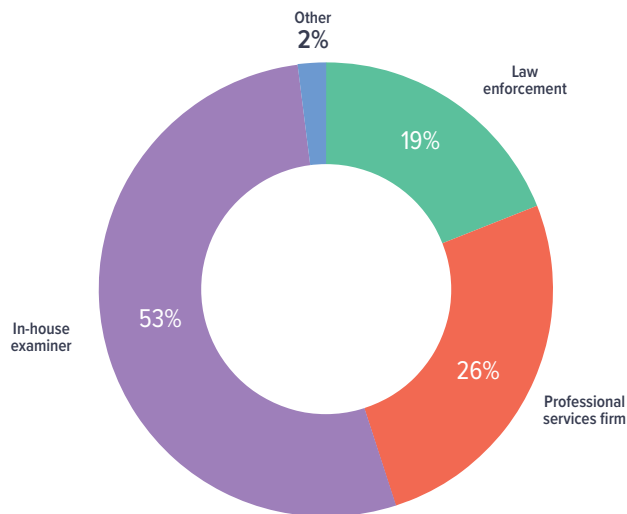
FIG. 48 What was the primary occupation of survey participants?



### Nature of Fraud Examination Role

More than half of the survey respondents work in-house and conduct fraud-related engagements on behalf of a single company or agency. In contrast, 26% work for a professional services firm that conducts fraud-related engagements on behalf of client organizations, and 19% work in law enforcement and conduct fraud investigations of other parties under their agency's authority.

FIG. 49 What was the professional role of the survey participants?



### Professional Experience

The CFEs who participated in our survey had a median 11 years of fraud examination experience, with 30% having more than 15 years of experience (see Figure 50). Additionally, as Figure 51 shows, one-quarter of survey participants have investigated more than 20 cases of fraud during the last two years, while 42% investigated five or fewer cases during that period.

FIG. 50 How much fraud examination experience did survey participants have?

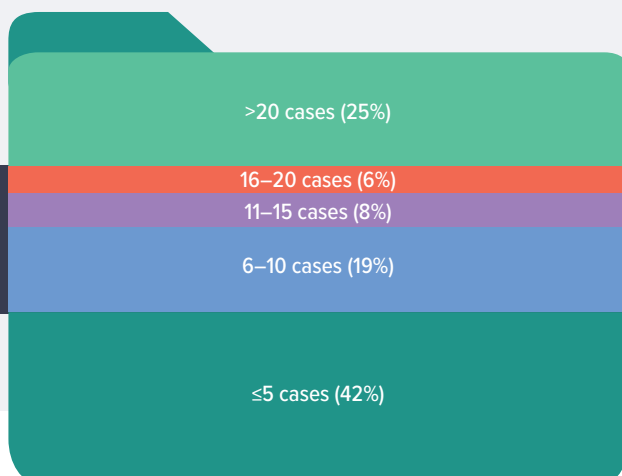
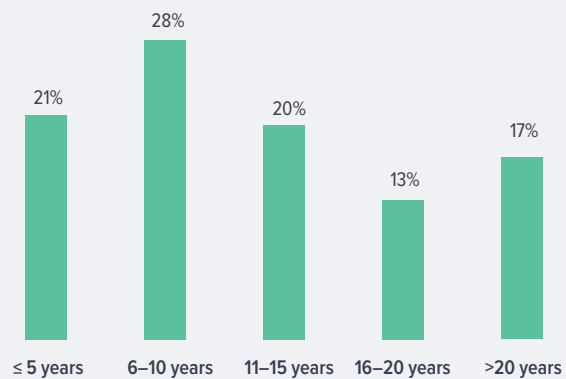


FIG. 51 How many fraud cases have survey participants investigated in the past two years?

## REGIONAL FOCUS

# ASIA-PACIFIC



FIG. 52 What are the most common occupational fraud schemes in the Asia-Pacific region?

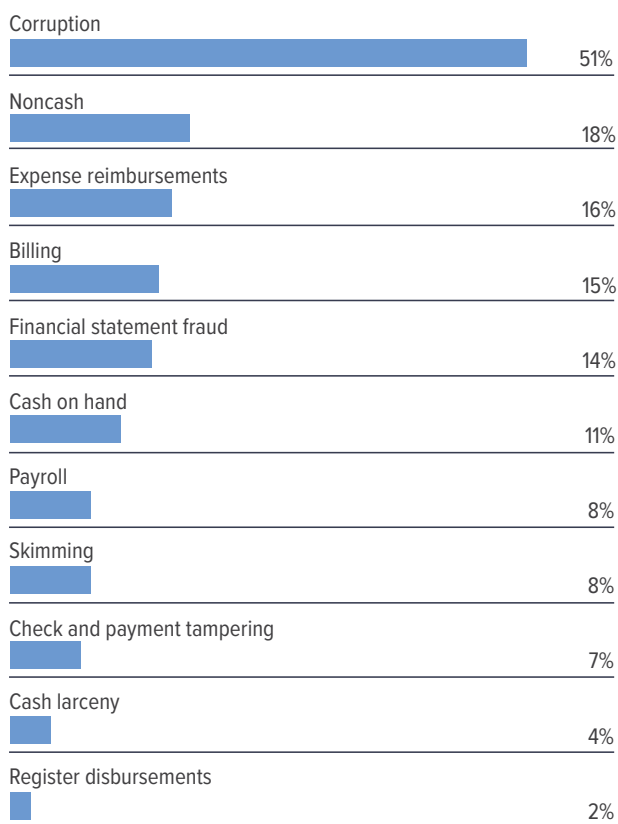


FIG. 53 How is occupational fraud initially detected in the Asia-Pacific region?

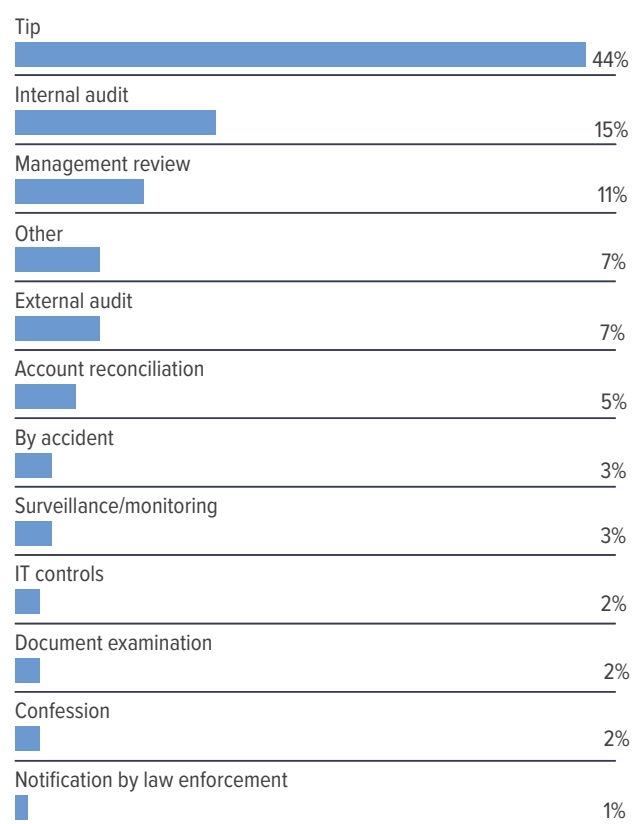


FIG. 54 What anti-fraud controls are the most common in the Asia-Pacific region?

Control	Percent of cases
External audit of financial statements	93%
Code of conduct	88%
Internal audit department	84%
Management certification of financial statements	80%
Management review	78%
External audit of internal controls over financial reporting	75%
Hotline	72%
Independent audit committee	71%
Fraud training for employees	64%
Fraud training for managers/executives	62%
Anti-fraud policy	59%
Employee support programs	50%
Dedicated fraud department, function, or team	50%
Formal fraud risk assessments	45%
Proactive data monitoring/analysis	43%
Surprise audits	36%
Job rotation/mandatory vacation	32%
Rewards for whistleblowers	15%

FIG. 55 How does the perpetrator’s level of authority relate to occupational fraud in the Asia-Pacific region?

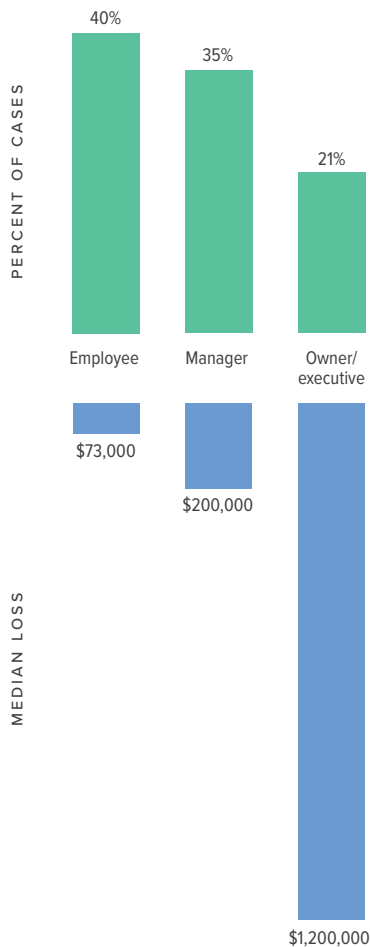
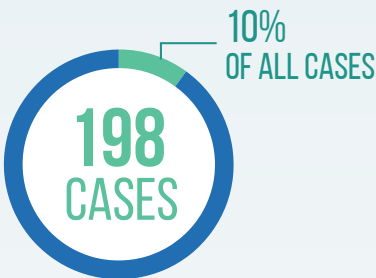


FIG. 56 Cases by country in the Asia-Pacific region

Country	Number of cases
Australia	29
China	33
Hong Kong	11
Indonesia	36
Japan	8
Laos	1
Macau	1
Malaysia	19
Myanmar (Burma)	1
New Zealand	3
Philippines	24
Singapore	17
South Korea	5
Taiwan	2
Thailand	6
Vietnam	2
<b>Total cases:</b>	<b>198</b>

MEDIAN LOSS:  
USD 195,000





## REGIONAL FOCUS

# EASTERN EUROPE AND WESTERN/ CENTRAL ASIA



FIG. 57 What are the most common occupational fraud schemes in Eastern Europe and Western/Central Asia?

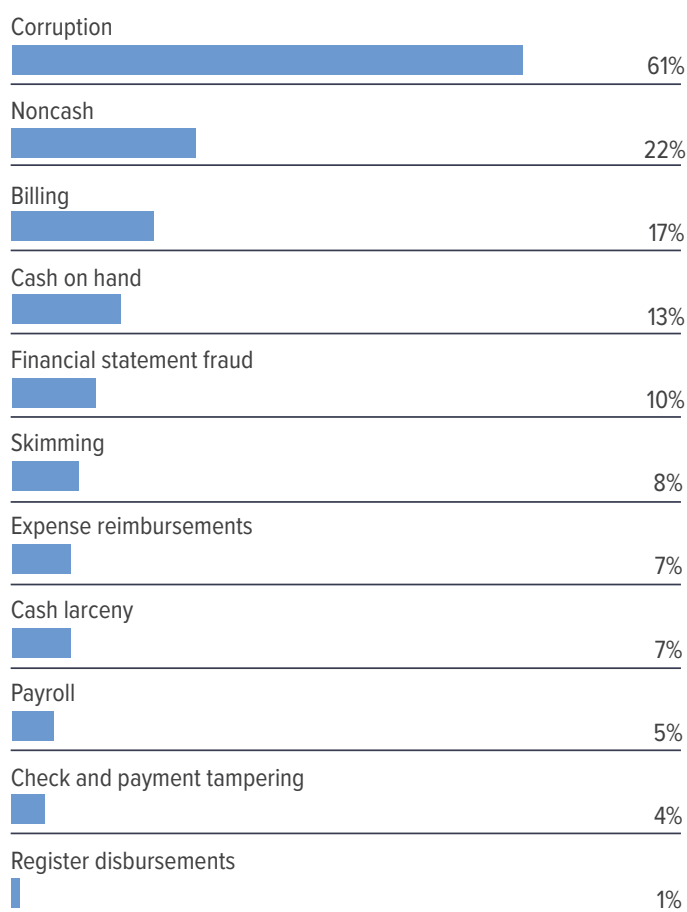


FIG. 58 How is occupational fraud initially detected in Eastern Europe and Western/Central Asia?

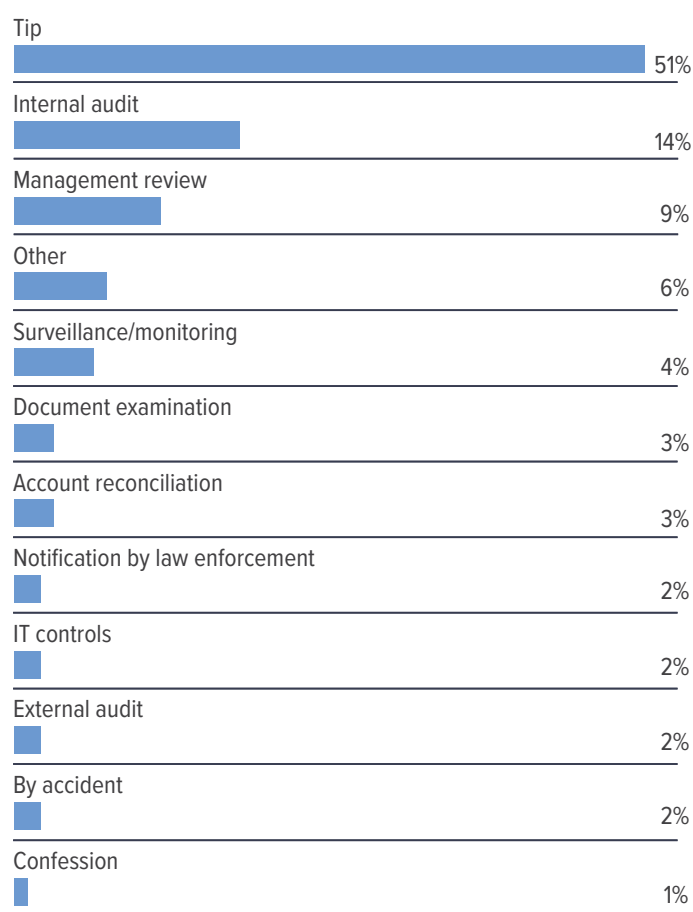


FIG. 59 What anti-fraud controls are the most common in Eastern Europe and Western/Central Asia?

Control	Percent of cases
External audit of financial statements	89%
Code of conduct	87%
Management review	84%
Internal audit department	80%
Management certification of financial statements	78%
Hotline	76%
Anti-fraud policy	73%
Independent audit committee	72%
External audit of internal controls over financial reporting	71%
Fraud training for employees	67%
Fraud training for managers/executives	66%
Dedicated fraud department, function, or team	58%
Formal fraud risk assessments	51%
Surprise audits	45%
Proactive data monitoring/analysis	42%
Employee support programs	29%
Job rotation/mandatory vacation	29%
Rewards for whistleblowers	9%

FIG. 60 How does the perpetrator's level of authority relate to occupational fraud in Eastern Europe and Western/Central Asia?

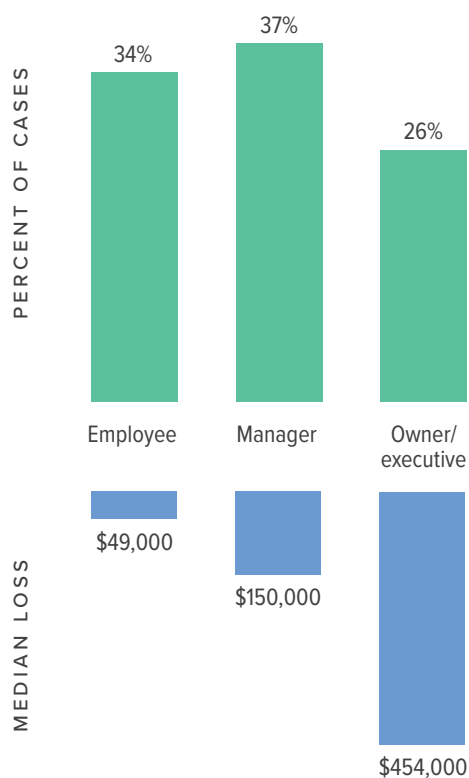
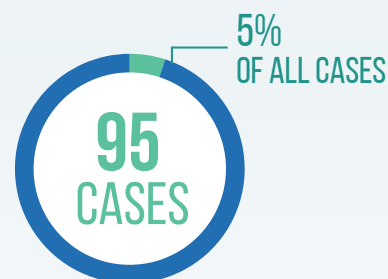


FIG. 61 Cases by country in Eastern Europe and Western/Central Asia

Country	Number of cases
Albania	1
Azerbaijan	1
Bosnia and Herzegovina	1
Bulgaria	2
Czech Republic	5
Estonia	1
Georgia	1
Hungary	5
Kazakhstan	4
Kosovo	2
Lithuania	1
Moldova	1
North Macedonia	2
Poland	6
Romania	9
Russia	13
Serbia	14
Slovakia	3
Slovenia	4
Tajikistan	1
Turkey	13
Ukraine	4
Uzbekistan	1
<b>Total cases:</b>	<b>95</b>

MEDIAN LOSS:  
**USD 133,000**



## REGIONAL FOCUS

# LATIN AMERICA AND THE CARIBBEAN



FIG. 62 What are the most common occupational fraud schemes in Latin America and the Caribbean?



FIG. 63 How is occupational fraud initially detected in Latin America and the Caribbean?

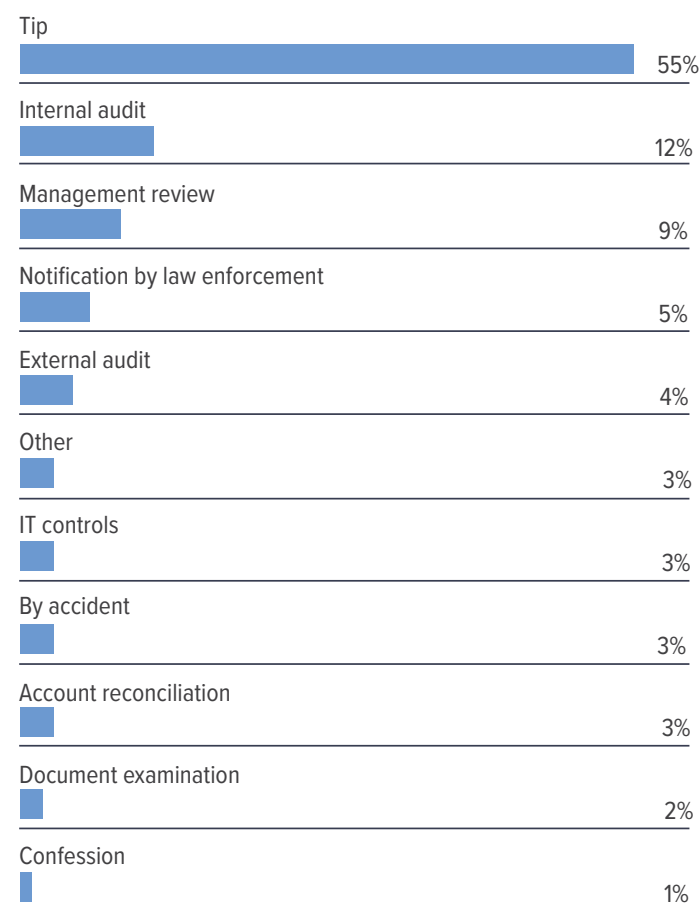


FIG. 64 What anti-fraud controls are the most common in Latin America and the Caribbean?

Control	Percent of cases
External audit of financial statements	88%
Code of conduct	88%
Internal audit department	81%
Management certification of financial statements	72%
Hotline	72%
External audit of internal controls over financial reporting	71%
Independent audit committee	67%
Management review	65%
Fraud training for employees	58%
Anti-fraud policy	56%
Fraud training for managers/executives	54%
Dedicated fraud department, function, or team	46%
Employee support programs	45%
Formal fraud risk assessments	44%
Surprise audits	40%
Proactive data monitoring/analysis	26%
Job rotation/mandatory vacation	16%
Rewards for whistleblowers	9%

FIG. 65 How does the perpetrator's level of authority relate to occupational fraud in Latin America and the Caribbean?

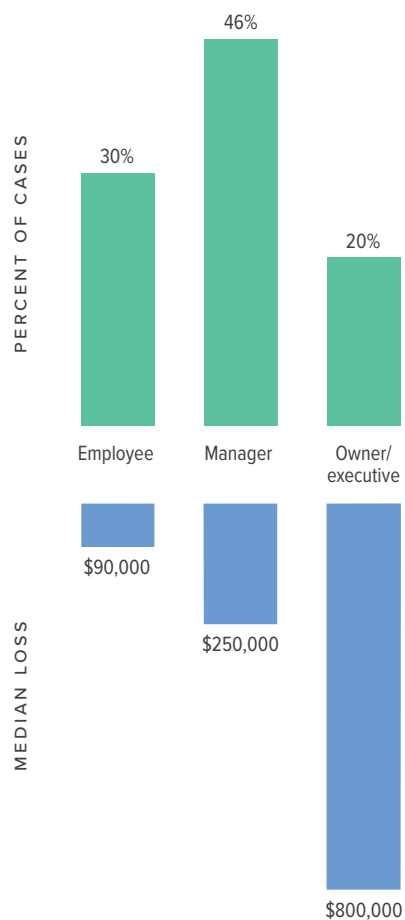


FIG. 66 Cases by country in Latin America and the Caribbean

Country	Number of cases
Argentina	10
Bahamas	5
Barbados	1
Brazil	22
Chile	2
Colombia	10
Costa Rica	4
Curaçao	1
Dominican Republic	1
Ecuador	1
Grenada	2
Haiti	1
Jamaica	3
Mexico	23
Peru	6
Saint Vincent and the Grenadines	1
Suriname	1
Trinidad and Tobago	5
Venezuela	2
<b>Total cases:</b>	<b>101</b>

MEDIAN LOSS:  
**USD 200,000**



## REGIONAL FOCUS

# MIDDLE EAST AND NORTH AFRICA



FIG. 67 What are the most common occupational fraud schemes in the Middle East and North Africa?

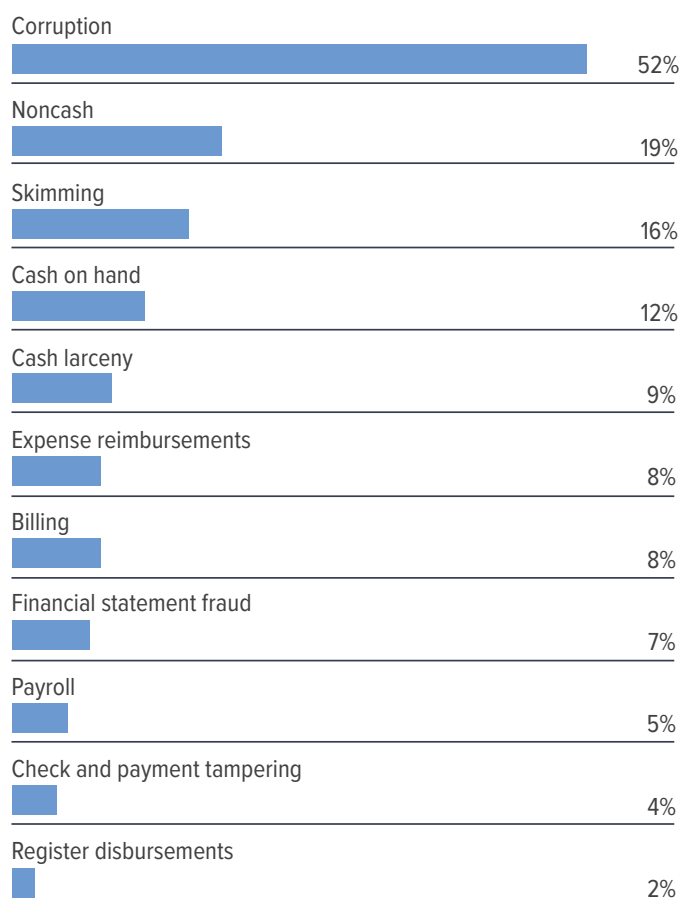


FIG. 68 How is occupational fraud initially detected in the Middle East and North Africa?

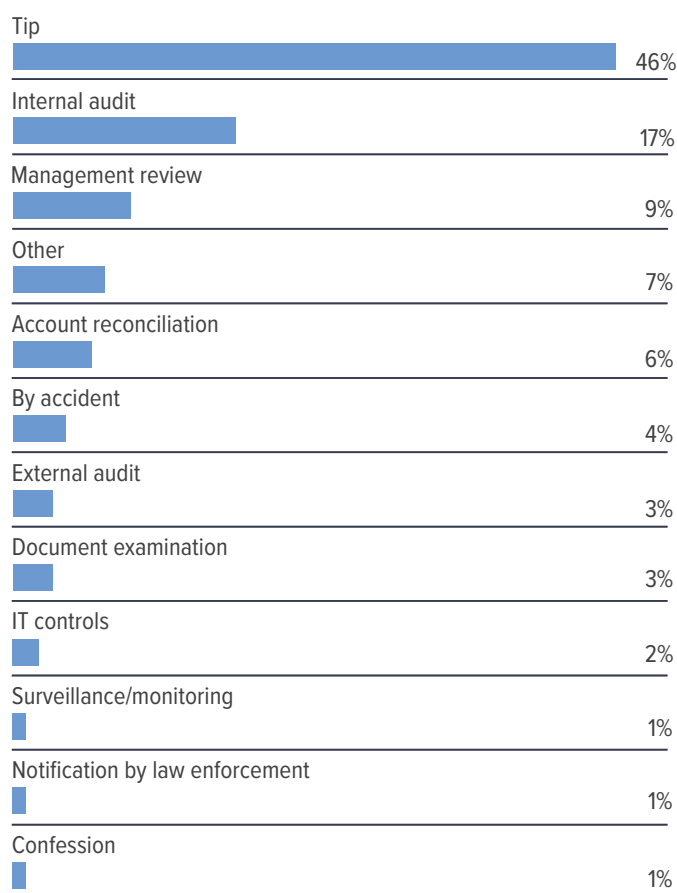


FIG. 69 What anti-fraud controls are the most common in the Middle East and North Africa?

Control	Percent of cases
External audit of financial statements	88%
Internal audit department	87%
Code of conduct	84%
Management certification of financial statements	83%
External audit of internal controls over financial reporting	74%
Management review	72%
Independent audit committee	72%
Hotline	72%
Fraud training for managers/executives	58%
Surprise audits	55%
Anti-fraud policy	55%
Fraud training for employees	55%
Dedicated fraud department, function, or team	46%
Formal fraud risk assessments	45%
Proactive data monitoring/analysis	41%
Employee support programs	34%
Job rotation/mandatory vacation	33%
Rewards for whistleblowers	17%

FIG. 70 How does the perpetrator's level of authority relate to occupational fraud in the Middle East and North Africa?

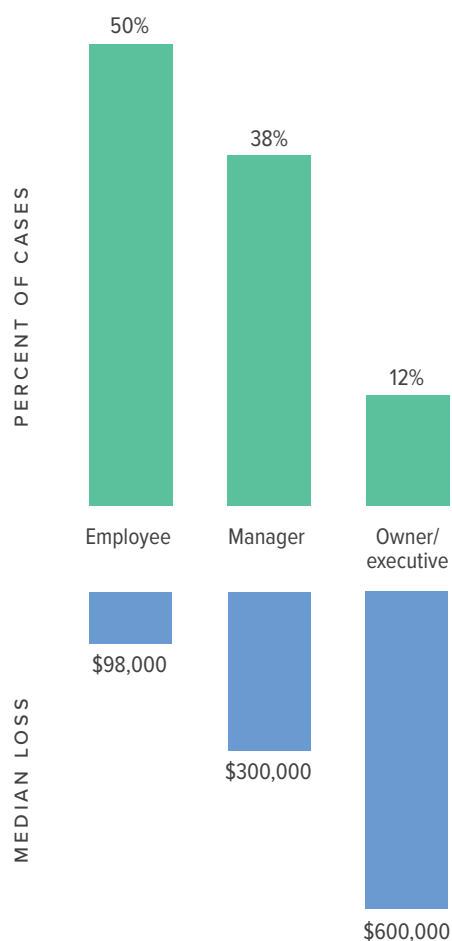
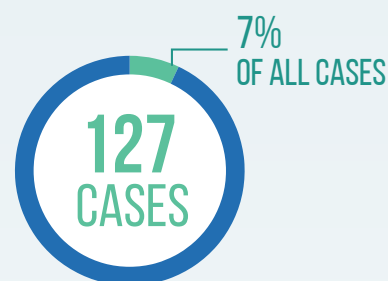


FIG. 71 Cases by country in the Middle East and North Africa

Country	Number of cases
Bahrain	5
Cyprus	11
Egypt	6
Iraq	3
Israel	1
Jordan	4
Kuwait	9
Lebanon	4
Morocco	3
Oman	5
Qatar	5
Saudi Arabia	23
Tunisia	2
United Arab Emirates	46
<b>Total cases:</b>	<b>127</b>

MEDIAN LOSS:  
**USD 100,000**



## REGIONAL FOCUS

# SOUTHERN ASIA



FIG. 72 What are the most common occupational fraud schemes in Southern Asia?

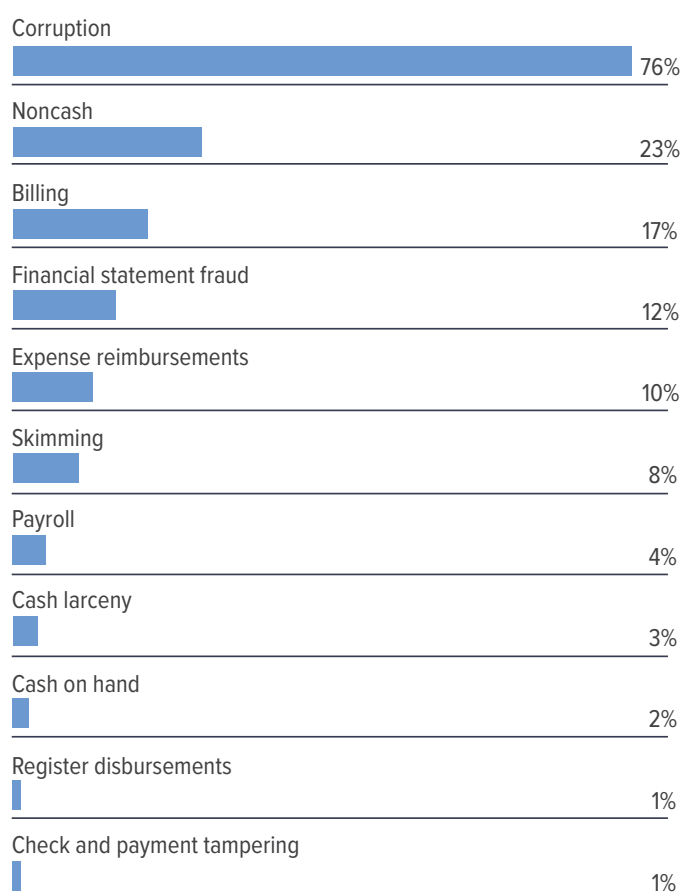


FIG. 73 How is occupational fraud initially detected in Southern Asia?

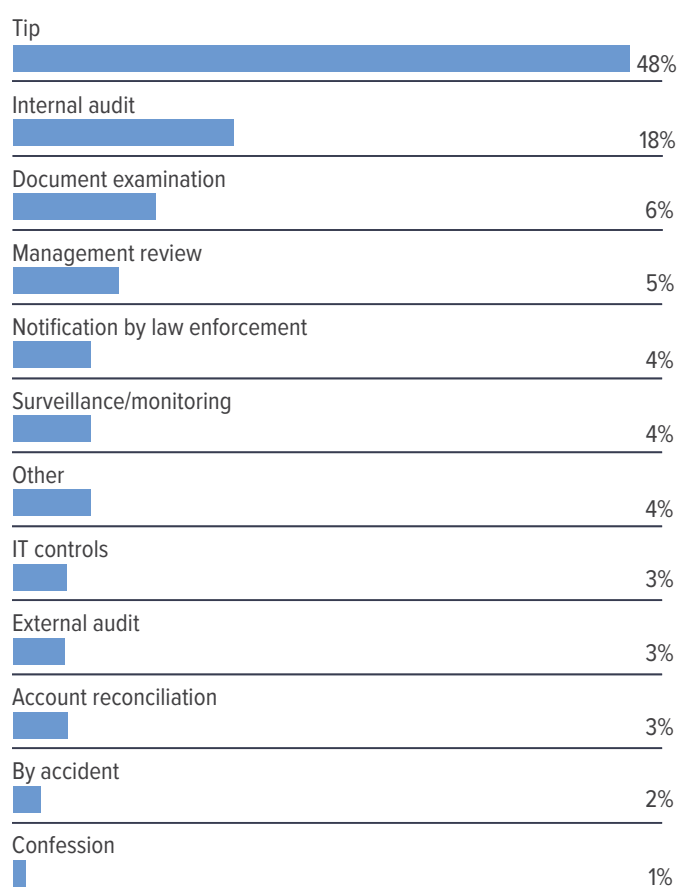


FIG. 74 What anti-fraud controls are the most common in Southern Asia?

Control	Percent of cases
External audit of financial statements	88%
Management certification of financial statements	86%
Internal audit department	86%
Code of conduct	81%
External audit of internal controls over financial reporting	76%
Management review	72%
Independent audit committee	70%
Hotline	66%
Anti-fraud policy	64%
Fraud training for managers/executives	55%
Fraud training for employees	51%
Employee support programs	43%
Surprise audits	43%
Dedicated fraud department, function, or team	36%
Formal fraud risk assessments	35%
Proactive data monitoring/analysis	34%
Job rotation/mandatory vacation	29%
Rewards for whistleblowers	20%

FIG. 75 How does the perpetrator’s level of authority relate to occupational fraud in Southern Asia?

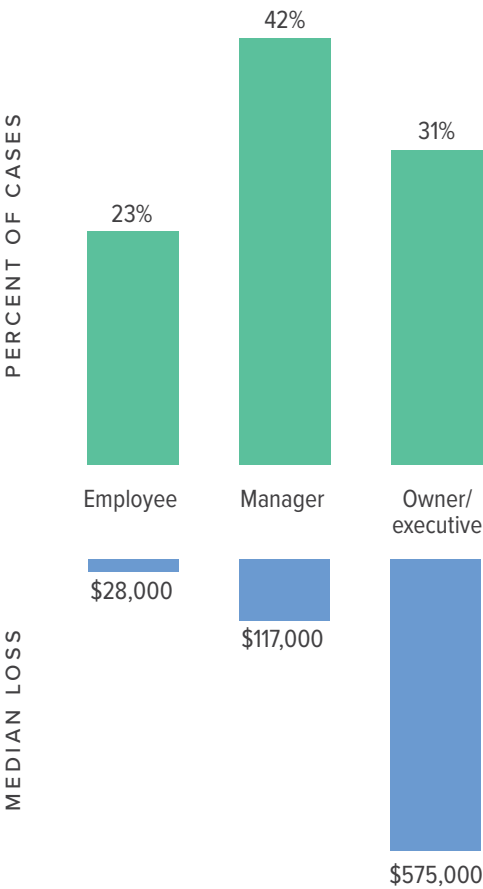
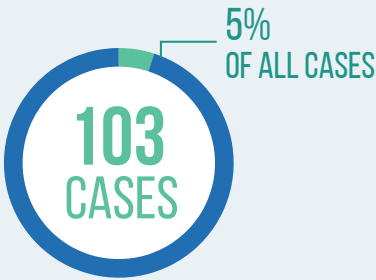


FIG. 76 Cases by country in Southern Asia

Country	Number of cases
Afghanistan	3
Bangladesh	4
India	77
Nepal	1
Pakistan	15
Sri Lanka	3
<b>Total cases:</b>	<b>103</b>

MEDIAN LOSS:  
USD 117,000





## REGIONAL FOCUS

# SUB-SAHARAN AFRICA



FIG. 77 What are the most common occupational fraud schemes in Sub-Saharan Africa?

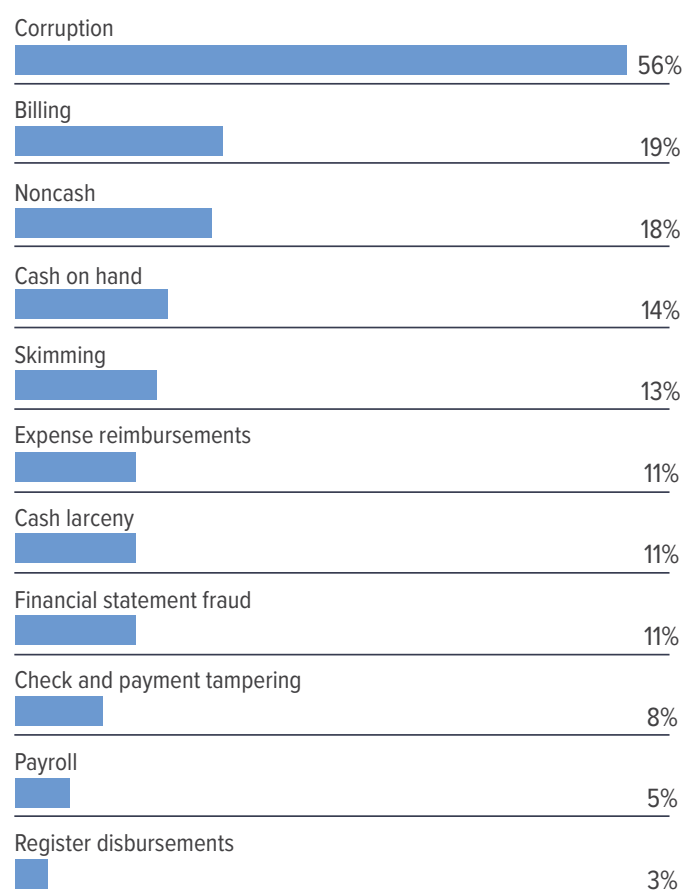


FIG. 78 How is occupational fraud initially detected in Sub-Saharan Africa?

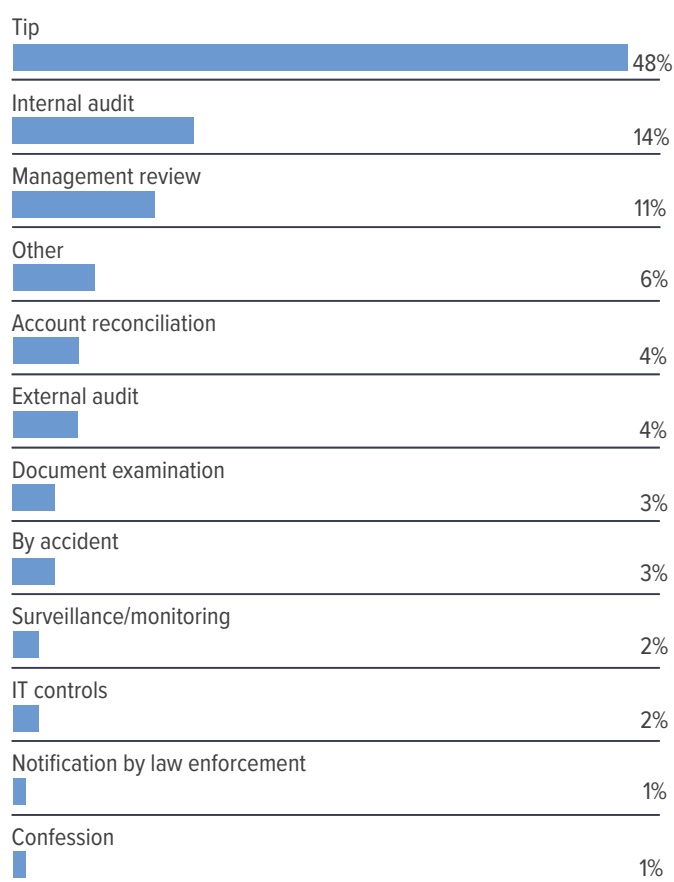


FIG. 79 What anti-fraud controls are the most common in Sub-Saharan Africa?

Control	Percent of cases
External audit of financial statements	92%
Code of conduct	86%
Internal audit department	85%
Management certification of financial statements	82%
External audit of internal controls over financial reporting	79%
Management review	70%
Hotline	69%
Independent audit committee	69%
Anti-fraud policy	61%
Fraud training for employees	57%
Fraud training for managers/executives	54%
Dedicated fraud department, function, or team	49%
Employee support programs	49%
Surprise audits	48%
Formal fraud risk assessments	44%
Proactive data monitoring/analysis	31%
Job rotation/mandatory vacation	28%
Rewards for whistleblowers	21%

FIG. 80 How does the perpetrator's level of authority relate to occupational fraud in Sub-Saharan Africa?

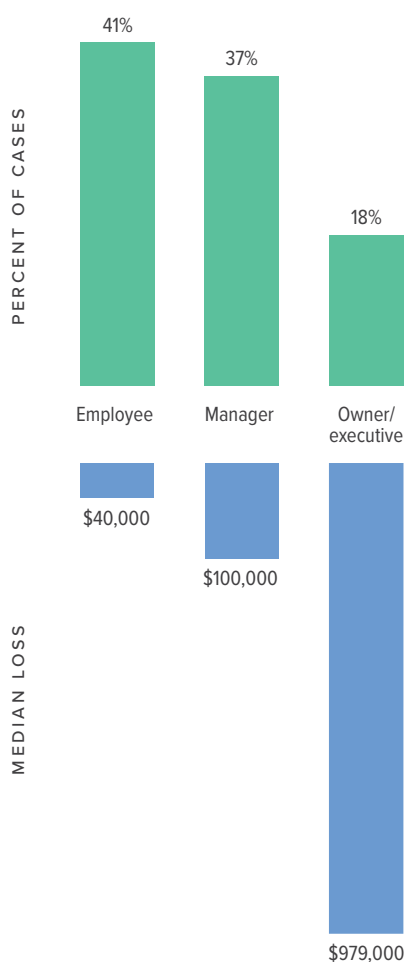


FIG. 81 Cases by country in Sub-Saharan Africa

Country	Number of cases
Angola	1
Benin	1
Botswana	5
Burundi	1
Cameroon	4
Central African Republic	2
Chad	1
Cote d'Ivoire	4
Democratic Republic of the Congo	5
Ethiopia	2
Gabon	1
Ghana	12
Kenya	53
Lesotho	2
Liberia	8
Madagascar	4
Malawi	10
Mauritius	6
Mozambique	3
Namibia	3
Nigeria	49
Rwanda	3
Senegal	2
South Africa	77
Sudan	2
Swaziland	1
Tanzania	7
Togo	4
Uganda	16
Zambia	3
Zimbabwe	9
<b>Total cases:</b>	<b>301</b>

MEDIAN LOSS:  
**USD 100,000**



## REGIONAL FOCUS

# UNITED STATES AND CANADA



FIG. 82 What are the most common occupational fraud schemes in the United States and Canada?

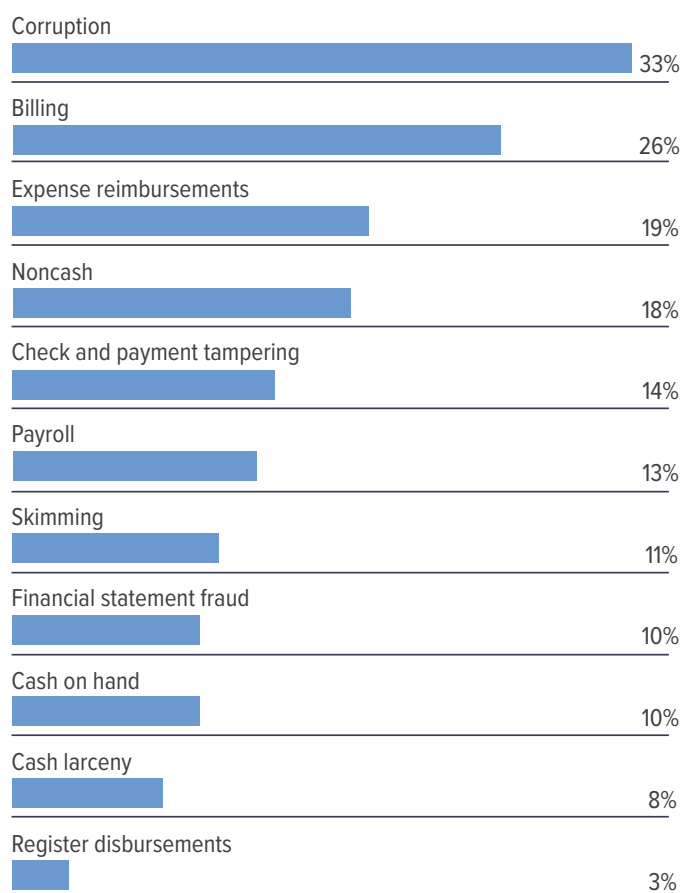


FIG. 83 How is occupational fraud initially detected in the United States and Canada?

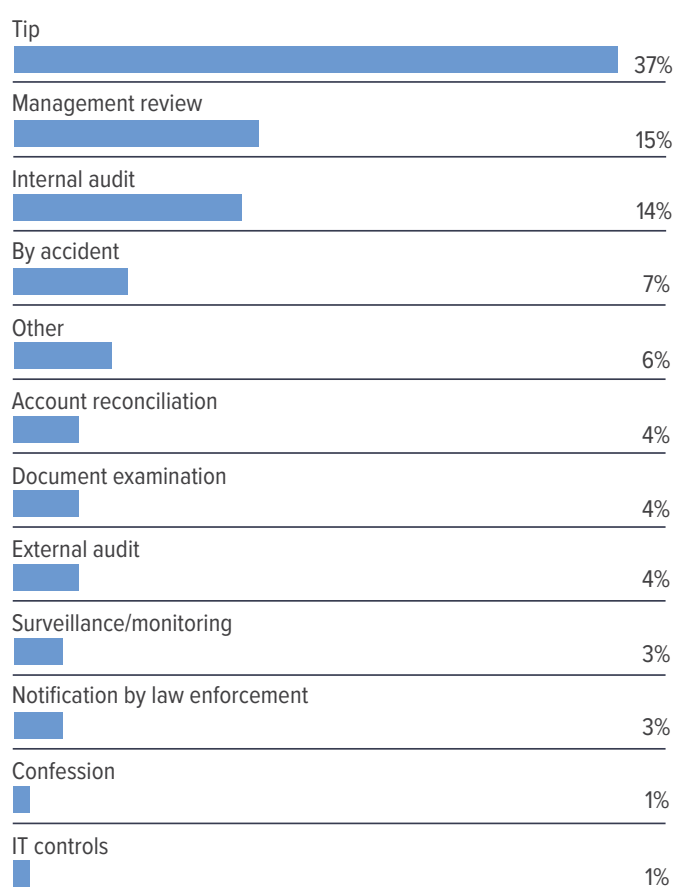


FIG. 84 What anti-fraud controls are the most common in the United States and Canada?

Control	Percent of cases
Code of conduct	80%
External audit of financial statements	72%
Internal audit department	71%
Employee support programs	71%
Management review	68%
Management certification of financial statements	67%
Independent audit committee	61%
Hotline	57%
External audit of internal controls over financial reporting	54%
Fraud training for managers/executives	51%
Fraud training for employees	51%
Anti-fraud policy	44%
Proactive data monitoring/analysis	38%
Formal fraud risk assessments	35%
Dedicated fraud department, function, or team	33%
Surprise audits	28%
Job rotation/mandatory vacation	15%
Rewards for whistleblowers	10%

FIG. 85 How does the perpetrator’s level of authority relate to occupational fraud in the United States and Canada?

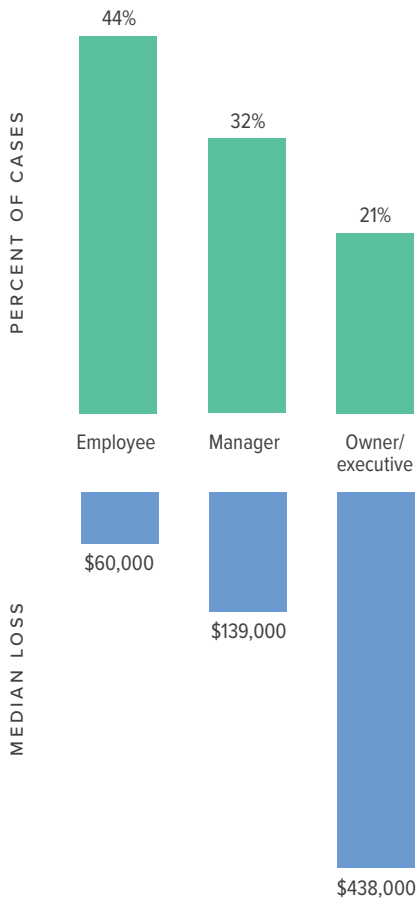
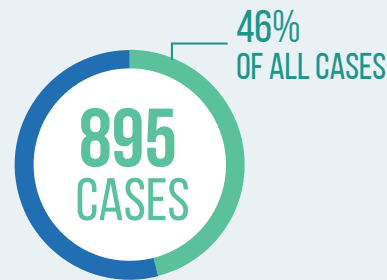


FIG. 86 Cases by country in the United States and Canada

Country	Number of cases
Canada	66
United States	829
<b>Total cases:</b>	<b>895</b>

MEDIAN LOSS:  
USD 120,000



## REGIONAL FOCUS

# WESTERN EUROPE



FIG. 87 What are the most common occupational fraud schemes in Western Europe?

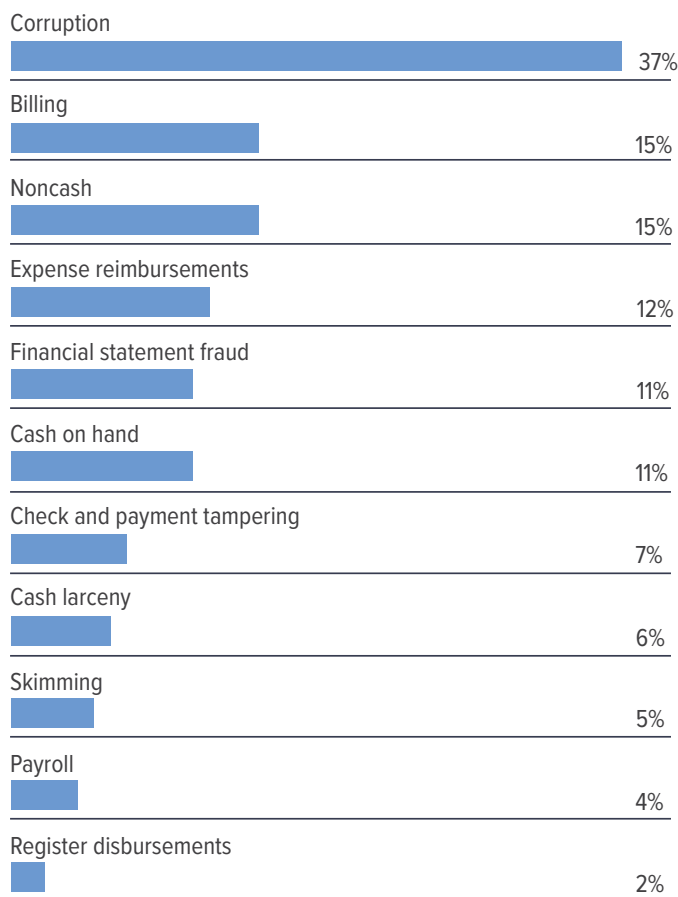


FIG. 88 How is occupational fraud initially detected in Western Europe?

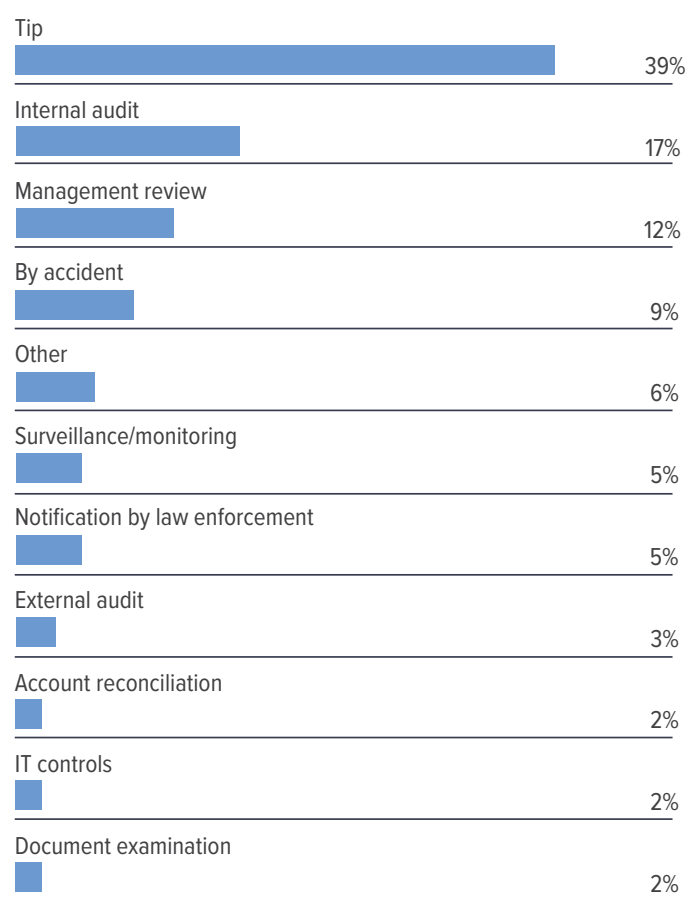


FIG. 89 What anti-fraud controls are the most common in Western Europe?

Control	Percent of cases
External audit of financial statements	89%
Code of conduct	87%
Management certification of financial statements	81%
Internal audit department	80%
External audit of internal controls over financial reporting	79%
Management review	74%
Independent audit committee	70%
Hotline	65%
Anti-fraud policy	65%
Fraud training for managers/executives	62%
Fraud training for employees	61%
Employee support programs	57%
Formal fraud risk assessments	53%
Dedicated fraud department, function, or team	51%
Proactive data monitoring/analysis	44%
Surprise audits	43%
Job rotation/mandatory vacation	25%
Rewards for whistleblowers	6%

FIG. 90 How does the perpetrator's level of authority relate to occupational fraud in Western Europe?

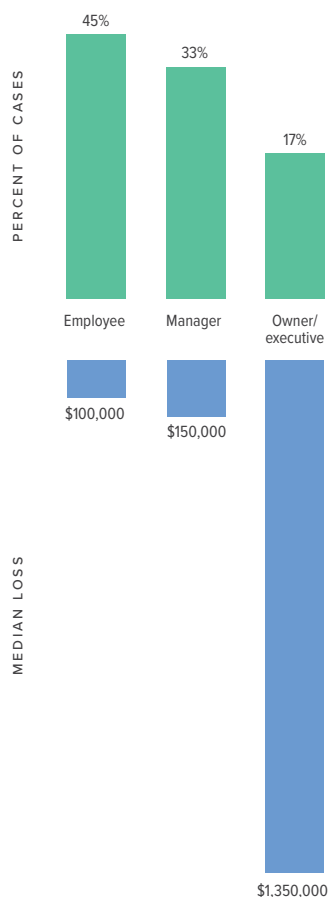
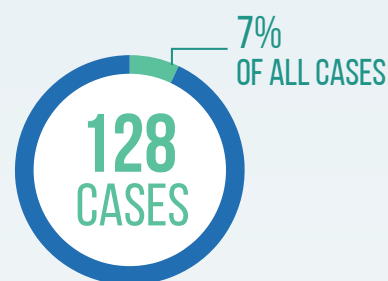


FIG. 91 Cases by country in Western Europe

Country	Number of cases
Austria	2
Belgium	3
Denmark	2
Finland	3
France	6
Germany	12
Greece	21
Ireland	2
Italy	10
Luxembourg	1
Netherlands	12
Spain	13
Switzerland	17
United Kingdom	24
<b>Total cases:</b>	<b>128</b>

MEDIAN LOSS:  
**USD 139,000**



# STATISTICAL APPENDIX



	Cases	25th percentile	Median (50th)	75th percentile	Mean*
All cases	2,448	\$29,000	\$125,000	\$605,000	\$1,509,000
<b>Schemes</b>					
Asset misappropriation	1,639	\$21,000	\$100,000	\$500,000	\$1,199,000
Billing	306	\$20,000	\$100,000	\$407,000	\$842,000
Noncash	305	\$10,000	\$78,000	\$500,000	\$1,138,000
Expense reimbursements	193	\$6,000	\$33,000	\$140,000	\$202,000
Skimming	160	\$10,000	\$47,000	\$133,000	\$361,000
Cash on hand	154	\$5,000	\$26,000	\$95,000	\$1,204,000
Check and payment tampering	141	\$40,000	\$110,000	\$500,000	\$588,000
Cash larceny	106	\$13,000	\$83,000	\$305,000	\$1,000,000
Payroll	105	\$16,000	\$62,000	\$238,000	\$367,000
Register disbursements	27	\$7,000	\$20,000	\$65,000	\$85,000
Corruption	789	\$34,000	\$200,000	\$1,100,000	\$3,039,000
Financial statement fraud	186	\$140,000	\$954,000	\$5,000,000	\$8,693,000
<b>Detection method</b>					
Tip	869	\$30,000	\$145,000	\$750,000	\$1,486,000
Internal audit	291	\$14,000	\$100,000	\$350,000	\$1,115,000
Management review	240	\$26,000	\$100,000	\$570,000	\$1,316,000
By accident	103	\$50,000	\$200,000	\$600,000	\$613,000
Account reconciliation	86	\$17,000	\$81,000	\$325,000	\$485,000
External audit	80	\$39,000	\$150,000	\$972,000	\$2,397,000
Document examination	71	\$32,000	\$101,000	\$500,000	\$1,357,000
Surveillance/monitoring	56	\$10,000	\$44,000	\$300,000	\$955,000
Notified by law enforcement	48	\$197,000	\$900,000	\$9,750,000	\$5,206,000
IT controls	33	\$9,000	\$80,000	\$1,255,000	\$1,133,000
Confession	23	\$100,000	\$225,000	\$3,000,000	\$3,826,000

\*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).

	Cases	25th percentile	Median (50th)	75th percentile	Mean*
<b>Victim organization</b>					
<b>Region:</b>					
United States and Canada	886	\$22,000	\$120,000	\$563,000	\$1,234,000
Sub-Saharan Africa	295	\$15,000	\$100,000	\$568,000	\$1,523,000
Asia-Pacific	197	\$38,000	\$195,000	\$1,000,000	\$1,988,000
Western Europe	124	\$50,000	\$139,000	\$638,000	\$2,113,000
Middle East and North Africa	124	\$33,000	\$100,000	\$1,000,000	\$1,302,000
Southern Asia	102	\$28,000	\$117,000	\$713,000	\$2,208,000
Latin America and the Caribbean	99	\$50,000	\$200,000	\$1,000,000	\$1,500,000
Eastern Europe and Western/Central Asia	94	\$30,000	\$133,000	\$499,000	\$1,603,000
<b>Organization type:</b>					
Private company	883	\$31,000	\$150,000	\$750,000	\$1,451,000
Public company	529	\$35,000	\$150,000	\$925,000	\$1,675,000
Nonprofit	189	\$12,000	\$75,000	\$300,000	\$639,000
Government	327	\$23,000	\$100,000	\$530,000	\$1,812,000
National	141	\$34,000	\$200,000	\$1,000,000	\$2,652,000
State/provincial	66	\$12,000	\$91,000	\$1,125,000	\$2,693,000
Local	105	\$18,000	\$75,000	\$253,000	\$365,000
<b>Organization size:</b>					
<100 employees	516	\$31,000	\$150,000	\$697,000	\$1,145,000
100–999 employees	452	\$26,000	\$120,000	\$520,000	\$1,580,000
1,000–9,999 employees	541	\$24,000	\$100,000	\$513,000	\$1,557,000
10,000+ employees	496	\$32,000	\$140,000	\$800,000	\$1,715,000
<b>Organization revenue:</b>					
< USD 50 million	745	\$28,000	\$114,000	\$500,000	\$985,000
USD 50 million–USD 499 million	473	\$20,000	\$120,000	\$684,000	\$1,884,000
USD 500 million–USD 999 million	236	\$21,000	\$132,000	\$608,000	\$1,936,000
USD 1 billion+	526	\$35,000	\$150,000	\$1,000,000	\$1,679,000
<b>Industry:</b>					
Banking and financial services	379	\$20,000	\$100,000	\$600,000	\$1,546,000
Government and public administration	193	\$18,000	\$100,000	\$500,000	\$1,609,000
Manufacturing	181	\$50,000	\$198,000	\$1,000,000	\$1,579,000
Health care	147	\$33,000	\$200,000	\$900,000	\$1,508,000
Energy	91	\$54,000	\$275,000	\$1,225,000	\$2,337,000
Retail	89	\$10,000	\$85,000	\$550,000	\$1,112,000
Insurance	86	\$12,000	\$70,000	\$410,000	\$889,000
Education	81	\$17,000	\$65,000	\$250,000	\$354,000
Construction	77	\$47,000	\$200,000	\$995,000	\$1,872,000
Telecommunications	66	\$71,000	\$250,000	\$2,000,000	\$2,049,000
Technology	65	\$39,000	\$150,000	\$1,000,000	\$1,823,000
Transportation and warehousing	63	\$32,000	\$150,000	\$1,000,000	\$653,000
Food service and hospitality	58	\$29,000	\$114,000	\$509,000	\$771,000
Services (professional)	53	\$46,000	\$150,000	\$700,000	\$772,000
Real estate	52	\$38,000	\$254,000	\$1,777,000	\$1,988,000
Religious, charitable, or social services	43	\$12,000	\$76,000	\$300,000	\$919,000
Agriculture, forestry, fishing, and hunting	39	\$29,000	\$100,000	\$1,000,000	\$2,191,000
Arts, entertainment, and recreation	39	\$30,000	\$90,000	\$255,000	\$1,254,000
Services (other)	29	\$7,000	\$150,000	\$1,400,000	\$2,316,000
Mining	26	\$100,000	\$475,000	\$3,100,000	\$4,409,000
Wholesale trade	25	\$20,000	\$130,000	\$454,000	\$923,000
Utilities	20	\$14,000	\$163,000	\$350,000	\$1,271,000
Communications and publishing	14	\$39,000	\$115,000	\$526,000	\$673,000



	Cases	25th percentile	Median (50th)	75th percentile	Mean
<b>Perpetrator</b>					
<b>Number of perpetrators:</b>					
One perpetrator	954	\$15,000	\$90,000	\$300,000	\$666,000
Two perpetrators	358	\$30,000	\$105,000	\$713,000	\$1,115,000
Three or more perpetrators	641	\$75,000	\$350,000	\$2,000,000	\$2,953,000
<b>Position:</b>					
Employee	803	\$10,000	\$60,000	\$259,000	\$545,000
Manager	688	\$36,000	\$150,000	\$600,000	\$1,247,000
Owner/executive	398	\$111,000	\$600,000	\$3,485,000	\$3,817,000
<b>Tenure:</b>					
> 10 years	452	\$50,000	\$200,000	\$1,000,000	\$2,082,000
6–10 years	432	\$50,000	\$190,000	\$1,000,000	\$1,664,000
1–5 years	886	\$20,000	\$100,000	\$500,000	\$1,268,000
< 1 year	169	\$10,000	\$50,000	\$295,000	\$604,000
<b>Department:</b>					
Operations	285	\$12,000	\$72,000	\$410,000	\$1,249,000
Accounting	273	\$50,000	\$200,000	\$763,000	\$1,109,000
Executive/upper management	230	\$132,000	\$596,000	\$3,383,000	\$3,787,000
Sales	222	\$22,000	\$94,000	\$385,000	\$807,000
Customer service	174	\$15,000	\$86,000	\$250,000	\$826,000
Administrative support	114	\$10,000	\$76,000	\$259,000	\$568,000
Finance	101	\$19,000	\$100,000	\$682,000	\$1,833,000
Purchasing	95	\$39,000	\$200,000	\$1,000,000	\$1,556,000
Information technology	66	\$73,000	\$200,000	\$813,000	\$1,204,000
Facilities and maintenance	59	\$30,000	\$100,000	\$450,000	\$390,000
Warehousing/inventory	58	\$20,000	\$85,000	\$313,000	\$453,000
Board of directors	45	\$101,000	\$750,000	\$5,575,000	\$5,205,000
Marketing/public relations	40	\$20,000	\$100,000	\$363,000	\$797,000
Manufacturing and production	34	\$45,000	\$275,000	\$1,350,000	\$1,486,000
Human resources	27	\$15,000	\$40,000	\$400,000	\$915,000
Legal	13	\$10,000	\$195,000	\$741,000	\$450,000
Research and development	12	\$26,000	\$350,000	\$1,113,000	\$1,795,000
Internal audit	8	†	†	†	†

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

	Cases	25th percentile	Median (50th)	75th percentile	Mean
<b>Perpetrator (cont.)</b>					
<b>Gender:</b>					
Male	1,391	\$35,000	\$150,000	\$1,000,000	\$1,823,000
Female	543	\$18,000	\$85,000	\$300,000	\$677,000
<b>Age:</b>					
<26	81	\$5,000	\$20,000	\$113,000	\$169,000
26–30	191	\$15,000	\$65,000	\$250,000	\$403,000
31–35	307	\$18,000	\$80,000	\$400,000	\$845,000
36–40	347	\$31,000	\$150,000	\$600,000	\$1,320,000
41–45	345	\$38,000	\$141,000	\$750,000	\$1,733,000
46–50	268	\$56,000	\$213,000	\$1,200,000	\$2,379,000
51–55	152	\$50,000	\$207,000	\$1,000,000	\$1,641,000
56–60	117	\$78,000	\$400,000	\$2,284,000	\$3,086,000
>60	60	\$120,000	\$575,000	\$3,425,000	\$3,644,000
<b>Education level:</b>					
High school graduate or less	325	\$15,000	\$80,000	\$312,000	\$933,000
Some university	219	\$30,000	\$150,000	\$451,000	\$751,000
University degree	751	\$40,000	\$175,000	\$1,000,000	\$1,811,000
Postgraduate degree	238	\$35,000	\$200,000	\$1,000,000	\$2,285,000

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# FRAUD PREVENTION CHECKLIST



The most cost-effective way to limit fraud losses is to prevent fraud from occurring. 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 [ACFE.com/fraudrisktools](https://www.acfe.com/fraudrisktools).

## 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?

## 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?**
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 themselves 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 drug, 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, 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., recording fictitious revenues, understating reported expenses, or artificially inflating reported assets)

**Hotline:** A mechanism to report fraud or other violations, whether managed internally or by an external party. This might include, in addition to telephone hotlines, 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:** Any 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 his or her 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 85,000 members, the ACFE is reducing business fraud worldwide and providing the training and resources needed to fight fraud more effectively. The ACFE provides educational tools and practical solutions for anti-fraud professionals through events, education, publications, networking, and educational tools 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 the essential tools and resources necessary for anti-fraud professionals to accomplish their objectives.

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

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