

Association of Certified Fraud Examiners  
**2002 REPORT TO THE NATION**  
**OCCUPATIONAL FRAUD AND ABUSE**

## ABOUT THE ASSOCIATION

Since 1988 there has been only one organization whose main focus is to train anti-fraud professionals in their fight against economic crime: the Association of Certified Fraud Examiners. With more than 25,000 members in over 100 countries, the Association is networked to respond quickly and decisively to the needs of anti-fraud professionals everywhere. The mission of the Association is to reduce the incidence of fraud and white-collar crime, and to assist members in its detection and deterrence. To accomplish its mission, the Association:

- I Provides bona fide qualifications for Certified Fraud Examiners by administering the Uniform CFE Examination
- II Sets high standards for admission, including demonstrated competence through mandatory continuing professional education
- III Requires Certified Fraud Examiners to adhere to a strict code of professional conduct and ethics
- IV Serves as the international representative for Certified Fraud Examiners to business and government
- V Provides leadership to inspire public confidence in the integrity, objectivity, and professionalism of Certified Fraud Examiners

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## LETTER FROM THE PRESIDENT

Occupational fraud and abuse is a tremendous problem, one that affects practically every organization.

In 1996, the Association of Certified Fraud Examiners (ACFE) published its first *Report to the Nation on Occupational Fraud and Abuse*, which was the largest privately funded study on the subject. Six years later, the ACFE is now releasing the *2002 Report to the Nation on Occupational Fraud and Abuse*. This new report updates the data in the first report and also expands that study; it provides the most detailed view yet of how occupational fraud affects organizations.

This report is based on 663 occupational fraud cases that were reported by the CFEs who investigated them. In total, the cases in this study caused over \$7 billion in losses. This report focuses on five areas: the cost of occupational fraud and abuse, the methodologies, the victims, the perpetrators, and the legal outcomes of fraud cases.

The *2002 Report to the Nation* was conceived by the Association's founder and chairman, Joseph T. Wells, who was also the creator of the first *Report to the Nation* back in 1996. Through his work with the Association of Certified Fraud Examiners, Mr. Wells has contributed more to the study of occupational fraud than any person in the field. In his honor, I named the 1996 study *The Wells Report*. It follows, then, that this study should be christened *The 2002 Wells Report*.

This report is being made available to the general public, organizations, practitioners, academicians, and the press. For anyone who is interested in the study of occupational fraud or the practical consequences wrought by this type of crime, *The 2002 Wells Report* is an invaluable source of information.

Gil Geis, Ph.D., CFE

President

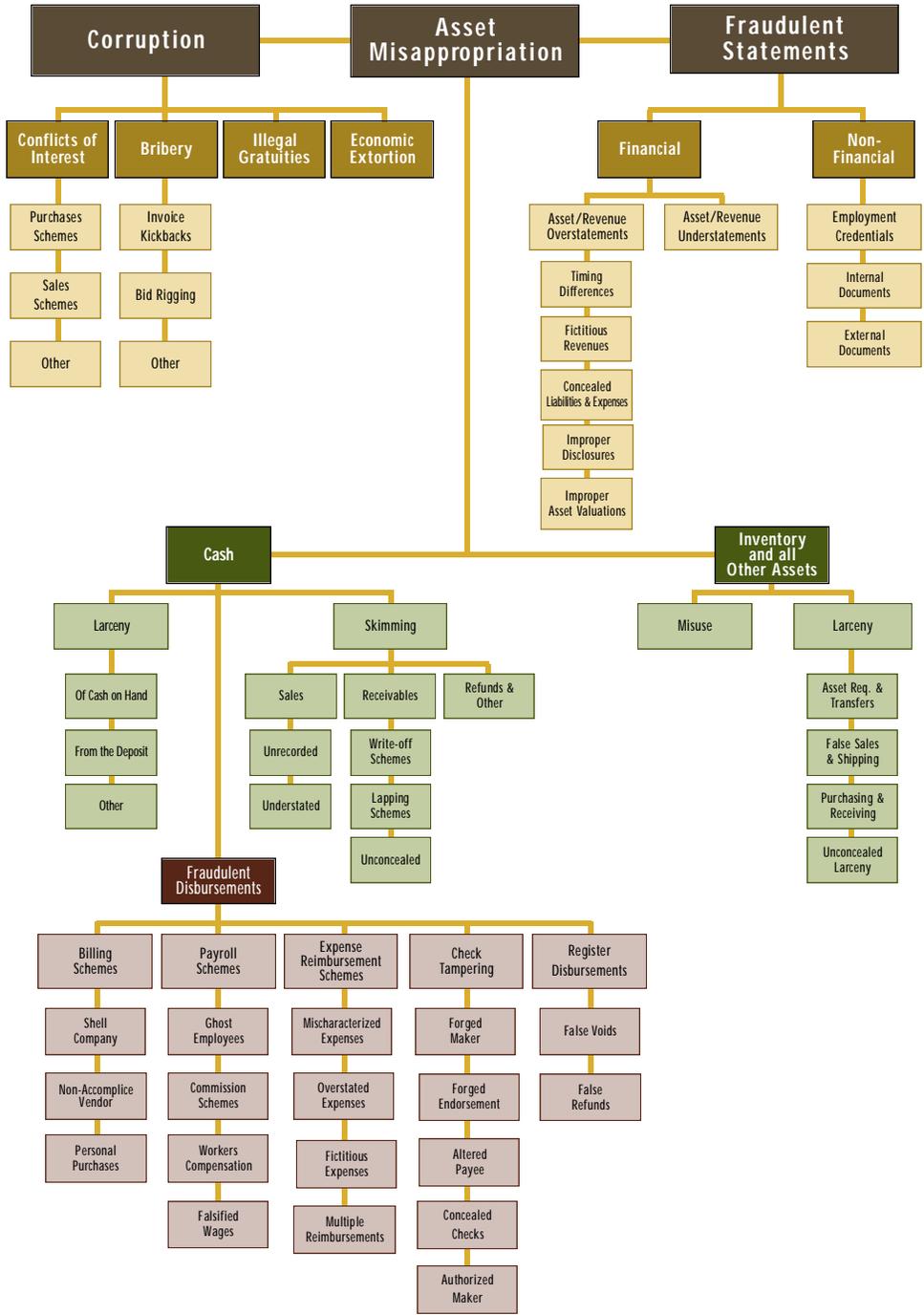
Association of Certified Fraud Examiners

## EXECUTIVE SUMMARY



- This study covers 663 occupational fraud cases that caused over \$7 billion in losses.
- Certified fraud examiners estimate that six percent of revenues will be lost in 2002 as a result of occupational fraud and abuse. Applied to the U.S. Gross Domestic Product, this translates to losses of approximately \$600 billion, or about \$4,500 per employee.
- Over half of the frauds in this study caused losses of at least \$100,000 and nearly one in six caused losses in excess of \$1 million.
- All occupational frauds fall into one of three categories: asset misappropriations, corruption, or fraudulent statements.
  - Over 80% of occupational frauds involve asset misappropriations. Cash is the targeted asset 90% of the time.
  - Corruption schemes account for 13% of all occupational frauds and they cause over \$500,000 in losses, on average.
  - Fraudulent statements are the most costly form of occupational fraud with median losses of \$4.25 million per scheme.
- The average scheme in this study lasted 18 months before it was detected.
- The most common method for detecting occupational fraud is by a tip from an employee, customer, vendor or anonymous source. The second most common method is by accident.
- Organizations with fraud hotlines cut their fraud losses by approximately 50% per scheme. Internal audits, external audits, and background checks also significantly reduce fraud losses.
- The typical perpetrator is a first-time offender. Only seven percent of occupational fraudsters in this study were known to have prior convictions for fraud-related offenses.
- Small businesses are the most vulnerable to occupational fraud and abuse. The average scheme in a small business causes \$127,500 in losses. The average scheme in the largest companies costs \$97,000.

# OCCUPATIONAL FRAUD AND ABUSE CLASSIFICATION SYSTEM



## I N T R O D U C T I O N



Occupational fraud and abuse is a widespread problem that affects practically every organization, regardless of size, location, or industry. Yet despite its tremendous scope and cost, relatively little research has been done on occupational fraud. The Association of Certified Fraud Examiners (ACFE) has made it a goal to better educate the public and anti-fraud professionals about this threat. In 1996, we released the first *Report to the Nation on Occupational Fraud and Abuse*, the largest known privately funded study on the subject. The *1996 Report to the Nation* was comprised of detailed data supplied by over 2,500 Certified Fraud Examiners on fraud cases they had investigated. The goals of that report were to:

- Summarize the opinion of experts on the percentage and amount of organizational revenue lost to all forms of occupational fraud and abuse.
- Examine the characteristics of the employees who commit occupational fraud and abuse.
- Determine what kinds of organizations are victims of occupational fraud and abuse.
- Categorize the ways in which serious fraud and abuse occurs.

This report is an update of the *1996 Report to the Nation*. The methodology used to gather data is the same; this report was also based on detailed case information supplied by certified fraud examiners who had first-hand knowledge of the cases they reported.

But in many ways, the *2002 Report to the Nation* is an expansion of the *1996 Report*. Based on the results of the first report, this study was tailored to obtain more useful information on the specific methodologies that employees, managers, and executives use to commit occupational fraud. Information was also gathered on the legal dispositions of the cases, something that was not included in the *1996 Report*. The end result, we believe, is a more thorough and complete study – one that will be useful to those seeking information about the threat of fraud that all organizations face from within.

## WHAT IS OCCUPATIONAL FRAUD?

The term “occupational fraud” may be 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.”***

This definition encompasses a wide range of misconduct by employees, managers, and executives. Occupational fraud schemes can be as simple as pilferage of company supplies or as complex as sophisticated financial statement frauds. All occupational fraud schemes have four key elements in common. The activity:

- is clandestine
- violates the perpetrator’s fiduciary duties to the victim organization
- is committed for the purpose of direct or indirect financial benefit to the perpetrator
- costs the employing organization assets, revenue, or reserves

## THE SURVEY

This study is based on a survey that began in April 2001 and ran through February 2002. We distributed a 6-page questionnaire to approximately 10,000 certified fraud examiners (CFEs) throughout the United States. The questionnaire was designed to elicit detailed information on one specific fraud case each CFE had personally investigated. The schemes had to meet the following criteria: 1) the CFE’s investigation was complete; 2) the CFE was reasonably sure that the perpetrator (or perpetrators) had been identified; and 3) all legal proceedings resulting from the case, if any, had concluded.

For each case in the survey, the CFE who had investigated it was asked to provide a narrative explanation of how the scheme worked. Using this information, along with other data supplied by the respondents, we were able to classify each scheme according to the *Occupational Fraud Classification System* that was initially developed from the *1996 Report to the Nation*. This classification system is illustrated on page iii. We wanted to measure the frequency and median losses of each scheme type, and to see if those numbers were comparable to our findings from the *1996 Report*. For the most part, they were.

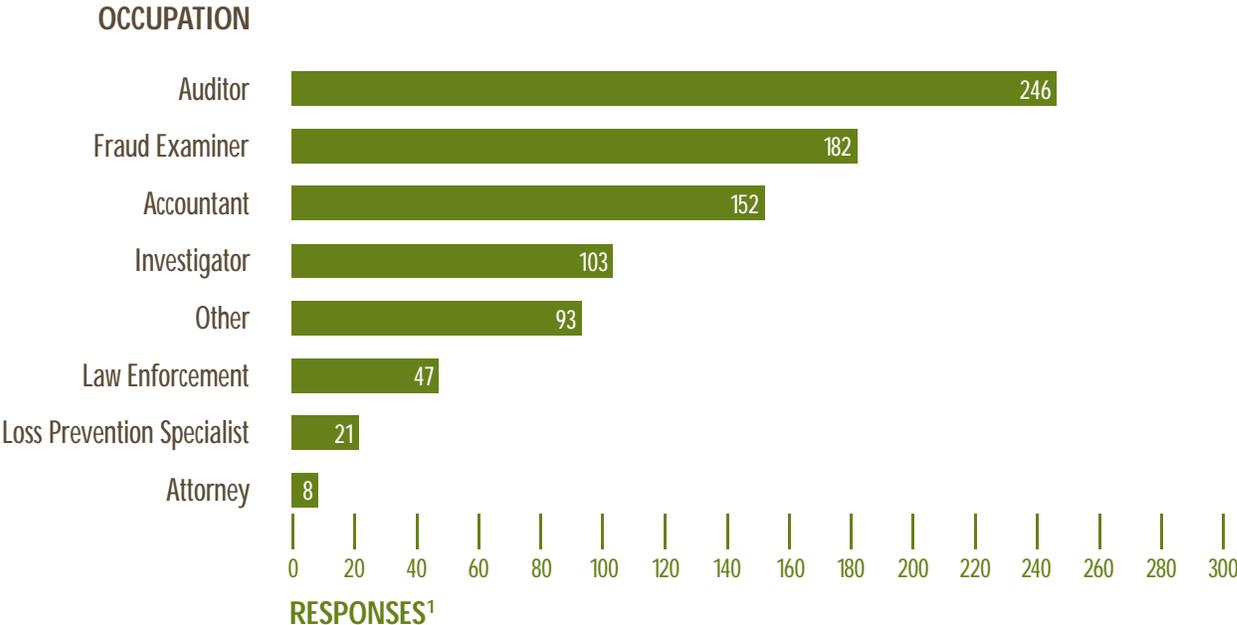
The participants were also asked to provide detailed information about the victims and perpetrators of these crimes, and about any legal proceedings that resulted from the frauds in the survey. This helped to profile fraud offenders; to determine which organizations are most vulnerable to fraud; to measure the effectiveness of certain anti-fraud measures; and to determine how fraud is dealt with by victim organizations and by the courts. Finally, CFEs were asked to provide general observations about how fraud affects the economy.

CFEs furnished 971 usable responses to the survey, 663 of which involved occupational fraud and abuse. The data in this report is based solely on the information from those 663 cases. Cumulatively, the frauds in this study caused over \$7 billion in total losses. The largest fraud involved a financial statement swindle that caused \$5.4 billion in losses; the smallest was a fraudulent expense reimbursement in the amount of \$100.

PARTICIPANTS

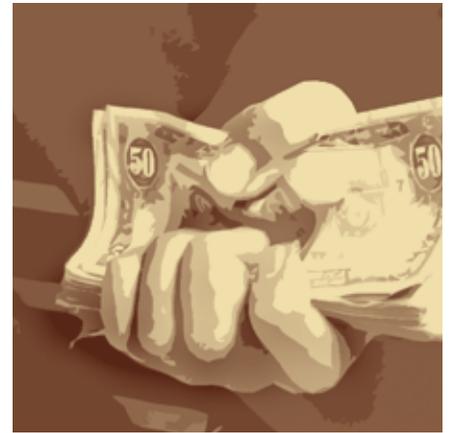
Survey participants were CFEs drawn exclusively from the United States. In general, CFEs are usually employed in one of three industries: government, business, and public accounting (in that order). The CFEs who participated in our study had, on average, 19 years' experience dealing with fraud. Their occupations are listed below.

OCCUPATIONS OF SURVEY PARTICIPANTS



<sup>1</sup> The number of responses exceeds 653, which is the total number of responses we received to this question, because some respondents listed themselves under more than one occupational category.

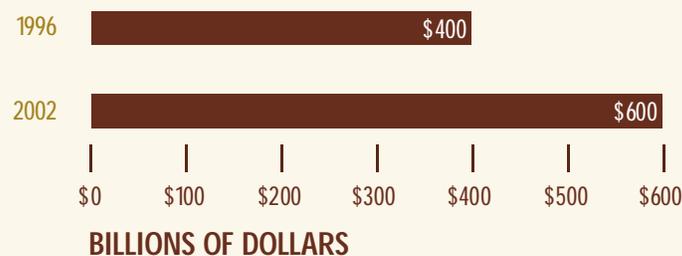
## THE COST OF FRAUD



It is most likely an impossible task to calculate the cost fraud imposes on the American economy because not all fraud is detected or reported. There is also no organization charged with accumulating data on fraud offenses, and relatively few studies have been done on the subject. In order to obtain an estimate of the total losses caused by occupational fraud, the experts who deal with the problem were polled for their opinions. But the reader should be cautioned that any estimates regarding the cost of fraud (including this one) are subjective.

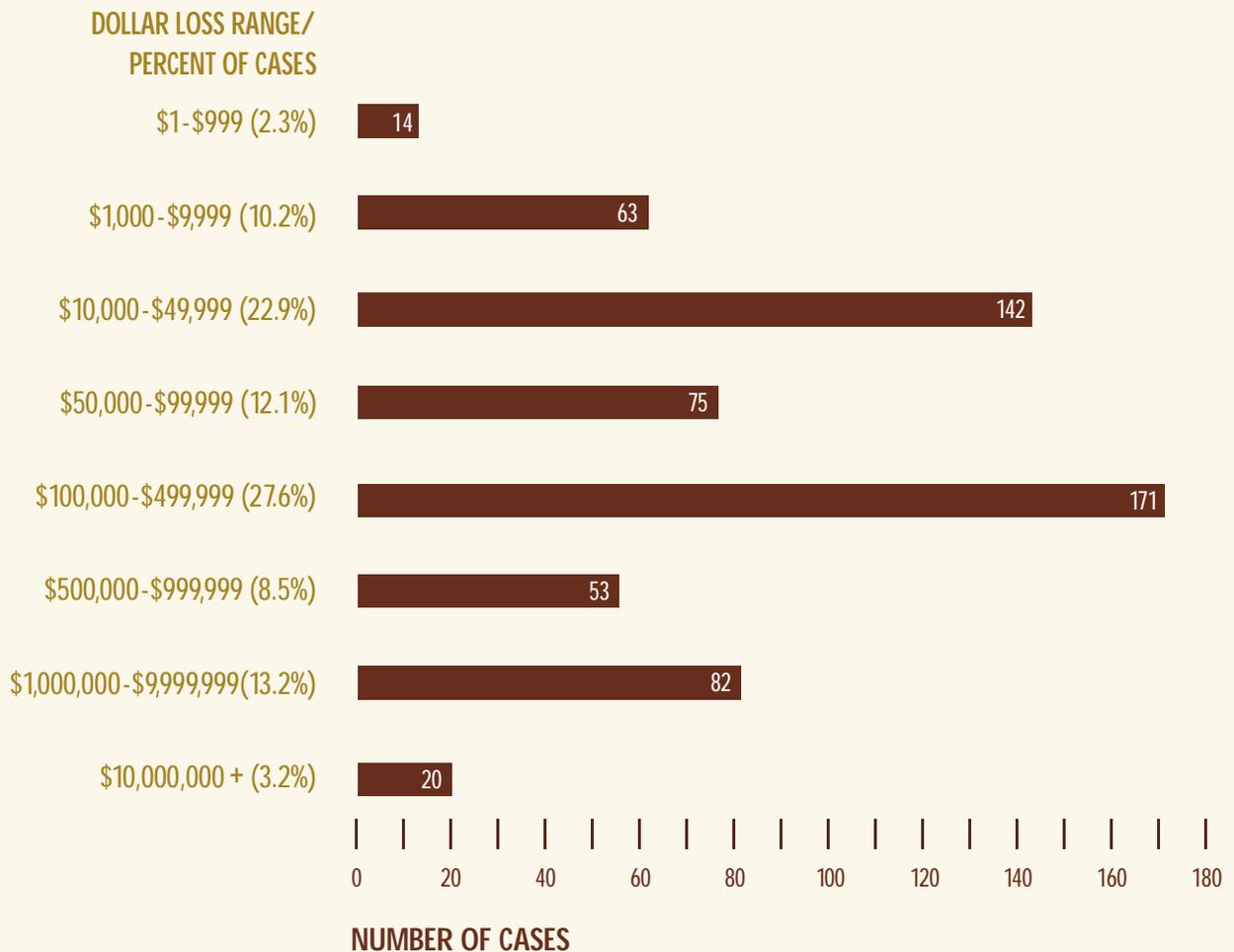
When CFEs were asked to estimate the percentage of revenues that will be lost in 2002 as a result of occupational fraud and abuse, they projected a median cost of six percent. This is the same rate that was estimated in our *1996 Report*. However, in the intervening period the Gross Domestic Product has risen from approximately \$7 trillion to about \$10 trillion. Although the expected rate of fraud has remained unchanged, the rising Gross Domestic Product would account for a \$200 billion increase in fraud totals from six years ago.

### OCCUPATIONAL FRAUD LOSSES

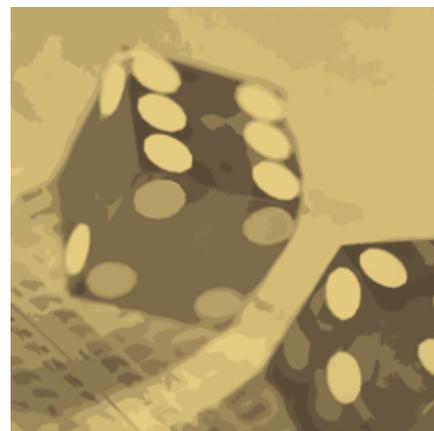


Each respondent was asked about the total dollar loss caused by the schemes they reported on. There were 620 cases in which CFEs were able to provide loss data. As the following chart illustrates, over half of the frauds in the study cost their victims at least \$100,000, and nearly one in six caused losses of \$1 million or more.

### DISTRIBUTION OF DOLLAR LOSSES



## THE METHODS



One of the major goals of this report was to determine precisely how fraud is accomplished and to classify the offenses by the methods used to commit them. Each case in the study was reviewed and categorized according to the *Occupational Fraud Classification System*. Once each scheme was classified, comparisons were drawn on the costs and frequency of each scheme type.

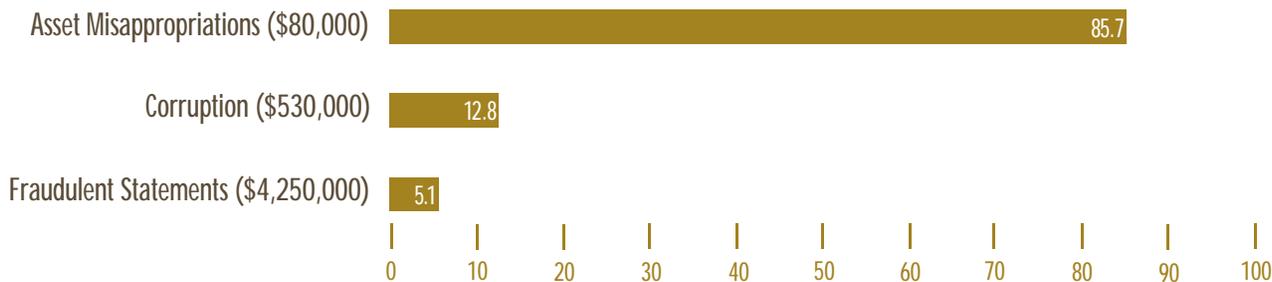
As determined by both the *1996* and *2002 Reports to the Nation*, there are three major categories of occupational fraud:

- **Asset misappropriations**, which involve the theft or misuse of an organization's assets. (Common examples include skimming revenues, stealing inventory, and payroll fraud.)
- **Corruption**, in which fraudsters wrongfully use their influence in a business transaction in order to procure some benefit for themselves or another person, contrary to their duty to their employer or the rights of another. (Common examples include accepting kickbacks and engaging in conflicts of interest.)
- **Fraudulent statements**, which generally involve falsification of an organization's financial statements. (Common examples include overstating revenues and understating liabilities or expenses.)

Asset misappropriations were by far the most common of the three schemes, accounting for over 80% of the cases studied. However, the largest losses tended to result from fraudulent statements.

### METHODS OF FRAUD - ALL TYPES

#### SCHEME TYPE/MEDIAN LOSS



#### PERCENT OF CASES (%)<sup>2</sup>

<sup>2</sup> The sum of percentages exceeds 100% because some cases involved more than one type of fraud. The same is true for every scheme classification chart.

Asset misappropriation schemes can be subdivided based on the type of asset that is stolen or misused. As expected, the asset that is most commonly targeted by dishonest employees is cash. Approximately 90% of the asset misappropriation cases in this study involved the theft of an organization’s cash. Schemes involving non-cash assets (such as inventory, equipment, and proprietary information) were much less common, but were more costly, on average.

## BREAKDOWN OF ASSET MISAPPROPRIATIONS

### SCHEME TYPE/PERCENT OF CASES<sup>3</sup>



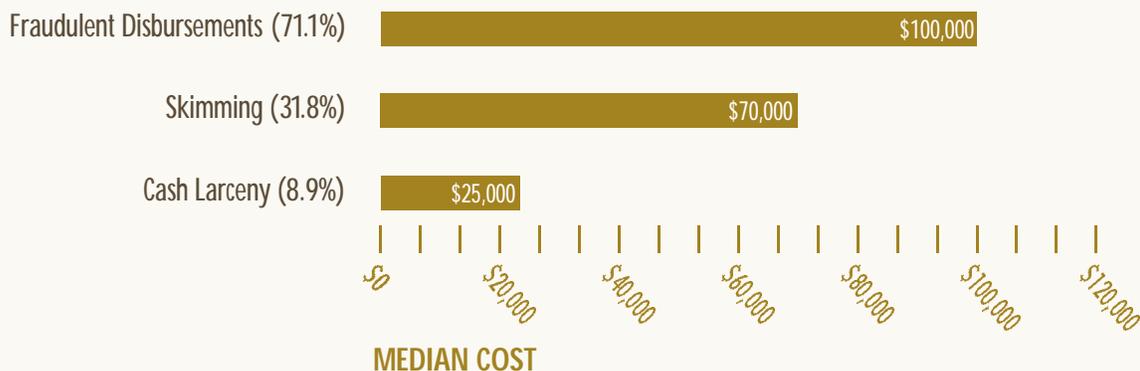
Cash schemes can generally be divided into three categories:

- **Fraudulent disbursements**, in which the perpetrator causes his organization to disburse funds through some trick or device (common examples include submitting false invoices or false timecards).
- **Skimming**, in which cash is stolen from an organization *before* it is recorded on the organization’s books and records.
- **Cash larceny**, in which cash is stolen from an organization *after* it has been recorded on the organization’s books and records.

Among these three categories, fraudulent disbursements were reported most frequently and had the highest median loss, costing their victims an average of \$100,000 per occurrence.

## BREAKDOWN OF CASH SCHEMES

### SCHEME TYPE/PERCENT OF CASES<sup>4</sup>



<sup>3</sup> The sum of percentages exceeds 100% because some cases involved more than one type of fraud.

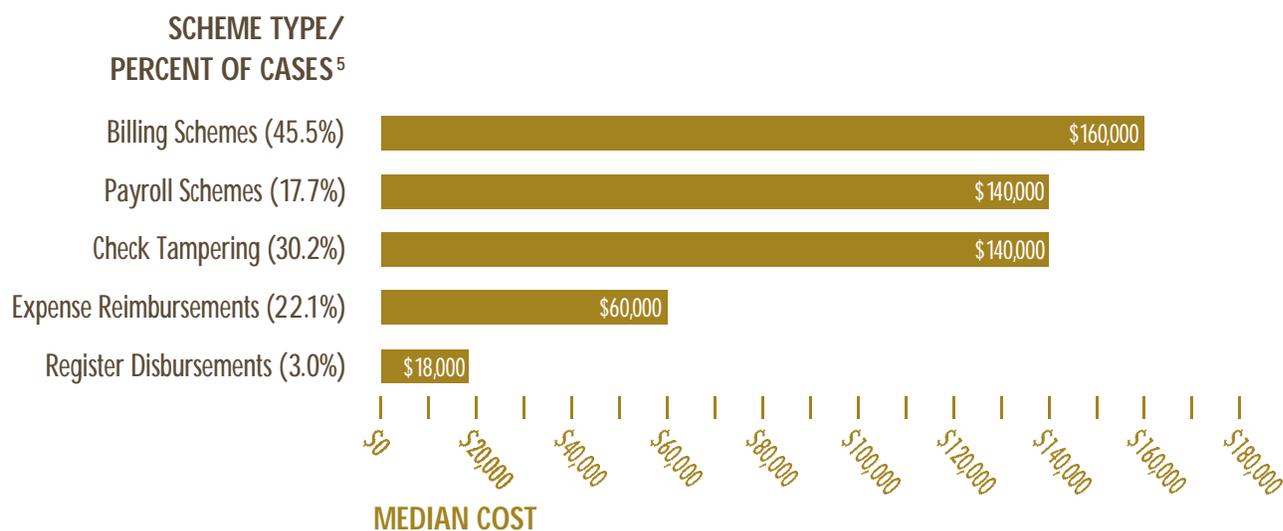
<sup>4</sup> The sum of percentages exceeds 100% because some cases involved more than one type of fraud.

Finally, most fraudulent disbursements fall into one of five categories.

- **Billing schemes**, in which a fraudster causes the victim organization to issue a payment by submitting invoices for fictitious goods or services, inflated invoices, or invoices for personal purchases.
- **Payroll schemes**, in which an employee causes the victim organization to issue a payment by making false claims for compensation.
- **Expense reimbursement schemes**, in which an employee makes a claim for reimbursement of fictitious or inflated business expenses.
- **Check tampering**, in which the perpetrator converts an organization’s funds by forging or altering a check on one of the organization’s bank accounts, or steals a check the organization has legitimately issued to another payee.
- **Register disbursement schemes**, in which an employee makes false entries on a cash register to conceal the fraudulent removal of currency.

Of the fraudulent disbursement schemes, fraudulent billings were both the most common and the most costly.

### BREAKDOWN OF FRAUDULENT DISBURSEMENTS



The following tables present a comparison between the 1996 and 2002 data regarding the frequency and cost of occupational fraud categories. We found that this data remained relatively stable.

### COMPARISON OF MAJOR OCCUPATIONAL FRAUD CATEGORIES BY 1996 & 2002 DATA

Scheme Type	2002		1996	
	Percentage of Cases <sup>6</sup>	Median Cost	Percentage of Cases	Median Cost
Asset Misappropriations	85.7	\$80,000	81.1	\$65,000
Corruption Schemes	12.8	\$530,000	14.8	\$440,000
Fraudulent Statements	5.1	\$4,250,000	4.1	\$4,000,000

<sup>5</sup> The sum of percentages exceeds 100% because some cases involved more than one type of fraud.

<sup>6</sup> Column exceeds 100% because some cases involved more than one type of fraud. In the 1996 study we classified schemes by primary method only.

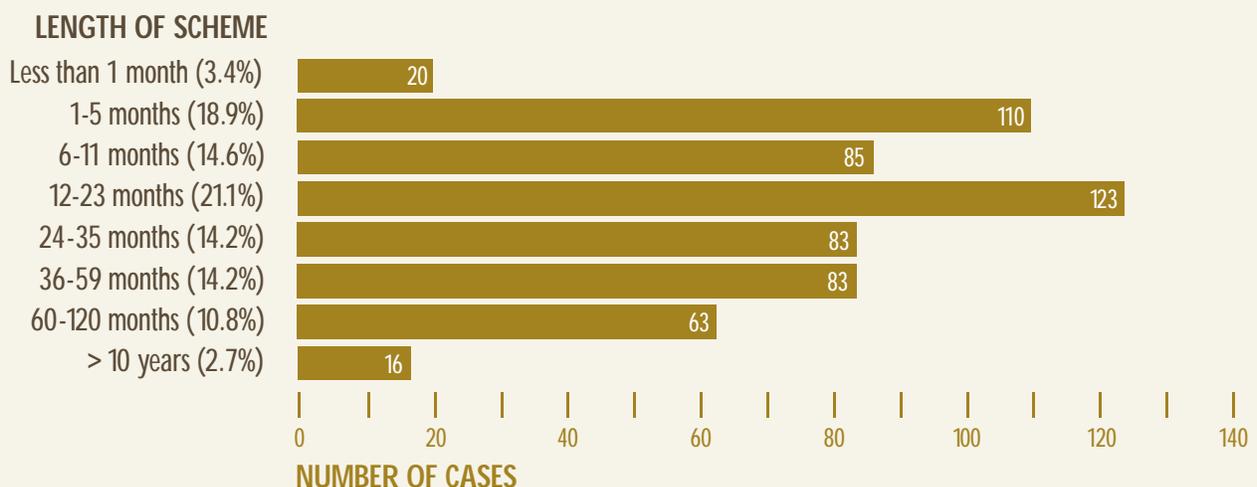
## COMPARISON OF ALL OCCUPATIONAL FRAUD CATEGORIES BY 1996 AND 2002 DATA

2002/1996 Scheme Type	2002		1996	
	Percent of Cases <sup>7</sup>	Median Cost	Percent of Cases	Median Cost
<b>Asset Misappropriations</b>	<b>85.7</b>	<b>\$80,000</b>	<b>81.1</b>	<b>\$65,000</b>
Cash Schemes	77.8	\$80,000	70.4	\$60,000
Cash Larceny	6.9	\$25,000	2.9	\$22,000
Skimming	24.7	\$70,000	20.3	\$50,000
Fraudulent Disbursements	55.4	\$100,000	47.1	\$75,000
Billing Schemes	25.2	\$160,000	15.7	\$250,000
Payroll Schemes	9.8	\$140,000	7.8	\$50,000
Expense Reimbursements	12.2	\$60,000	7.0	\$20,000
Check Tampering	16.7	\$140,000	11.5	\$96,432
Register Disbursements	1.7	\$18,000	1.3	\$22,500
Non-Cash Misappropriations	9.0	\$200,000	10.7	\$100,000
<b>Corruption Schemes</b>	<b>12.8</b>	<b>\$530,000</b>	<b>14.8</b>	<b>\$440,000</b>
<b>Fraudulent Statements</b>	<b>5.1</b>	<b>\$4,250,000</b>	<b>4.1</b>	<b>\$4,000,000</b>

## DURATION OF SCHEMES

How long does the typical fraud scheme run before it is detected? CFEs provided information on the dates (month and year) in which the schemes began, and the dates on which they were detected. There were 583 respondents who provided answers to both of these questions. The median length of time from inception to detection for the occupational frauds was 18 months. The following chart provides more detail as to the relative lengths of these schemes. Nearly two out of every three schemes ran for more than a year before they were detected, and 13.5% of the frauds ran for five years (60 months) or longer before they were caught. Meanwhile, only 3% of the schemes were caught within the first month.

## LENGTH OF SCHEMES

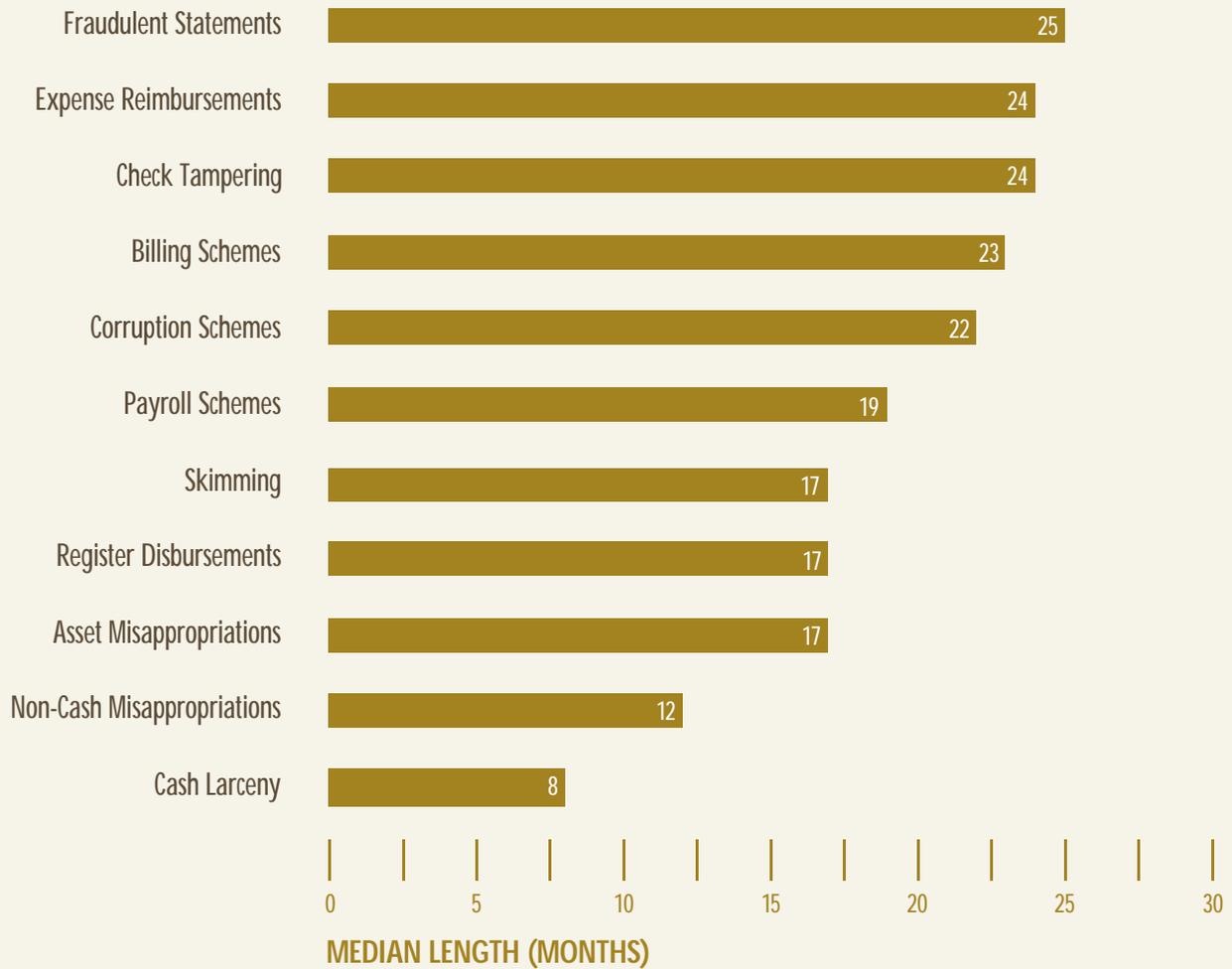


<sup>7</sup> Readers may note that the percentages in this column do not match the percentages in earlier tables. For instance, in this table skimming is shown to have occurred in 24.7% of cases, while in the chart on page 7 skimming had a value of 31.8%. That is because this table shows percentages based on our entire pool of 663 schemes. The chart on page 7, on the other hand, based percentages on the pool of cash misappropriations.

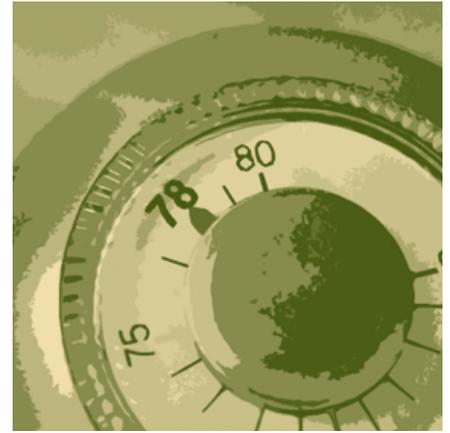
The following chart summarizes the median length of the fraud schemes in this survey based on their classification.

## DURATION BY CLASSIFICATION

### SCHEME TYPE



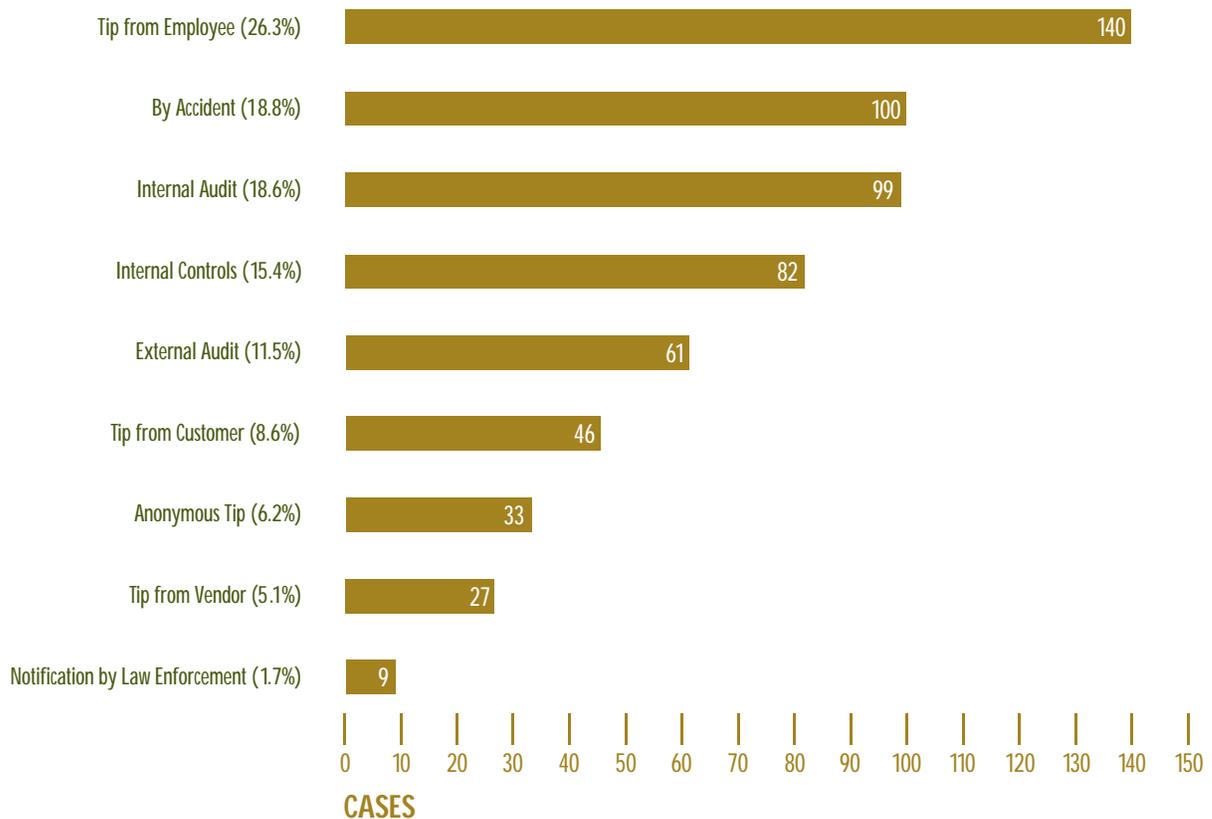
## DETECTING & PREVENTING FRAUD



Obviously, a key to dealing with fraud is detecting it when it occurs. Respondents were asked how the frauds they investigated were initially discovered. There were 532 responses to this question, the results of which are summarized below. The most common method of detection was a tip from an employee, which occurred in over a quarter of the cases reviewed. This data suggests that effective reporting mechanisms and open channels of communication from employees to management can have a positive effect on fraud detection and mitigation.

### INITIAL DETECTION OF FRAUDS

#### METHOD/PERCENT OF CASES<sup>8</sup>



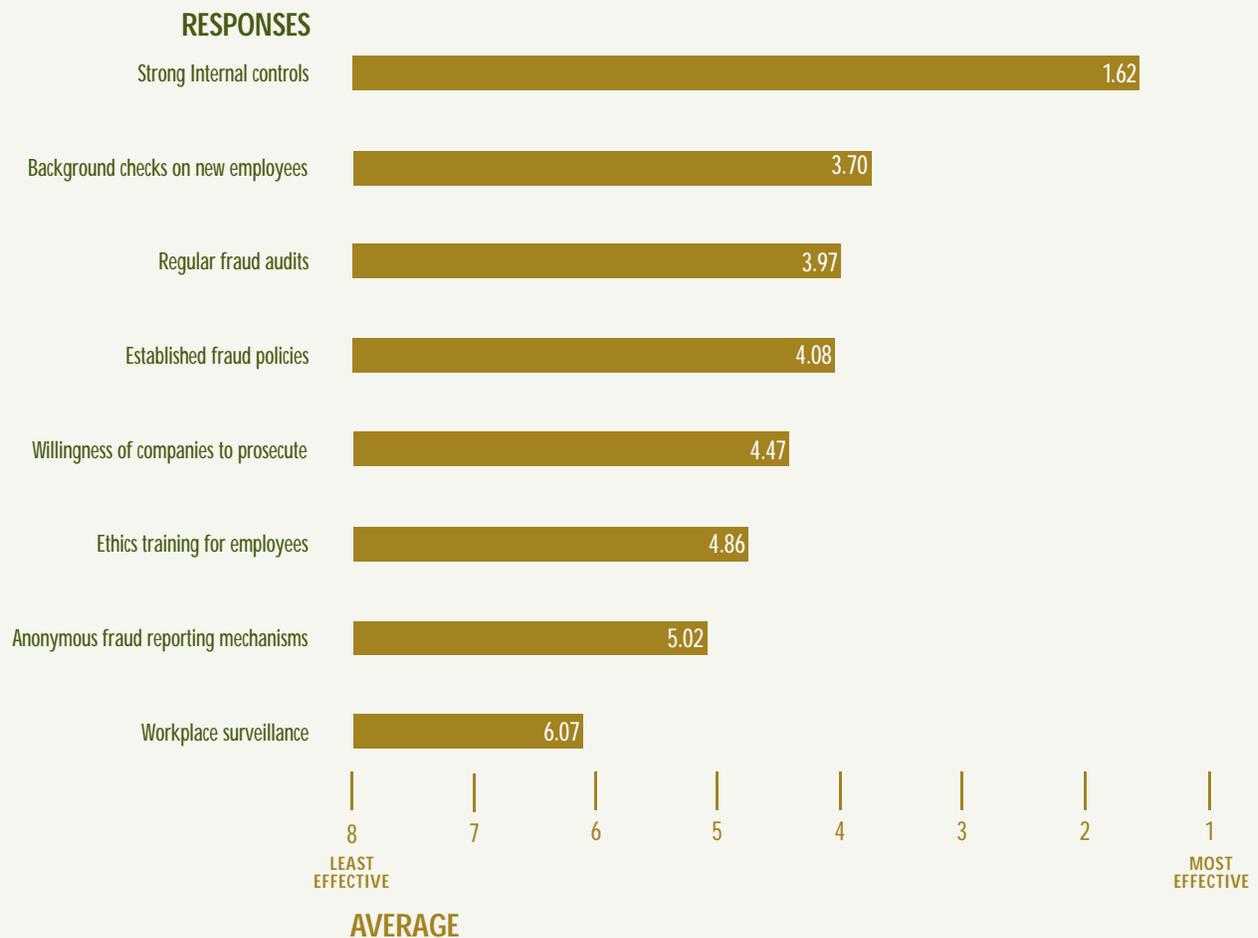
<sup>8</sup> Total exceeds 100% because some participants cited more than one method for initial discovery of the frauds.

## FRAUD PREVENTION MEASURES

Respondents were asked, based on their own expertise, which of the following eight measures are most helpful in preventing fraud against organizations. Each participant ranked the following measures in order of their perceived effectiveness, assigning a "1" to the measure that is most effective, a "2" to the measure that is next most effective, and so on. Thus, the most effective anti-fraud measures would have the lowest average scores.

A strong system of internal controls was viewed as the most effective anti-fraud measure by a wide margin. Detailed background checks on new employees were thought to be the next most important measure, followed by regular fraud audits.

### WHICH MEASURES ARE MOST HELPFUL IN PREVENTING FRAUD?



## THE PERPETRATORS



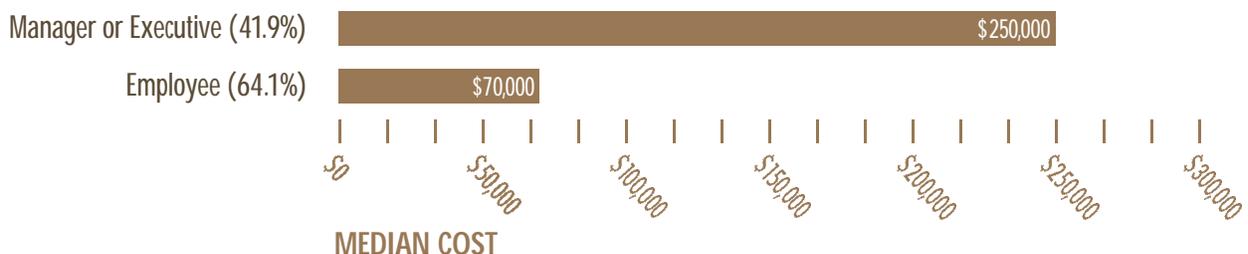
Survey respondents provided information about the perpetrators of the crimes they had investigated. This data, summarized below, helps profile fraud perpetrators and shows how certain factors affect the size of the losses that these perpetrators inflict upon their victims.

## THE EFFECT OF POSITION

One of the strongest indicators of the size of the loss in an occupational fraud scheme is the position that the perpetrator holds within the victim organization. As the following data shows, schemes committed by managers and executives, on average, cause median losses of \$250,000, which was about 3.5 times as high as losses associated with frauds committed by rank and file employees. Such a relationship could be expected, since higher-level employees have a greater degree of control over company assets. This trend was also evident in the *1996 Report*.

## POSITION OF PERPETRATOR

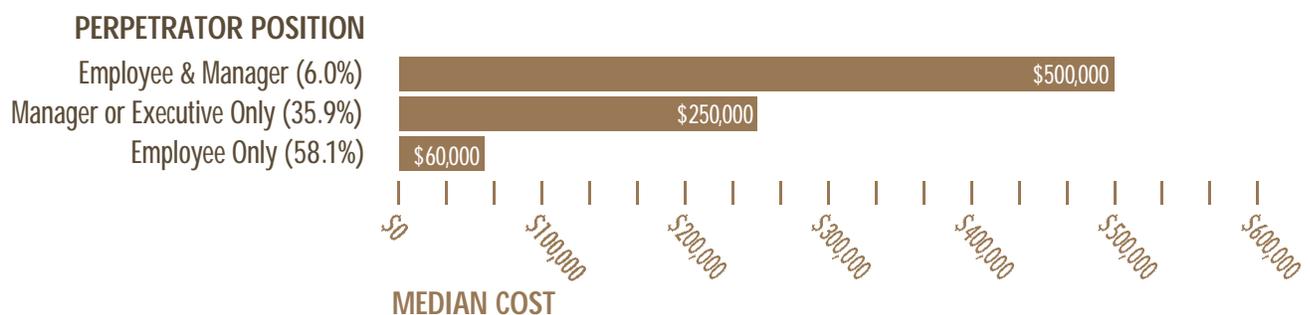
### PERPETRATOR POSITION/ PERCENT OF CASES



Thirty-nine cases in this survey involved some form of collusion between employees and managers. When those cases were segregated, the distinction between schemes committed by 'employees only' versus schemes committed by 'managers only' was even greater. The effect of collusion on the size of fraud also became apparent. In the 39 cases in which employees and managers conspired, the median loss was \$500,000. This was over eight times the median loss caused by schemes in which employees acted alone.

Collusion, especially between managers and employees, can be difficult for organizations to prevent and detect because managers are typically counted upon as a key part of the organizations' control structures; they are expected to identify fraud among employees and to deter fraud through their oversight functions. When managers participate in fraud along with their employees, this serves to disrupt a major component of internal control and creates a much higher level of vulnerability for the victim organization, as the figures below reflect.

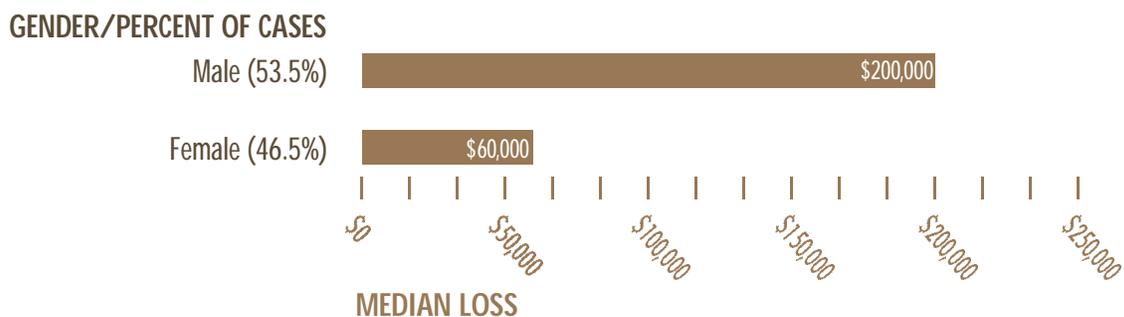
### POSITION OF PERPETRATOR INCLUDING COLLUSION



### THE EFFECT OF GENDER

The following chart reflects the relative frequency and median losses for males and females. Although the number of schemes committed by the two sexes was roughly the same, losses from schemes committed by males were more than three times as high as the losses caused by females. We conclude that the link between gender and loss is reflective of the "glass ceiling" phenomenon. Losses are strongly related to the perpetrator's position, and in many organizations the vast majority of managerial and executive positions are still held by males.

### GENDER OF PERPETRATOR



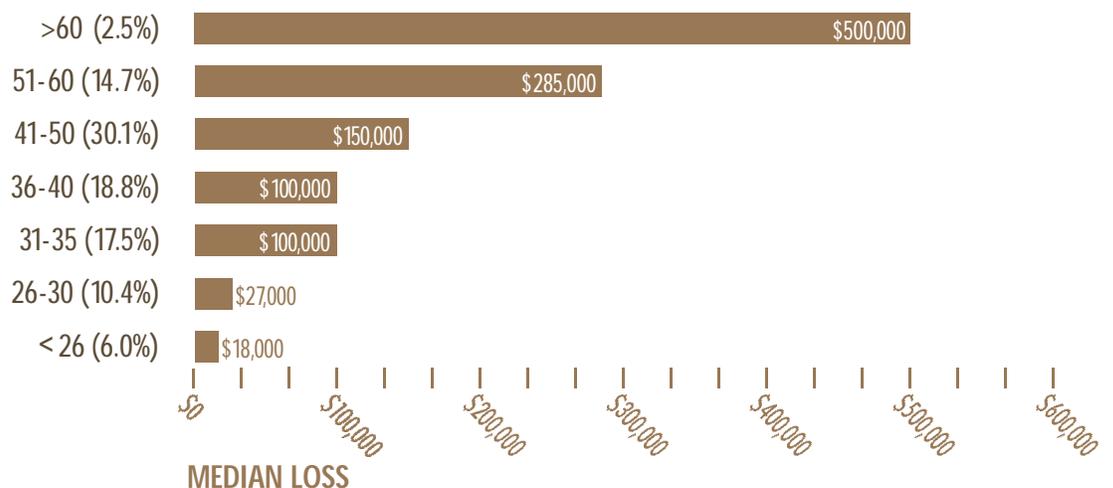
## THE EFFECT OF AGE

There was a direct correlation between age and median loss; as perpetrators got older their schemes got more costly. Median losses for the oldest employees (those older than 60) were \$500,000, which was 27 times higher than losses caused by employees under 26 years of age. As with gender, however, we postulate that age is a secondary factor with regard to losses; the primary factor being that older employees tend to occupy more senior positions with greater access to assets.

Although some studies have suggested that younger employees are more likely to commit occupational crimes, the data in this study did not support that contention. Only six percent of the frauds in this study were committed by individuals below the age of 26. Meanwhile, two-thirds of the frauds were committed by persons over the age of 35, and nearly half of all schemes were committed by individuals between the ages of 36 and 50.

## AGE OF PERPETRATOR

### SCHEME TYPE/PERCENT OF CASES



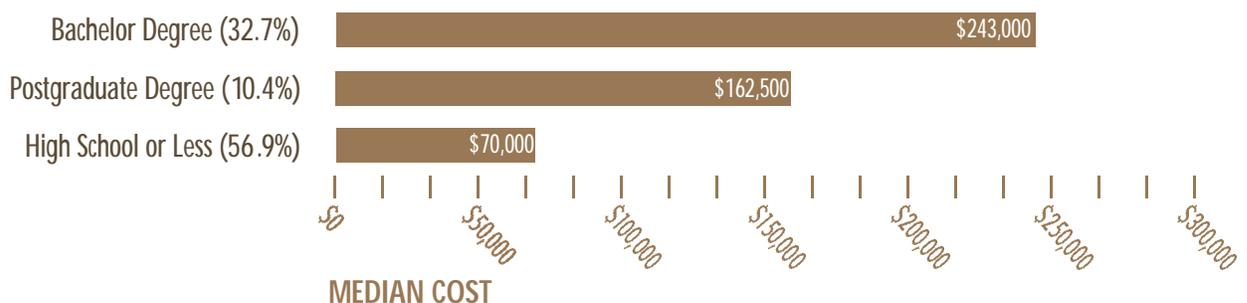
## THE EFFECT OF EDUCATION

In general, those with higher levels of education tend to have higher positions in an organization and greater access to assets. As with age and gender, it would appear the link between education and loss is mainly a function of the employee's position in the organization. This was borne out by the *1996 Report*.

Losses caused by perpetrators who had college degrees were about 3.5 times as high as losses caused by perpetrators with only high school diplomas. However, the median loss for perpetrators with postgraduate degrees was approximately \$80,000 less than the median loss for those with only undergraduate degrees. This contradicts data from the *1996 Report*, which showed losses continuing to rise as the perpetrator's education level increased.

## LOSS BY EDUCATION

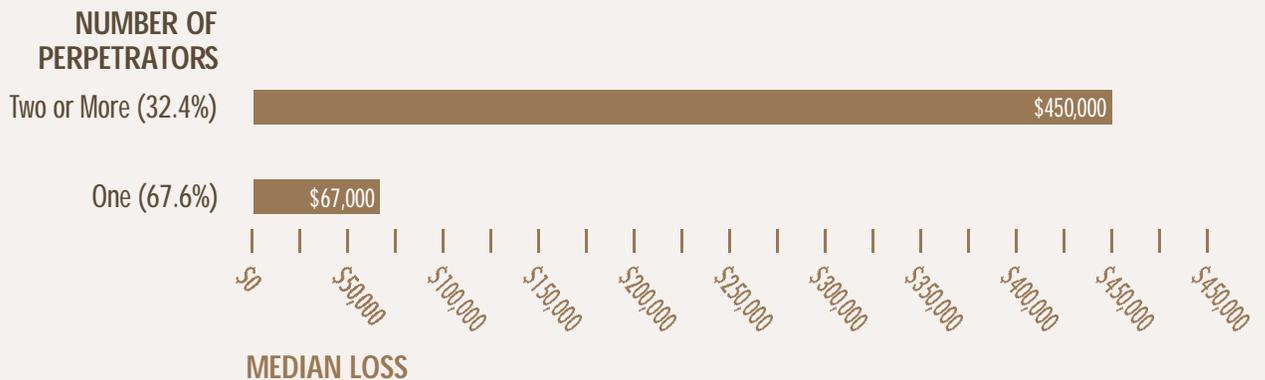
### LEVEL OF EDUCATION/ PERCENT OF CASES



## THE EFFECT OF COLLUSION

As noted above, the cost of occupational fraud tends to rise when multiple parties act in collusion. The following chart shows the median cost of fraud based on the number of perpetrators, regardless of position<sup>9</sup>. While it was much more common for a fraud to be committed by a single perpetrator (68% of cases), the median loss in schemes with multiple perpetrators was \$450,000, which was almost seven times higher than the losses caused by perpetrators who acted alone.

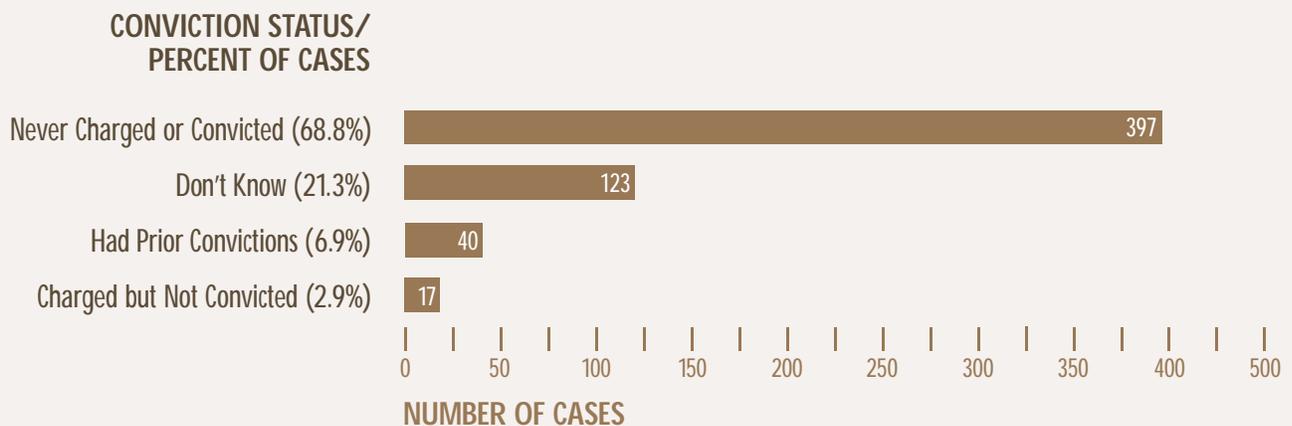
### LOSS BY NUMBER OF PERPETRATORS



## CRIMINAL HISTORY OF PERPETRATORS

The following chart shows that only about seven percent of occupational fraud perpetrators were known to have been convicted for a previous crime, and only another three percent were known to have been previously charged for a fraud-related offense. This is consistent with other studies that have shown most people who commit fraud are first-time offenders.

### CRIMINAL HISTORY OF PERPETRATOR



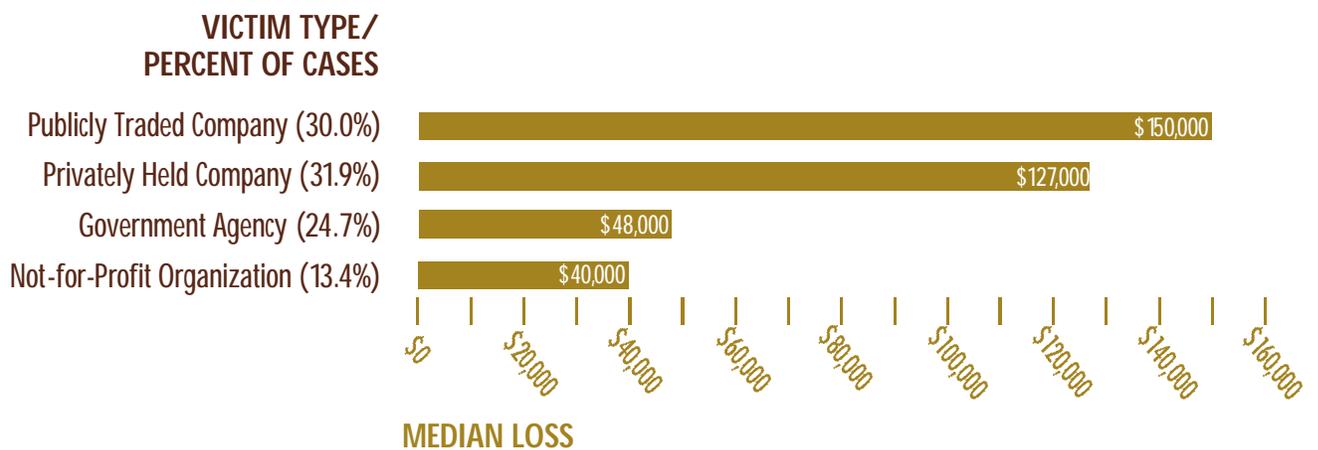
<sup>9</sup> Whereas in the chart on page 14 we were only looking at collusion between managers and employees, in this chart we are viewing the effects of collusion between any two parties. This not only includes purely internal collusion, but also schemes in which an employee or manager conspires with an outsider such as a vendor or a customer.

## THE VICTIMS

The victims of occupational fraud are the organizations that employ the fraud perpetrators and suffer losses as a result of these crimes. The CFEs who participated in this study provided information on the size and type of organizations that were victimized, and on the anti-fraud measures that those organizations had in place before and after the frauds took place.

The frauds were distributed fairly evenly across four sectors: government agencies, publicly traded companies, privately held companies, and not-for-profit organizations. The largest median losses occurred in public companies, while the smallest took place in non-profits and governmental agencies.

## LOSS BY ORGANIZATION TYPE



## LOSSES BY SIZE

The smallest organizations in this study (100 employees or less) actually suffered higher median losses per scheme than did the largest organizations (10,000 employees or more). This data was consistent with the *1996 Report*.

## LOSS BY NUMBER OF EMPLOYEES

### NUMBER OF EMPLOYEES/ PERCENT OF CASES



There appear to be two key factors that contribute to the large losses suffered by small companies. First, organizations with small staffs often lack basic accounting controls. Anecdotal evidence suggests that it is not at all uncommon for a small organization to have a single employee who writes and signs checks, reconciles the bank statement, and keeps the company's books. In situations where control of an organization's finances is consolidated in a single individual, occupational fraud is easy to commit and conceal.

The second reason we conclude that small companies suffer large median losses is due to the level of trust that tends to exist between co-workers within small organizations. In an atmosphere where employees and management know each other well on a personal basis – as is often the case in small businesses – they can be less alert to the possibility of dishonesty.

## ANTI-FRAUD MEASURES

Certified fraud examiners were asked about four basic anti-fraud measures: background checks, anonymous reporting mechanisms (such as hotlines), internal audit departments, and independent audits by CPAs. This study showed that the presence of each one of these anti-fraud measures had a noticeable impact on the size of the loss suffered by the victim organization. The greatest reduction in loss was associated with anonymous reporting mechanisms, while the next largest was associated with internal audit.

As reflected on page 11, occupational fraud was most commonly detected by a tip from an employee, customer, vendor, or an anonymous source. The presence of an anonymous reporting mechanism facilitates the reporting of wrongdoing and seems to have a recognizable effect in limiting fraud losses.

Other than by accident, the next most common method of initial discovery was through internal audit. If internal audit is effective in detecting fraud, then the presence of an internal audit department would be expected to reduce the median loss of fraud schemes. That appeared to be the case in this study; organizations that lacked an internal audit department suffered median losses of \$153,000, as opposed to the \$87,500 median loss in organizations that had an internal audit department.

In addition to its role in detecting fraud, we believe that the presence of an internal audit department has a deterrent effect on occupational fraud; employees who know auditors are present and looking for fraud are less likely to commit fraud because of a greater perceived likelihood that they will be caught.

## THE IMPACT OF ANTI-FRAUD MEASURES

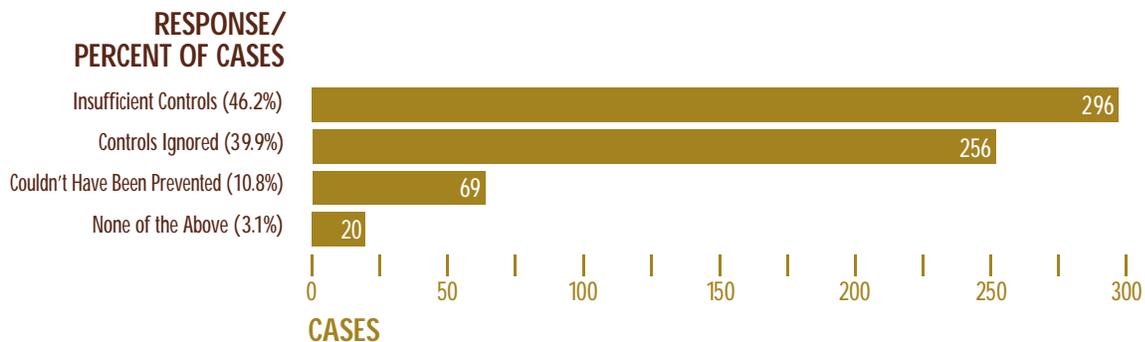
Anti-Fraud Measure	Number of Cases	Percent of Cases	Median Loss
Background Checks?			
Yes	256	47.9	\$90,000
No	279	52.1	\$130,000
Anonymous Reporting Mechanism?			
Yes	210	35.2	\$77,500
No	386	64.8	\$150,000
Internal Audit/Fraud Exam?			
Yes	354	57.7	\$87,500
No	259	42.3	\$153,000
External Audits?			
Yes	437	73.0	\$100,000
No	162	27.0	\$140,000

Understanding that most organizations have at least a basic internal control structure, while also recognizing that most organizations at one time or another fall victim to occupational fraud, the study sought information about the relationship between the fraud schemes and the victims' internal controls. Do fraud schemes succeed because of a lack of controls, or do they succeed because controls which could have prevented the fraud are ignored?

Respondents were given four options:

1. The victim lacked sufficient controls to prevent the fraud
2. The victim had sufficient controls, but they were ignored by employees and/or management
3. The scheme could not have been prevented by standard internal controls
4. None of the above

## RELATIONSHIP OF FRAUD AND VICTIM CONTROLS



There was a fairly even split between organizations with insufficient controls and organizations in which controls that could have prevented fraud were ignored. In about 11% of the cases, respondents judged that the scheme could not have been prevented by standard internal controls.

## POST-FRAUD REACTIONS

As the previous chart shows, in approximately 86% of the cases the victim was either deemed to have insufficient controls or to have allowed its controls to be ignored by its employees and/or management. Both of these problems ought to be correctable, so respondents were asked if they believed that the victims in their cases had taken sufficient steps to protect themselves from future schemes. In over a quarter of the cases, respondents felt that the victim had failed to remedy the problems that left it vulnerable to fraud in the first place.

### HAS THE VICTIM TAKEN ADEQUATE STEPS TO PREVENT FUTURE FRAUDS?

ADEQUATE PREVENTION TAKEN/  
PERCENT OF CASES

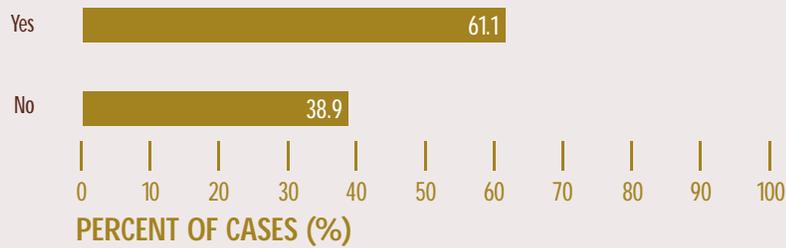


## INSURANCE

Many organizations prepare themselves for the possibility of fraud by obtaining insurance against losses. Five hundred and sixty-three respondents answered questions about the victim organizations' insurance coverage. Slightly over 60% of the victim organizations in our study carried insurance to protect them from fraud losses.

### WAS THE VICTIM INSURED?

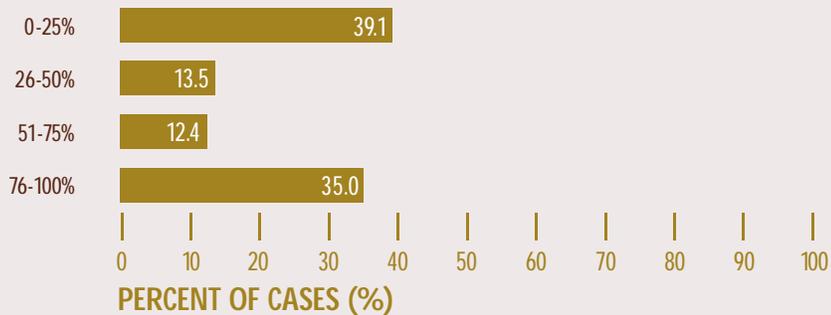
#### RESPONSE CASES



Respondents also provided information about the percentage of losses the victim organizations were able to recover through their insurance.

### INSURANCE RECOVERY FOR FRAUD LOSSES

#### RESPONSE CASES



## CASE RESULTS



Respondents answered questions about how the victim organizations dealt with the perpetrators of these schemes; specifically, did they initiate any sort of legal action against the perpetrators?

### CRIMINAL REFERRALS

Anecdotal evidence suggests that victim organizations rarely attempt to prosecute dishonest employees, but that contention was not borne out in this study. Of the 650 CFEs who responded to questions on criminal referrals, approximately 75% said that the victim organization referred its case to law enforcement.

### WAS THE CASE REFERRED TO LAW ENFORCEMENT?

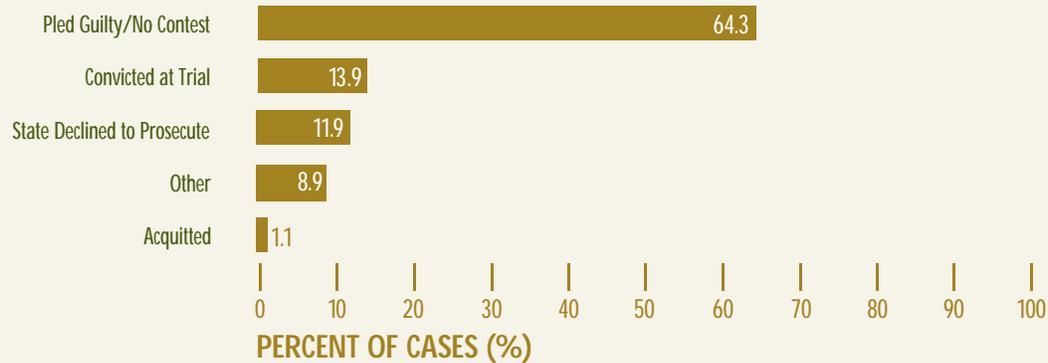
REFERRED TO LAW ENFORCEMENT/  
PERCENT OF CASES



Among the 490 cases that were referred, 462 responses were received about the outcome of the case. In over 75% of these cases, the perpetrator was convicted, either through a plea bargain (64%) or at trial (14%). Among cases that did go to trial, the state scored 64 convictions versus only five acquittals for the defendants. In approximately 12% of the cases the state declined to prosecute the case.

## RESULTS OF CRIMINAL CASES

### RESPONSE CASES



## CIVIL SUITS

Civil suits were much less common than criminal referrals. This is not surprising given the time and expense that can be required of the victim in a civil action. The cases that did lead to civil suits tended to involve very large losses.

## CIVIL SUIT FILED?

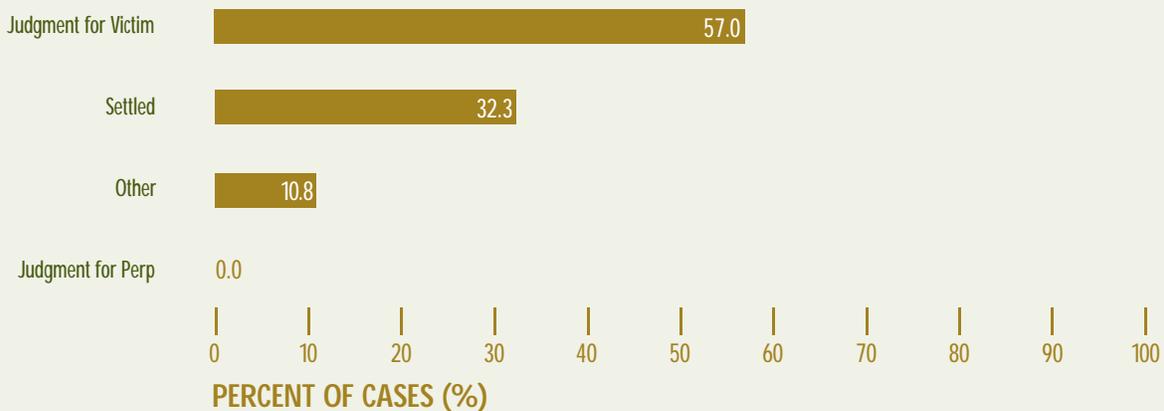
### CIVIL SUIT/ PERCENT OF CASES



One hundred-and-eight cases in the study involved a civil suit against the perpetrator. In 93 of these cases, the CFE was able to provide information about the outcome of the lawsuit. As with criminal referrals, the perpetrators did not have a very good record of success in civil actions. In cases that went to jury verdict, judgment was rendered in favor of the victim 53 times, while there were no cases in which a civil judgment was rendered in favor of the perpetrator. Approximately one-third of the cases settled.

## RESULTS OF CIVIL CASES

### RESPONSE CASES



Respondents were asked whether they thought the punishment (criminal, civil, or other) received by the perpetrator in their case was sufficient. The majority did not believe that the punishment was severe enough.

## SUFFICIENT PUNISHMENT?

### PUNISHMENT WAS/ PERCENT OF CASES

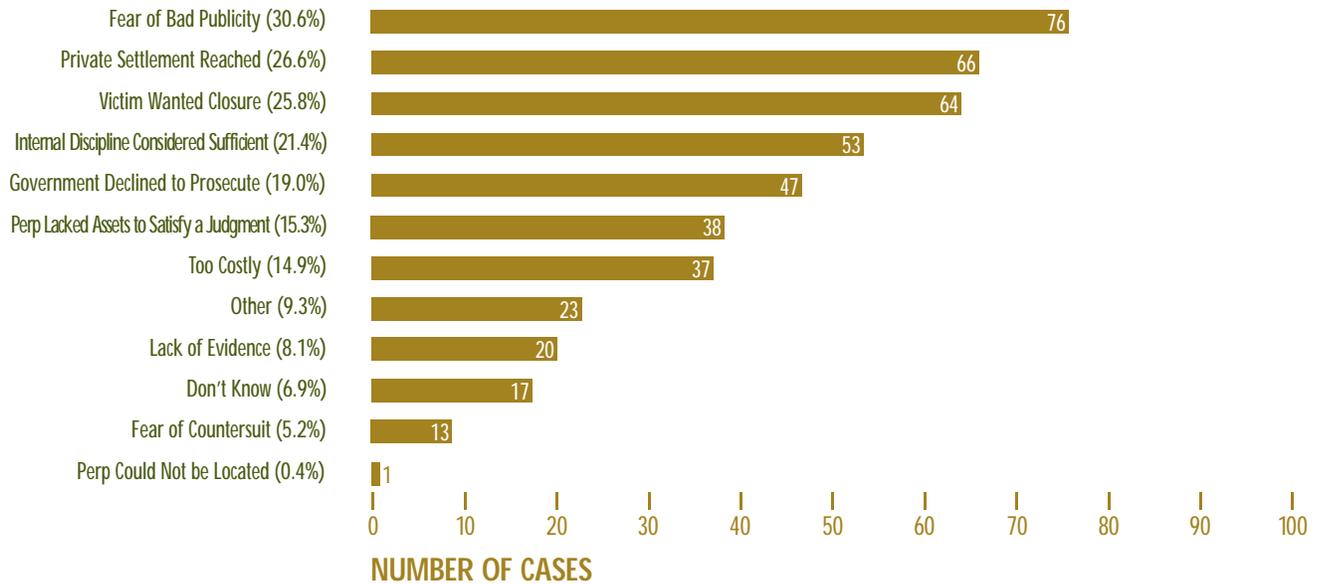


## NO LEGAL ACTION

In cases in which the victim took no legal action against the offender, CFEs were asked why this decision was made. Respondents were presented with the following list of commonly cited reasons. Although no single reason was predominant, fear of bad publicity, the fact that a private settlement had been reached, and the victim's desire for closure were all cited in over 25% of the cases where victims declined to take legal action.

### WHY NO LEGAL ACTION?

#### REASONS/PERCENT OF CASES<sup>10</sup>

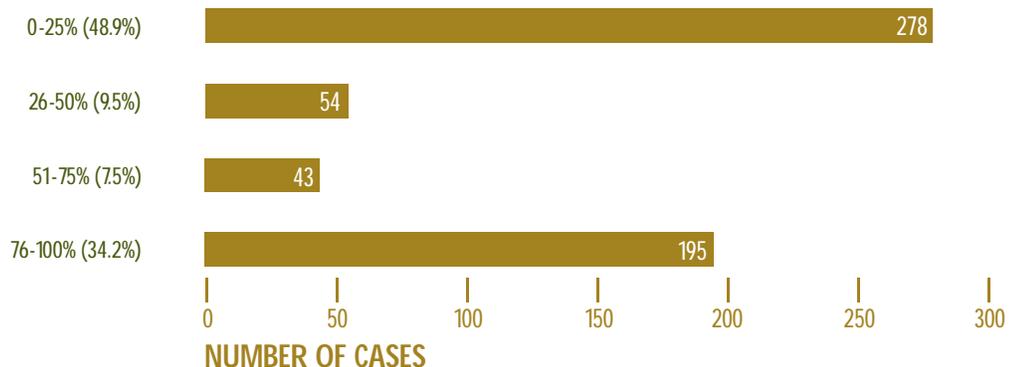


## RECOVERY OF LOSSES

The victim organizations' insurance recovery for fraud losses was illustrated on page 21. The data in the following chart represents all organizations' recovery efforts through *all methods*, including restitution, civil judgment, and private settlement, in addition to insurance.

### RECOVERY OF VICTIM'S LOSSES

#### AMOUNT RECOVERED/ PERCENT OF CASES



<sup>10</sup> Total exceeds 100% because several respondents cited more than one reason for declining to take legal action.

## C O N C L U S I O N S



### **OCCUPATIONAL FRAUD AND ABUSE IS A SERIOUS PROBLEM FOR ORGANIZATIONS.**

Although the rate of occupational fraud is difficult to measure, evidence suggests that the problem is vastly underreported. In the cases presented in this study, over half caused losses of at least \$100,000; one in six cases were in excess of \$1 million. Certified fraud examiners estimate that organizations lose about six percent of their revenue to occupational fraud and abuse.

### **SMALL BUSINESSES ARE ESPECIALLY VULNERABLE TO OCCUPATIONAL FRAUD AND ABUSE.**

The data in this study reflects that the median cost of occupational fraud and abuse is inversely proportional to company size. That is, the smaller the company, the greater the median losses. The largest companies are generally at risk to multi-million dollar financial statement manipulations. However, these offenses are relatively rare. Small businesses suffer the greatest losses because of a lack of basic internal control measures.

### **CASH IS THE ASSET MOST FREQUENTLY TARGETED BY DISHONEST EMPLOYEES.**

All enterprises, regardless of type, collect and pay out money. Not only is cash an asset common to all organizations; dishonest employees prefer cash because it has a defined value, and because it is easily transported and converted. Organizations are vulnerable when cash is collected and when it is disbursed. Proper oversight of the revenue and disbursement cycles is therefore essential in controlling cash frauds.

### **MOST OCCUPATIONAL FRAUDS ARE ONGOING.**

The data in this report reflects that the median length of occupational frauds — from inception to detection — is about 18 months. Most employees who start committing fraud will continue to do so until there is some compelling reason to quit; their activities are either discovered or the employees believe that continuing the frauds will result in their discovery. As a result, organizations should allocate adequate resources to deterring fraud.

### **THE MOST COSTLY FRAUDS ARE COMMITTED BY WELL-EDUCATED SENIOR MALE EXECUTIVES.**

Frauds are crimes of opportunity. In organizations, the higher the rank of the employee, the more assets he or she controls; expensive frauds usually come from the boardroom, not the mailroom. Rank in an organization is normally dependent on three factors: age, sex, and education. Older employees tend to hold higher-ranking positions than their younger counterparts. Males generally hold more senior positions than females. College-educated employees normally have higher positions than high school graduates.

### **INTERNAL CONTROLS ARE A DETERRENT TO OCCUPATIONAL FRAUD.**

Larger organizations that have adequate internal controls are less vulnerable to occupational fraud. Small businesses, by contrast, often have a single employee responsible for all cash-related functions: receiving and disbursing funds, signing checks, and reconciling bank accounts. In such cases, cash frauds are easy to commit.

The following minimum procedures are recommended for small businesses:

- Do not allow the same employee to keep books, collect funds, write checks, and reconcile the bank account.
- Have the monthly bank statement delivered unopened to the owner, who should review it for unusual transactions such as declining deposits and unfamiliar payees.
- Consider an annual independent review of the cash accounts and bank statements by an anti-fraud specialist.

### **WORKPLACE CONDITIONS AFFECT THE RATE OF FRAUD WITHIN AN ORGANIZATION.**

The attitudes that employees hold toward their organizations is a factor in whether or not they will commit fraud. Employees who feel well treated and adequately compensated are less likely to commit fraud than those who don't. Employees who hold grudges against their employers — whether justified or not — often turn to occupational fraud and abuse for revenge.

### **THE SINGLE MOST EFFECTIVE MEANS OF DETECTING OCCUPATIONAL FRAUD IS THROUGH TIPS AND COMPLAINTS.**

The frauds in this study were most commonly discovered by a tip or complaint from an employee, vendor, customer, or outside source. This is because employees and others are frequently in a position to observe violations of controls, poor ethical standards, or excessive personal spending by the perpetrator. Organizations are encouraged to adopt hotlines or other reporting mechanisms that will permit the reporting of fraud without reprisals.

### **AUDITS AND OTHER ANTI-FRAUD MEASURES ARE EFFECTIVE IN REDUCING THE COST OF OCCUPATIONAL FRAUD AND ABUSE.**

In addition to hotlines and other reporting mechanisms, three measures have been shown to significantly reduce the cost of fraud: background checks on new employees, internal audits, and external audits by independent Certified Public Accountants. Organizations should consider each of these measures as part of a comprehensive fraud deterrence program.

### **EMPLOYEE EDUCATION IS AN IMPORTANT ASPECT OF PREVENTING OCCUPATIONAL FRAUD AND ABUSE.**

Any serious effort to control occupational fraud depends on the employees of an organization. Fraud from within causes the loss of jobs, raises, and profits. Employees who receive regular and recurring training about the detrimental aspects of fraud are more likely to aid in controlling it.

**CERTIFIED FRAUD EXAMINER'S  
CODE OF PROFESSIONAL ETHICS**

**ARTICLE ONE**

A Certified Fraud Examiner shall, at all times, demonstrate a commitment to professionalism and diligence in the performance of his or her duties.

**ARTICLE TWO**

A Certified Fraud Examiner shall not engage in any illegal or unethical conduct, or any activity which would constitute a conflict of interest.

**ARTICLE THREE**

A Certified Fraud Examiner shall, at all times, exhibit the highest level of integrity in the performance of all professional assignments, and will accept only assignments for which there is reasonable expectation that the assignment will be completed with professional competence.

**ARTICLE FOUR**

A Certified Fraud Examiner will comply with the lawful orders of the courts, and will testify to matters truthfully and without bias or prejudice.

**ARTICLE FIVE**

A Certified Fraud Examiner, in conducting examinations, will obtain evidence or other documentation to establish a reasonable basis for any opinion rendered. No opinion shall be expressed regarding the guilt or innocence of any person or party.

**ARTICLE SIX**

A Certified Fraud Examiner shall not reveal any confidential information obtained during a professional engagement without proper authorization.

**ARTICLE SEVEN**

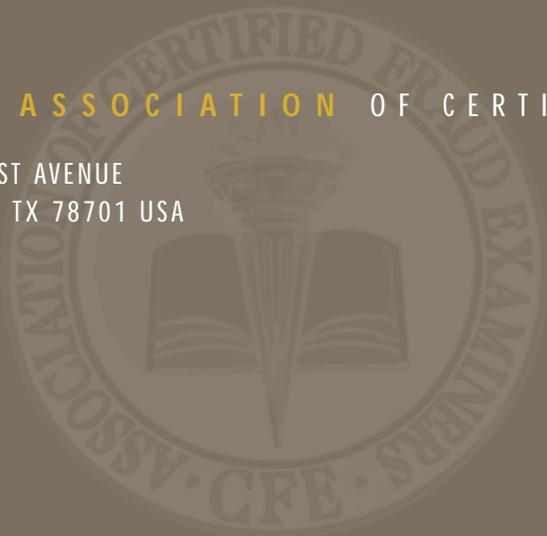
A Certified Fraud Examiner shall reveal all material matters discovered during the course of an examination, which, if omitted, could cause a distortion of the facts.

**ARTICLE EIGHT**

A Certified Fraud Examiner shall continually strive to increase the competence and effectiveness of professional services performed under his or her direction.

THE ASSOCIATION OF CERTIFIED FRAUD EXAMINERS

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