



April 2024

# FRAUD RISK MANAGEMENT

2018-2022 Data Show  
Federal Government  
Loses an Estimated  
\$233 Billion to \$521  
Billion Annually to  
Fraud, Based on  
Various Risk  
Environments

Accessible Version

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# GAO Highlights

View [GAO-24-105833](#). For more information, contact Rebecca Shea at (202) 512-6722 or [shear@gao.gov](mailto:shear@gao.gov) or Jared Smith at (202) 512-2700 or [SmithJB@gao.gov](mailto:SmithJB@gao.gov). Highlights of [GAO-24-105833](#), a report to congressional committees

April 2024

## FRAUD RISK MANAGEMENT

### **2018-2022 Data Show Federal Government Loses an Estimated \$233 Billion to \$521 Billion Annually to Fraud, Based on Various Risk Environments**

#### **Why GAO Did This Study**

All federal programs and operations are at risk of fraud. Therefore, agencies need robust processes in place to prevent, detect, and respond to fraud. While the government obligated almost \$40 trillion from fiscal years 2018 through 2022, no reliable estimates of fraud losses affecting the federal government previously existed.

As part of GAO's work on managing fraud risks, this report (1) estimates the range of total direct annual financial losses from fraud based on 2018-2022 data and (2) identifies opportunities and challenges in fraud estimation to support fraud risk management.

GAO estimated the range of total direct annual financial losses from fraud based on 2018-2022 data using a Monte Carlo simulation model. GAO identified opportunities and challenges through interviews and data collection focused on 12 agencies representing about 90 percent of federal obligations.

#### **What GAO Recommends**






GAO is making two recommendations to OMB—one in collaboration with the Council of the Inspectors General on Integrity and Efficiency (CIGIE) and the other with agency input to improve the availability of fraud-related data. GAO is also making a recommendation to the Department of the Treasury to expand government-wide fraud estimation, in consultation with OMB. OMB generally agreed with the recommendations but disagreed with the estimate. GAO believes the estimate is sound, as discussed in the report. CIGIE stated it would work with OMB to consider how OIGs might improve fraud-related data. Treasury agreed with the recommendation.

#### **What GAO Found**

GAO estimated total direct annual financial losses to the government from fraud to be between \$233 billion and \$521 billion, based on data from fiscal years 2018 through 2022. The range reflects the different risk environments during this period. Ninety percent of the estimated fraud losses fell in this range.

GAO collected data from three key sources to develop the estimate: investigative data, such as the number of cases sent for prosecution and the dollar value of closed cases; Office of Inspector General (OIG) semiannual report information; and confirmed fraud data reported to the Office of Management and Budget (OMB) by agencies. GAO organized these data around three fraud categories—adjudicated, detected potential, and undetected potential. Model design and validation were also informed by 46 fraud studies. OIG and other knowledgeable officials agreed with these categories and subcategories.

**Categories of Fraud-Related Data Used in GAO’s Estimate**

	Adjudicated fraud	Detected potential fraud Potential fraud is detected by the federal government but is not adjudicated as fraud.			Undetected potential fraud
	 Court or other adjudicative body determines facts and guilt or liability for fraud.	<b>Stage 3</b>  Department of Justice and agencies initiate adjudicatory proceedings, but guilt or liability for fraud has not yet been formally determined.	<b>Stage 2</b>  Investigative agencies conduct full investigations, but the federal government has not decided to take judicial or administrative actions to remedy.	<b>Stage 1</b>  Potential fraud is detected by the federal government but has not been accepted for full investigation.	 Potential fraud exists but has not been detected by the federal government.
Office of Inspector General (OIG) investigative information	●	●	●	●	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
OIG semiannual reports	●	●	●	●	
Office of Management and Budget confirmed fraud	●	○	○	○	
Fraud studies	●	●	●	●	

● Source used for cross-government fraud estimate    ○ Source not available for cross-government fraud estimate

Sources: GAO (information); GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

**Accessible Text for Categories of Fraud-Related Data Used in GAO's Estimate**

na	na	<b>Detected potential fraud: Potential fraud is detected by the federal government but is not adjudicated as fraud.</b>	<b>Detected potential fraud: Potential fraud is detected by the federal government but is not adjudicated as fraud.</b>	<b>Detected potential fraud: Potential fraud is detected by the federal government but is not adjudicated as fraud.</b>	na
na	<b>Adjudicated fraud: Court or other adjudicative body determines facts and guilt or liability for fraud.</b>	<b>Stage 3: Department of Justice and agencies initiate adjudicatory proceedings, but guilt or liability for fraud has not yet been formally determined.</b>	<b>Stage 2: Investigative agencies conduct full investigations, but the federal government has not decided to take judicial or administrative actions to remedy.</b>	<b>Stage 1: Potential fraud is detected by the federal government but has not been accepted for full investigation.</b>	<b>Undetected potential fraud: Potential fraud exists but has not been detected by the federal government.</b>
Office of Inspector General (OIG) investigative information	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
OIG semiannual reports	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
Office of Management and Budget confirmed fraud	Source used for cross-government fraud estimate	Source not available for cross-government fraud estimate	Source not available for cross-government fraud estimate	Source not available for cross-government fraud estimate	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
Fraud studies	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate

Sources: GAO (information); GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

GAO's approach is sensitive to the assumptions made about fraud and accounts for data uncertainty and limitations. GAO used a well-established probabilistic method for estimating a range of outcomes under different assumptions and scenarios where there is uncertainty. The estimate does not include fraud loss associated with federal revenue or fraud against federal programs that occurs at the state, local, or tribal level unless federal authorities investigated and reported it. GAO's estimate is in line with other

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estimates of fraud losses from the United Kingdom and Association of Certified Fraud Examiners, among others.

As a first of its kind government-wide estimate of federal dollars lost to fraud, there are known uncertainties associated with the model and underlying data important to interpreting the results. These include caveats related to

- **applying the estimate to agencies or programs.** GAO's model was developed to estimate government-wide federal fraud. The fraud estimate's range represents 3 to 7 percent of average federal obligations. These percentages should not be applied at the agency or program level. While every federal program and operation is at risk of fraud, the level of risk can vary substantially. Controls, growth or shrinkage of budget, and the emergence of new fraud schemes are some reasons the risk level can vary;
- **drawing conclusions about pandemic fraud.** GAO's estimate is based on data from fiscal years 2018 through 2022. The data include time periods and programs with and without pandemic-related spending. Therefore, the estimate includes, but is not limited to, pandemic-related spending fraud. While the upper range of the estimate is associated with higher-risk environments, it is not possible to break out a subset of our government-wide estimate to describe pandemic program fraud;
- **comparing with improper payment estimates.** GAO's estimate is not comparable to improper payment estimates. Improper payment estimates are based on a subset of federal programs, using a methodology not designed to identify fraud. GAO has also consistently reported that the federal government does not know the full extent of improper payments and has long recommended that agencies improve their improper payment reporting. In contrast, GAO's fraud estimate includes all federal programs and operations and is based on fraud-related data. With these differences in scope and data, the upper end of GAO's estimated fraud range exceeded annual improper payment estimates; and
- **assuming the estimate is predictive.** GAO's estimate is not based on a predictive model. Factors such as the amount of emergency spending, the effectiveness of federal fraud risk management, and the nature of new fraud threats could substantially impact the scale of future fraud.

GAO has previously issued Matters for Congressional Consideration and recommendations to improve agencies' program integrity, including fraud risk management. Fraud estimation provides opportunities to improve fraud risk management, according to OIG and agency officials. For example, estimates can demonstrate the scope of the problem, improve oversight prioritization, and help determine the return on investment from fraud risk management activities. While it is not possible to eliminate fraud, with a better understanding of the costs, agencies will be better positioned to manage the risk.

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## How Fraud Estimates Can Improve Fraud Risk Management



### Demonstrate scope of problem

Fraud estimates provide information on the extent of fraud that is needed to effectively detect and prevent wrongdoing. By not understanding the scope of the problem, some may assume that a problem does not exist and, thus, not direct resources to stop fraud from occurring.



### Improve oversight prioritization

Fraud estimates could help prioritize oversight resources. Reliably determining the extent of fraud – both frequency and impacts – in all federal programs could help Congress and agency officials prioritize fraud prevention and detection resources.



### Demonstrate return on investment

Fraud estimates can help demonstrate the return on investment of fraud risk management activities and, thus, help obtain additional funding for oversight of programs with the most need.

Sources: GAO analysis; GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

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## Accessible Text for How Fraud Estimates Can Improve Fraud Risk Management

- **Demonstrate scope of problem:** Fraud estimates provide information on the extent of fraud that is needed to effectively detect and prevent wrongdoing. By not understanding the scope of the problem, some may assume that a problem does not exist and, thus, not direct resources to stop fraud from occurring.
- **Improve oversight prioritization:** Fraud estimates could help prioritize oversight resources. Reliably determining the extent of fraud – both frequency and impacts – in all federal programs could help Congress and agency officials prioritize fraud prevention and detection resources.
- **Demonstrate return on investment:** Fraud estimates can help demonstrate the return on investment of fraud risk management activities and, thus, help obtain additional funding for oversight of programs with the most need.

Sources: GAO analysis; GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

OIG and agency officials noted challenges in producing fraud estimates, such as limited available fraud-related data and use of varying terms and definitions of fraud for recording data. These data gaps and variability result in information that cannot be readily compared or consolidated to determine the extent of fraud across the federal government. Guidance for collecting and reporting fraud-related data is currently limited to OIG semiannual reports and confirmed fraud reported by agencies to OMB, which are not designed to support fraud estimation. With guidance targeted to the purpose of fraud estimation, agencies and OIGs would be better positioned to collect and report data on potential and adjudicated fraud in support of estimation efforts.

OIG and agency officials also noted the utility of agency or program-level estimates compared with government-wide estimates. They further noted the need for expertise and data-analytics capacity to produce estimates. GAO previously reported that agencies identified limitations in expertise, data, and tools as a significant challenge for their fraud risk management efforts. These challenges could also impact agencies' ability to develop effective fraud estimates at a program or agency level. The Department of the Treasury's Office of Payment Integrity (OPI) supports

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agencies facing such challenges. OPI's resources are dedicated to preventing and detecting improper payments through a variety of data-matching and data-analytics services. Therefore, OPI is well positioned—with the expertise, data, and analytic tools—to evaluate and advance metho

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### Abbreviations

ACFE	Association of Certified Fraud Examiners
CFO	Chief Financial Officer
CIGIE	Council of the Inspectors General on Integrity and Efficiency
DOD	Department of Defense
Federal internal control standards	Standards for Internal Control in the Federal Government
Fraud Risk Framework	A Framework for Managing Fraud Risks in Federal Programs
FRDAA	Fraud Reduction and Data Analytics Act of 2015
HHS	Department of Health and Human Services
MAX	Office of Management and Budget's MAX A-11 Data Entry Information System
OIG	Office of Inspector General
OMB	Office of Management and Budget
PIIA	Payment Integrity Information Act of 2019

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April 16, 2024

### Congressional Committees

All federal programs and operations are at risk of fraud. Some individuals or groups will seek to gain through fraud when and wherever there is opportunity. As a result, agencies need robust processes in place to prevent, detect, and respond to fraud.<sup>1</sup> Prior GAO work has found evidence of substantial losses due to fraud in some government programs. While the federal government obligated almost \$40 trillion from fiscal years 2018 through 2022, no reliable estimate has existed on the amount of federal dollars lost to fraud.<sup>2</sup>

One of the many challenges in determining the full extent of fraud is its deceptive nature. Programs can incur losses related to fraud that are never identified, and such losses are difficult to reliably estimate. However, without usable information on the scope of fraud, actions to address it might not be directed at the highest-risk areas or designed to maximize their effectiveness. Reliably determining the extent of fraud in federal programs could help Congress, oversight entities, and agency officials better prioritize prevention, detection, and response resources. By identifying and addressing fraud, such as through targeted actions based on estimations of risk, potential fraudsters may be deterred.

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<sup>1</sup>Fraud involves obtaining a thing of value through willful misrepresentation. Willful misrepresentation can be characterized by making material false statements of fact based on actual knowledge, deliberate ignorance, or reckless disregard of falsity. Program officials are responsible for managing the risk of fraud through activities to prevent, detect, and respond to potential fraud.

<sup>2</sup>Obligations as reported on Office of Management and Budget's MAX A-11 Data Entry System (MAX), a government-wide system used to share information and services among government agencies and to collect and process most of the information required for preparing the President's Budget of the federal government. An obligation is a definite commitment that creates a legal liability on the part of the federal government for the payment of goods and services ordered or received, or a legal duty on the part of the United States that could mature into a legal liability by virtue of actions on the part of the other party beyond the control of the United States. Payment may be made immediately or in the future. An agency incurs an obligation, for example, when it places an order, signs a contract, awards a grant, purchases a service, or takes other actions that require the government to make payments to the public or from one government account to another. GAO, *A Glossary of Terms Used in the Federal Budget Process*, [GAO-05-734SP](#) (Washington, D.C.: Sept. 1, 2005).

We have previously reported that the federal government faces an unsustainable long-term fiscal future.<sup>3</sup> Our projections, as well as those from the Office of Management and Budget (OMB), the Department of the Treasury, and the Congressional Budget Office, all show that current fiscal policy is unsustainable over the long term. Improved efforts to combat fraud, with an emphasis on prevention, can reduce the loss of federal dollars and help improve the federal government's fiscal outlook.

We performed our work under the Comptroller General's authority to conduct evaluations to address issues of broad interest to Congress, such as the extent of fraud affecting the federal government. Our objectives were to (1) estimate the range of total direct annual financial losses from fraud affecting federal programs and operations and (2) identify opportunities and challenges in fraud estimation to support fraud risk management.

For both objectives, we interviewed officials from 12 selected agencies and their respective Offices of Inspector General (OIG).<sup>4</sup> These 12 agencies were selected based on obligation levels for fiscal years 2018 through 2022 and include those with the top 10 obligations for one of the fiscal years. Combined, they represent approximately 90 percent of all government obligations during this time.

We also identified and reviewed 46 fraud measurement and estimation studies developed by U.S. government, and international, academic, and others with subject-matter expertise.<sup>5</sup> We generally focused on the studies published between fiscal years 2013 and 2022. We used these studies to assess estimation and measurement methodologies, the amount of fraud estimated or measured, and challenges in estimating and measuring fraud. As appropriate, we also used the studies to assess the reasonableness of our fraud estimate. Our estimate was in line with fraud

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<sup>3</sup>GAO, *The Nation's Fiscal Health: Road Map Needed to Address Projected Unsustainable Debt Levels*, [GAO-24-106987](#) (Washington, DC: Feb. 15, 2024).

<sup>4</sup>The 12 selected agencies and OIGs are the Department of Defense, Department of Education, Department of Homeland Security, Department of Labor, Department of the Treasury, Department of Health and Human Services, Office of Personnel Management, Social Security Administration, Department of Agriculture, Department of Veterans Affairs, Department of Transportation, and the Small Business Administration.

<sup>5</sup>For the purposes of this report, we define fraud "measure" as a count of detected fraud or fraud-related activities. We define fraud "estimate" as a projection or inference based on fraud or fraud-related measures, assumptions, or analytical techniques, where direct measures are incomplete or unreliable.

estimates and analysis developed by other governments, as well as relevant nongovernmental organizations with fraud expertise.

We also met with subject-matter experts from the Association of Certified Fraud Examiners (ACFE); the Centre for Cybercrime and Economic Crime at the School of Criminology and Criminal Justice at the University of Portsmouth in the United Kingdom; and the creator of the Crime, and Compliance blog, among others.<sup>6</sup> We selected these experts based on our review of fraud measurement and estimation studies and through interviews.

To estimate the range of total direct annual financial losses from fraud, we assessed different methods that could be used to estimate fraud. Given available data and our cross-government scope, we selected a Monte Carlo simulation to develop our estimate. A Monte Carlo simulation is a method that can be used to estimate ranges for events where there is a high degree of uncertainty or for which there are limited data.<sup>7</sup> We chose this approach based on our review of fraud studies, available agency fraud-related reporting data and information, interviews with agency and OIG officials and fraud experts, and knowledge gained through our past work on fraud.

To inform the simulation, we identified and collected relevant fraud-related data and information from fiscal years 2018 through 2022 for the 12 selected agencies. These sources include

- OIG investigative data relating to past and ongoing investigations, including adjudicated cases;
- OIG semiannual reports;<sup>8</sup> and

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<sup>6</sup>During our review, the Centre for Cybercrime and Economic Crime was founded and integrated the Centre for Counter Fraud Studies.

<sup>7</sup>Determining the extent of fraud is challenging due to multiple factors. We have previously reported on several challenges in measuring fraud, which are discussed later in this report.

<sup>8</sup>Under the Inspector General Act of 1978, as amended, federal inspectors general are required to submit semiannual reports to Congress describing the offices' activities and accomplishments during that reporting period. 5 U.S.C. App. § 5.

- confirmed fraud reported by agencies to the OMB's Paymentaccuracy.gov dashboard.<sup>9</sup>

To collect OIG investigative data, we developed a data collection instrument, which enabled us to consistently request and gather detailed, fraud-related data and information from the 12 selected OIGs. We pretested this data collection instrument with three OIGs prior to collecting these data from all 12 selected OIGs.

We also collected and analyzed information reported in semiannual reports for the 12 selected agencies for fiscal years 2018 through 2022. For example, we collected information on cases referred for prosecution, investigative reports issued, and hotline reporting statistics.

We spoke with OIG officials knowledgeable about their investigative data and semiannual reports and reviewed any relevant documentation they provided to identify limitations with the data.

We collected and analyzed confirmed fraud data and asked knowledgeable agency and OIG officials about the data. We assessed the reliability of all data used in our analysis and determined they were sufficiently reliable for our purposes.

Using these data, we developed an estimate of fraud affecting the federal government. Based on the data available and known uncertainties in estimating fraud, we developed our estimate as a range.

We assessed the reasonableness of our estimate by comparing it with applicable fraud estimates identified in our review of 46 fraud measurement and estimation studies. While these studies utilized different methodologies or estimated fraud in a variety of environments, our estimate was in line with those estimates.

To identify ways that enhanced fraud estimation could potentially improve fraud risk management, we evaluated these data and information using relevant leading practices in GAO's A Framework for Managing Fraud Risks in Federal Programs (Fraud Risk Framework), specifically, leading

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<sup>9</sup>OMB requires agencies to provide certain information about improper payments and confirmed fraud. OMB publishes this information in a dashboard on Paymentaccuracy.gov.

practices related to assessing fraud.<sup>10</sup> We also evaluated existing fraud-related data and information collection against the principles in Standards for Internal Control in the Federal Government (federal internal control standards).<sup>11</sup> Specifically, we determined that the information and communication component of internal control was significant to the objective, along with the underlying principles that management should use quality information to achieve the entity's objectives.

For additional information on our methodology, including a detailed discussion of the steps taken to develop our fraud estimate and associated caveats, see appendix I.

We conducted this performance audit from February 2022 to April 2024 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings based on our audit objectives.

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## Background

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### Fraud Against the Federal Government

Our work has shown that fraud can result in financial and nonfinancial losses to federal programs and operations. In 2022, we issued the Antifraud Resource, a web-based tool that provides users with tools to help learn more about fraud schemes that affect the federal government, their underlying concepts, and how to combat such fraud.<sup>12</sup> The Antifraud Resource provides a detailed discussion of the characteristics of fraud

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<sup>10</sup>GAO, *A Framework for Managing Fraud Risks in Federal Programs*, [GAO-15-593SP](#) (Washington, D.C.: July 28, 2015).

<sup>11</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

<sup>12</sup>GAO, "The GAO Antifraud Resource" (Washington, D.C.: Jan. 10, 2022), [https://gaoinnovations.gov/antifraud\\_resource/](https://gaoinnovations.gov/antifraud_resource/).

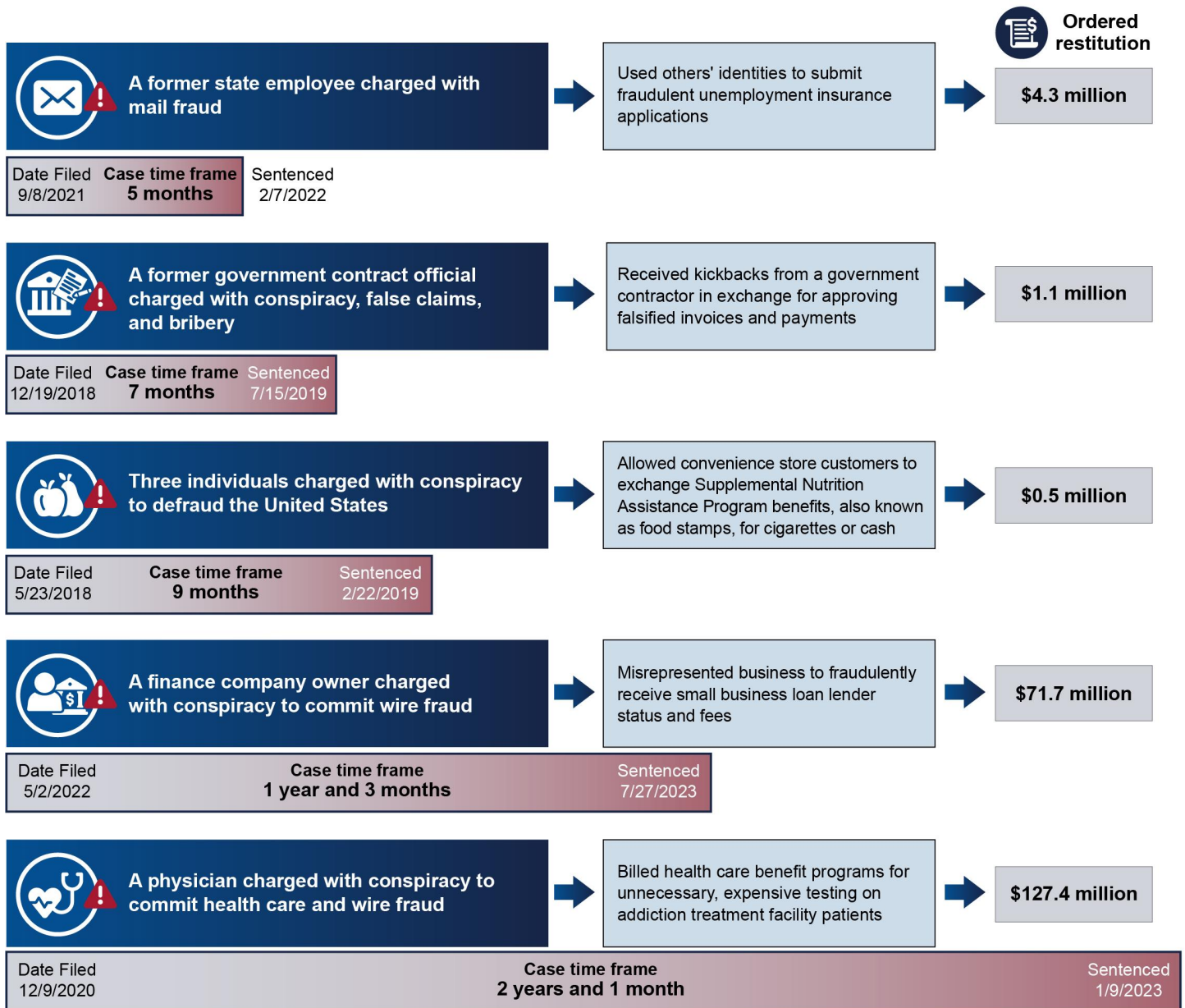
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that affect the federal government and notes that fraud can impact many different federal programs and operations.

The Antifraud Resource also provides numerous case examples of fraud that impacts federal programs and operations. These examples include cases that resulted in a financial loss to the federal government, as well as those that resulted in nonfinancial losses. Nonfinancial losses can include things such as negative impacts to the affected program's ability to provide beneficiary services, or reputational loss. For illustrative examples of federal fraud cases, see figure 1. As shown in the figure, it can take months, and even years, from the date fraud-related charges are filed against a suspected fraudster until the case is adjudicated.



**Figure 1: Illustrative Examples of Adjudicated Fraud Perpetrated Against the Federal Government**



Sources: GAO analysis of information from; the Department of Justice and U.S. courts; Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

**Accessible Text for Figure 1: Illustrative Examples of Adjudicated Fraud Perpetrated Against the Federal Government**

Category one	Category two	Category three	Ordered restitution
A former state employee charged with mail fraud	Used others' identities to submit fraudulent unemployment insurance applications	Case time frame: 5 months Date Filed: 9/8/2021 Sentenced: 2/7/2022	\$4.3 million
A former government contract official charged with conspiracy, false claims, and bribery	Received kickbacks from a government contractor in exchange for approving falsified invoices and payments	Case time frame: 7 months Date filed: 12/19/2018 Sentenced: 7/15/2019	\$1.1 million
Three individuals charged with conspiracy to defraud the United States	Allowed convenience store customers to exchange Supplemental Nutrition Assistance Program benefits, also known as food stamps, for cigarettes or cash	Case time frame: 9 months Date Filed: 5/23/2018 Sentenced: 2/22/2019	\$0.5 million
A finance company owner charged with conspiracy to commit wire fraud	Misrepresented business to fraudulently receive small business loan lender status and fees	Case time frame: 1 year and 3 months Date Filed: 5/2/2022 Sentenced: 7/27/2023	\$71.7 million
A physician charged with conspiracy to commit health care and wire fraud	Billed Medicare for fraudulent tests and treatments at addiction treatment facilities	Case time frame: 2 years and 5 months Date Filed: 12/9/2020 Sentenced: 1/9/2023	\$127.4 million

Sources: GAO analysis of information from ; the Department of Justice and U.S. courts; Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

Note: Restitution is ordered to reimburse victims for financial losses, making it indicative of at least a portion of the federal financial loss. Restitution does not, however, include or reflect agency resources spent investigating and prosecuting fraud.

**Existing Information on the Extent of Fraud and Potential Fraud in the Federal Government**

Various federal entities report data that provide insights into the extent of federal fraud. For example:

- **The Council of the Inspectors General on Integrity and Efficiency (CIGIE):** annually reports its accomplishments to the President and Congress.<sup>13</sup> For fiscal years 2018 through 2022, CIGIE reported between \$6.6 billion and \$19.7 billion in potential savings from investigative recoveries and receivables. This amount includes ordered restitution, fines, and settlements from resolved criminal and

<sup>13</sup>CIGIE was established as an independent entity within the executive branch by The Inspector General Reform Act of 2008, Pub. L. No. 110-409. Among other things, CIGIE is to increase the professionalism and effectiveness of personnel by developing policies, standards, and approaches to aid in the establishment of a well-trained and highly skilled workforce in the Offices of the Inspectors General.

civil cases. However, this amount also includes potential crimes beyond fraud, such as theft and the mismanagement of government funds. This amount also excludes undetected fraud, as well as potential fraud detected by the agency that has not resulted in investigative action.

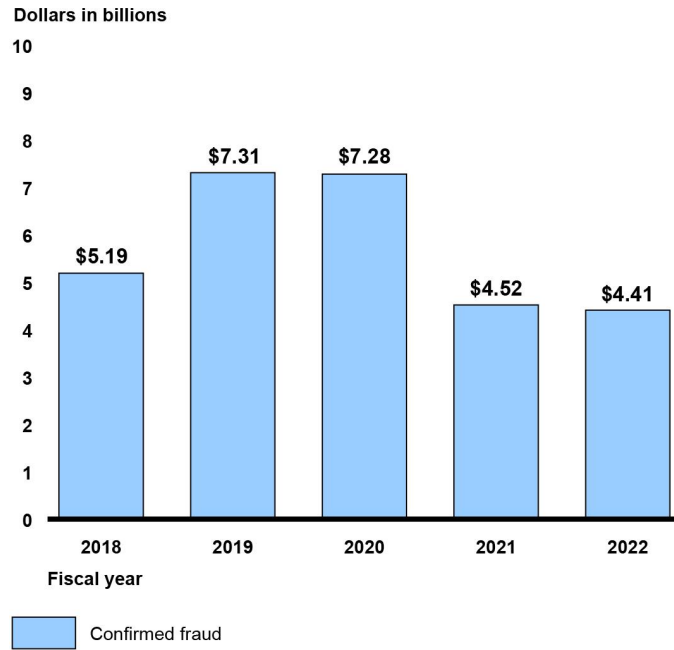
- **The Office of Management and Budget:** annually reports federal government confirmed fraud data on its website, [Paymentaccuracy.gov](https://www.paymentaccuracy.gov). According to OMB, confirmed fraud is the amount determined to be fraudulent through the judicial or adjudication process.<sup>14</sup> It represents only those fraud cases that have been confirmed by a court or other adjudicative forum and does not represent anything settled out of court with or without admission of guilt.<sup>15</sup> For fiscal years 2018 through 2022, OMB reported between \$4.41 billion and \$7.31 billion annually in confirmed fraud, as shown in figure 2.

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<sup>14</sup>Per OMB guidance, confirmed fraud does not include transactions determined by management to be anomalous or indicative of potential fraud that were referred to the agency's OIG or the Department of Justice, unless the appropriate judicial or adjudicative process has made the determination.

<sup>15</sup>[Paymentaccuracy.gov](https://www.paymentaccuracy.gov) reporting on confirmed fraud states that it only includes fraud confirmed by a court.

**Figure 2: Confirmed Fraud, as Reported by the Office of Management and Budget for Fiscal Years 2018 through 2022**



Source: GAO analysis of Office of Management and Budget data from Paymentaccuracy.gov. | GAO-24-105833

**Accessible Data for Figure 2: Confirmed Fraud, as Reported by the Office of Management and Budget for Fiscal Years 2018 through 2022**

Fiscal year	Confirmed fraud (dollars in billions)
2018	\$5.19
2019	\$7.31
2020	\$7.28
2021	\$4.52
2022	\$4.41

Source: GAO analysis of Office of Management and Budget data from Paymentaccuracy.gov. | GAO-24-105833

According to OMB’s definition used on PaymentAccuracy.gov, confirmed fraud does not include those cases resolved through settlement or an administrative process. Therefore, for example, it would not reflect a contractor that was debarred from obtaining government contracts for a certain period based on determinations made by an agency administrative body. Further, it does not include settlements, with or without an admission of wrongdoing, that may be significant. In addition, it does not count amounts recouped under the False Claims Act. According to the Department of Justice, in fiscal year 2022 the government was

party to 351 False Claims Act settlements and judgments, in an amount that exceeded \$2 billion.<sup>16</sup>

In addition to these issues, limitations with the reported confirmed fraud numbers have also been identified. For example, the Department of Defense (DOD) OIG reported at least \$1.1 billion in confirmed fraud to CIGIE in fiscal year 2021, but DOD reported \$0 in confirmed fraud to OMB for the same period.<sup>17</sup> Because of these limitations on the completeness and quality of OMB's confirmed fraud data, it is not sufficient information for fraud estimation.

- **The Department of Justice:** issues press releases for some federal fraud cases and may include information such as the charges and outcome of a trial. For fiscal years 2018 through 2022, the Department of Justice annually issued around 1,300 press releases. However, these press releases include cases unrelated to federal fraud, and the Department of Justice does not issue a press release for every case.





Some agencies and OIGs have also issued studies that examine the extent of identified potential fraud in a limited number of programs, including studies in response to concerns about fraud impacting pandemic spending (see fig. 3).

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<sup>16</sup>31 U.S.C. §§ 3729 – 3733. The False Claims Act provides that any person who knowingly submits, or causes to submit, false claims to the government is liable for three times the government's damages, plus a penalty.

<sup>17</sup>Department of Defense, Office of Inspector General, *Audit of the Department of Defense's FY 2021 Compliance With Payment Integrity Information Act Requirements*, DODIG-2022-108 (Alexandria, VA: June 28, 2022). In the report, DOD personnel noted that the difference was a result of a change in reporting requirements and certain data limitations that had since been resolved.

**Figure 3: Examples of Analytic Studies of Potential Fraud in Select Federal Programs**

 <b>Agency</b>	 <b>Study topic</b>	 <b>Approach</b>	 <b>Finding</b>
<b>Department of Labor Office of Inspector General</b>	Identification of pandemic unemployment insurance fraud	Data analysis to identify indicators indicative of fraud	\$45.6 billion in potentially fraudulent unemployment insurance benefits paid from March 2020 to April 2022
<b>Small Business Administration</b>	Overview of pandemic-related integrity efforts and analysis of potential fraud	Use of automated screening as well as additional review to identify loans with potential fraud and investigative referral	\$36 billion of pandemic relief emergency program funds that were likely obtained fraudulently from 2020 to 2022
<b>Small Business Administration Office of Inspector General</b>	Identification of pandemic-related business loan fraud	Applied a variety of analytical methods to determine potential fraud	\$200 billion in potentially fraudulent pandemic-related business loans as of May 2023
<b>Department of Agriculture</b>	Supplemental Nutrition Assistance Program benefit trafficking estimate	Conducted data analysis of retailers to identify likely fraudulent vendors and trafficked benefits	\$1.02 billion in trafficked benefits from 2015 to 2017 annually

Sources: GAO analysis of fraud analytic studies; GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

**Accessible Text for Figure 3: Examples of Analytic Studies of Potential Fraud in Select Federal Programs**

<b>Agency</b>	<b>Study topic</b>	<b>Approach</b>	<b>Finding</b>
Department of Labor Office of Inspector General	Identification of pandemic unemployment insurance fraud	Data analysis to identify indicators indicative of fraud	\$45.6 billion in potentially fraudulent unemployment insurance benefits paid from March 2020 to April 2022
Small Business Administration	Overview of pandemic-related integrity efforts and analysis of potential fraud	Use of automated screening as well as additional review to identify loans with potential fraud and investigative referral	\$36 billion of pandemic relief emergency program funds that were likely obtained fraudulently from 2020 to 2022
Small Business Administration Office of Inspector General	Identification of pandemic-related business loan fraud	Applied a variety of analytical methods to determine potential fraud	\$200 billion in potentially fraudulent pandemic-related business loans as of May 2023

Agency	Study topic	Approach	Finding
Department of Agriculture	Supplemental Nutrition Assistance Program Benefit trafficking estimate	Conducted data analysis of retailers to identify likely fraudulent vendors and trafficked benefits	\$1.02 billion in trafficked benefits from 2015 to 2017 annually

Sources: GAO analysis of fraud analytic studies; GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

Note: Reports cited: Department of Labor, Office of Inspector General, Alert Memorandum: Potentially Fraudulent Unemployment Insurance Payments in High-Risk Areas Increased to \$45.6 Billion, Report No. 19-22-005-03-315 (Washington, D.C.: Sept. 21, 2022); Small Business Administration, Protecting the Integrity of the Pandemic Relief Programs: SBA’s Actions to Prevent, Detect and Tackle Fraud (Washington, D.C.: June 2023); Small Business Administration, Office of Inspector General, COVID-19 Pandemic EIDL and PPP Loan Fraud Landscape, White Paper Report 23-09 (Washington, D.C.: June 27, 2023); and U.S. Department of Agriculture, The Extent of Trafficking in the Supplemental Nutrition Assistance Program: 2015-2017 (Alexandria, VA.: September 2021).

**Undetected Fraud May Be Significant**

In March 2024, the Department of Health and Human Services Office of Inspector General (HHS OIG) issued a consumer alert related to scams that involve obtaining a Medicare enrollee’s personal information and then billing for unnecessary, low-cost medical equipment. Related media reported that an alleged fraud ring may have used the scheme to overbill Medicare for more than \$2 billion since 2022. It is alleged the fraud ring employed multiple small charges to many victims to help avoid detection.





Source: HHS OIG Consumer Alert: Urinary Catheter Scams. | GAO-24-105833

The studies noted in figure 3 quantify the extent of fraud based on instances of identified potential fraud. However, some portion of fraud is never detected. See sidebar for example of now detected, potential fraud that is alleged to have taken place, and gone undetected for about two years, per news media. Fraud estimates can provide information on the extent of undetected fraud. For example, we developed an estimate of unemployment fraud in response to congressional interest in the extent of pandemic-related spending fraud.<sup>18</sup> Specifically, we estimated that between \$100 billion and \$135 billion (between 11 and 15 percent of total spending) in fraudulent unemployment insurance payments were made between April 2020 and May 2023. This included an estimate of undetected fraud.

In addition to fraud estimation or analysis efforts performed by the federal government, non-U.S. governments and relevant nongovernmental organizations with fraud expertise have also developed estimates (see fig. 4).

<sup>18</sup>GAO, *Unemployment Insurance: Estimated Amount of Fraud during Pandemic Likely Between \$100 Billion and \$135 Billion*, [GAO-23-106696](#) (Washington, D.C.: Sept. 12, 2023).

**Figure 4: Select International or Nongovernmental Fraud Estimation Studies**

 <b>Agency</b>	 <b>Study topic</b>	 <b>Approach</b>	 <b>Finding</b>
<b>United Kingdom Public Sector Fraud Authority</b>	Cross-Government Fraud Landscape Annual Report	Review of 48 different government fraud and error loss measurement exercises	Fraud and error losses between 0.5 and 5 percent of government expenditures in 2020
<b>Association of Certified Fraud Examiners</b>	Extent and characteristics of company employee (occupational) fraud	Global survey to determine perceived loss due to company employee fraud	Organizations lost about 5 percent of revenue to fraud each year, based on the collective observations of more than 2,000 Certified Fraud Examiners between January 2020 and September 2021
<b>University of Portsmouth Centre for Counter Fraud Studies</b>	Financial costs of fraud	Global review of different existing fraud estimation studies deemed to be of sufficiently high quality by the authors	Fraud and error losses range between 0.02 and 63.96 percent, with average losses of 6.42 percent between 1997 and 2020

Sources: GAO analysis of fraud estimation studies; GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

**Accessible Text for Figure 4: Select International or Nongovernmental Fraud Estimation Studies**

<b>Agency</b>	<b>Study topic</b>	<b>Approach</b>	<b>Finding</b>
United Kingdom Public Sector Fraud Authority	Cross-Government Fraud Landscape Annual Report	Review of 48 different government fraud and error loss measurement exercises	Fraud and error losses between 0.5 and 5 percent of government expenditures in 2020
Association of Certified Fraud Examiners	Extent and characteristics of company employee (occupational) fraud	Global survey to determine perceived loss due to (company employee) fraud	Organizations lost about 5 percent of revenue to fraud each year, based on the collective observations of more than 2,000 Certified Fraud Examiners between January 2020 and September 2021
University of Portsmouth Centre for Counter Fraud Studies	Financial costs of fraud	Global review of different existing fraud estimation studies deemed to be of sufficiently high quality by the authors	Fraud and error losses range between 0.02 and 63.96 percent, with average losses of 6.42 percent between 1997 and 2020

Sources: GAO analysis of fraud estimation studies; GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

Note: Reports cited: United Kingdom Public Sector Fraud Authority, Cross-Government Fraud Landscape, Annual Report 2022; Occupational Fraud 2022: A Report to the Nations (Association of



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Certified Fraud Examiners, Inc.:2022). ACFE's study also explored characteristics of occupational fraud, such as the methods used and the characteristics of the perpetrators and impacted organizations. Jim Gee and Mark Button, *The Financial Cost of Fraud* (University of Portsmouth and Crowe, United Kingdom: 2021).

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## Fraud Risk Management and Standards for Internal Control

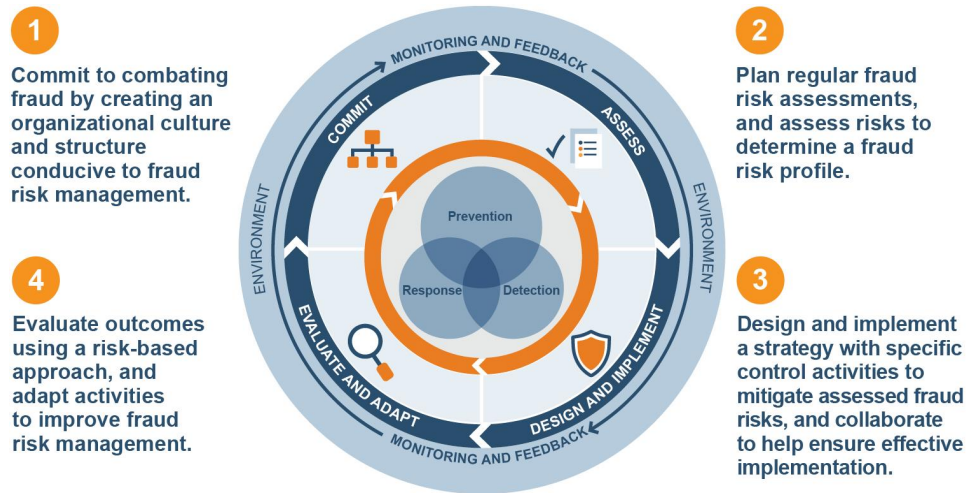
The Fraud Risk Framework provides a comprehensive set of key components and leading practices that serve as a guide for agency managers to use when developing efforts to combat fraud in a strategic, risk-based manner.<sup>19</sup> The objective of fraud risk management is to ensure program integrity by continuously and strategically mitigating the likelihood and impact of fraud.

As discussed in the Fraud Risk Framework, strategic fraud risk management involves more than having controls to prevent, detect, and respond to fraud. Rather, it also encompasses structures and environmental factors that influence or help managers achieve their objective to mitigate fraud risks. The Fraud Risk Framework describes leading practices in four components: commit, assess, design and implement, and evaluate and adapt, as depicted in figure 5.

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<sup>19</sup>[GAO-15-593SP](#). In June 2016, Congress enacted the Fraud Reduction and Data Analytics Act of 2015. This act required OMB to establish guidelines for federal agencies to create controls to identify and assess fraud risks and to design and implement antifraud control activities. The act further required OMB to incorporate the leading practices from GAO's Fraud Risk Framework in these guidelines. In its 2016 Circular No. A-123 guidelines, OMB directed agencies to adhere to the Fraud Risk Framework's leading practices as part of their efforts to effectively design, implement, and operate an internal control system that addresses fraud risks. The act was repealed and replaced in March 2020 by the Payment Integrity Information Act of 2019, which required these guidelines to remain in effect. In its 2021 update to Appendix C to Circular No. A-123 guidelines, OMB provided guidance to agencies to improve their controls for identifying, assessing, mitigating, and monitoring payment integrity risks, including fraud.

**Figure 5: Components of the Fraud Risk Framework**



Source: GAO (information and icons). | GAO-24-105833

**Accessible Text for Figure 5: Components of the Fraud Risk Framework**

1. Commit to combating fraud by creating an organizational culture and structure conducive to fraud risk management.
2. Plan regular fraud risk assessments, and assess risks to determine a fraud risk profile.
3. Design and implement a strategy with specific control activities to mitigate assessed fraud risks, and collaborate to help ensure effective implementation.
4. Evaluate outcomes using a risk-based approach, and adapt activities to improve fraud risk management.

Source: GAO (information and icons). | GAO-24-105833

The Fraud Risk Framework includes several leading practices that highlight the importance of understanding the scope of fraud affecting a program to manage fraud risk. It also includes leading practices associated with data analytics, such as

- assessing the likelihood and impact of inherent fraud risk, which may include involving qualified specialists, such as statisticians and subject-matter experts, to contribute expertise and guidance when employing techniques like analyzing statistically valid samples to estimate fraud losses and frequency;
- identifying specific tools, methods, and sources for gathering information about fraud risks, including data on fraud schemes and trends from monitoring and detection activities;

- 
- considering known or previously encountered fraud schemes to design data analytics; and
  - collecting and analyzing data, including data from reporting mechanisms and instances of detected fraud, for real-time monitoring of fraud trends and identification of potential control deficiencies.

The Fraud Risk Framework also includes leading practices related to assessing risk and using this information to inform a response, such as by

- considering the financial and nonfinancial impacts of fraud risks, and
- using the programs fraud risk profile (see sidebar) to help decide how to allocate resources to respond to residual fraud risks.

**Fraud Risk Profile**

The fraud risk profile forms the basis of a program's antifraud strategy and informs the specific control activities to be designed and implemented.

A Framework for Managing Fraud Risks in Federal Programs discusses information that might be in a fraud risk profile such as

- the identified fraud risk,
- fraud risk factors,
- inherent risk likelihood and impact,
- inherent risk significance, and
- the fraud risk response.

Source: GAO analysis of GAO, A Framework for Managing Fraud Risks in Federal Programs, [GAO-15-593SP](#) (Washington, D.C.: July 28, 2015). | GAO-24-105833

Federal internal control standards provide managers with criteria for designing, implementing, and operating an effective internal control system, which is key to preventing and reducing fraud.<sup>20</sup> Among other things, the standards state that program managers are to use quality information to achieve their objectives. Further, program managers are to identify and obtain relevant and reliable data and process the data into quality information. The standards also state that management should consider the potential for fraud when identifying, analyzing, and responding to risks.

OMB oversees implementation of programs and operations across the executive branch. Among other things, OMB issues guidance to agencies on their responsibilities. OMB Circular A-123 defines management's responsibility for internal control in federal agencies.<sup>21</sup> Among other actions, the circular directs agencies to follow the leading practices outlined in the Fraud Risk Framework. Moreover, in October 2022, OMB

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<sup>20</sup>[GAO-14-704G](#).

<sup>21</sup>Office of Management and Budget, *OMB Circular No. A-123, Management's Responsibility for Enterprise Risk Management and Internal Control*, M-16-17 (Washington, D.C.: July 15, 2016).

issued a Controller Alert reminding agencies that they must establish financial and administrative controls to identify and assess fraud risks.<sup>22</sup>

In our March 2022 testimony before the Senate Committee on Homeland Security and Governmental Affairs, we identified 10 actions that Congress could take to strengthen internal controls and financial and fraud risk management practices across the government.<sup>23</sup> For example, we suggested Congress (1) establish a permanent analytics center of excellence to aid the oversight community in identifying improper payments and fraud; (2) amend the Social Security Act to make permanent the sharing of full death data with the Department of the Treasury's Do Not Pay working system; and (3) reinstate the requirement that agencies report on their antifraud controls and fraud risk management efforts in their annual financial reports, among other actions. As of March 2024, these Matters for Congressional Consideration remain open. We continue to believe that such actions will increase accountability and transparency in federal spending in both normal operations and emergencies. See appendix II for a summary of the Matters for Congressional Consideration.

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## Data Analytics to Aid Program Integrity

The federal government has established capacity to provide data-analytics resources to combat fraud. For example, the Department of the Treasury's Office of Payment Integrity includes resources and expertise for preventing and detecting improper payments, including those due to fraud. The Office of Payment Integrity's Do Not Pay Business Center operates a resource dedicated to preventing and detecting improper payments through a variety of data-matching and data-analytics services

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<sup>22</sup>Office of Management and Budget, *Establishing Financial and Administrative Controls to Identify and Assess Fraud Risk*, CA-23-03 (Washington, D.C.: Oct. 17, 2022). Enterprise risk management is a decision-making tool that can assist federal leaders to anticipate and manage risks across their portfolios. Prior to implementing enterprise risk management, risk management focused on traditional internal control concepts for managing risk exposures. Beyond traditional internal controls, enterprise risk management promotes risk management by considering its effect across the entire organization and how it may interact with other identified risks.

<sup>23</sup>GAO, *Emergency Relief Funds: Significant Improvements Are Needed to Ensure Transparency and Accountability for COVID-19 and Beyond*, [GAO-22-105715](#) (Washington, D.C.: Mar. 17, 2022).

to support agency programs.<sup>24</sup> The Office of Payment Integrity's Payment Integrity Center of Excellence is a community of experts with a mission to provide government-wide partnership, guidance, and customer-centric solutions that aid in the prevention and recovery of improper payments due to fraud, waste, and abuse. The Payment Integrity Center of Excellence uses capacities such as data and analytics to help address agency payment integrity challenges.

Additionally, in March 2020, Congress enacted the CARES Act, which created the Pandemic Response Accountability Committee within CIGIE. The mission of the Pandemic Response Accountability Committee is to promote transparency and conduct and support oversight of covered funds and the coronavirus response to (1) prevent and detect fraud, waste, abuse, and mismanagement; and (2) mitigate major risks that cut across program and agency boundaries. In March 2021, the American Rescue Plan Act of 2021 appropriated \$40 million to the Pandemic Response Accountability Committee, which subsequently established the Pandemic Analytics Center of Excellence. The role of the Pandemic Analytics Center of Excellence is to help oversee the trillions of dollars in federal pandemic-related emergency spending.

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## Annual Federal Losses Due to Fraud Are Estimated to Be between \$233 Billion and \$521 Billion Based on Data from Fiscal Years 2018 through 2022, Reflecting Various Risk Environments

We estimated direct annual financial losses to the federal government from fraud to be between approximately \$233 billion and \$521 billion, as shown in figure 6. This range reflects the middle 90 percent of values, based on our model. The width of the range is a reflection of both the uncertainty associated with estimating fraud and the diversity in the risk environments that were present in fiscal years 2018 through 2022.

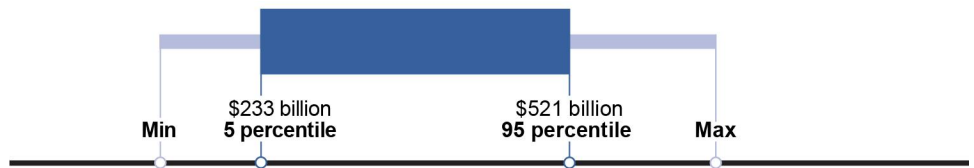
The estimate reflects fraud losses associated with direct federal spending on programs and operations. Accordingly, fraud loss associated with

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<sup>24</sup>According to its website, the Do Not Pay Business Center uses a variety of data sources, such as those to verify individual personal records, as well as data sources to determine if companies have been debarred or received other sanctions against them.

revenues, such as tax credits or other fees collected by the federal government, are not included. This estimate does not capture losses that occur at the state, local, tribal, or other government level unless those losses included a federal investigative, administrative, or related action. Further, the estimate does not include the nonfinancial losses due to fraud or the value of nonfinancial benefits obtained fraudulently.<sup>25</sup>

**Figure 6: Estimate of Direct Annual Financial Losses from Fraud Affecting the Federal Government, Based on Our Simulation**



Source: GAO analysis of selected agency and other data from fiscal years 2018 through 2022. | GAO-24-105833

**Accessible Data for Figure 6: Estimate of Direct Annual Financial Losses from Fraud Affecting the Federal Government, Based on Our Simulation**

- \$233 billion (5 percentile)
- \$521 billion (95 percentile)

Source: GAO analysis of selected agency and other data from fiscal years 2018 through 2022. | GAO-24-105833

The estimated losses represent about 3 to 7 percent of average federal obligations for fiscal years 2018 through 2022. These percentages are generally in line with fraud estimates and analysis developed by other governments, as well as relevant nongovernmental organizations with fraud expertise such as the ACFE and academia. For example, studies from the United Kingdom’s Public Sector Fraud Authority, ACFE, and Portsmouth Centre cite fraud losses of 0.5 to 5, 5, and 6.4 percent, respectively. Although these estimates vary in their methodology, risk environment, and entities affected, the results are in line with our estimate.<sup>26</sup>

Our estimate is also in line with studies of domestic federal program fraud. For example, we and others conducted estimation work related to pandemic spending, which was at higher risk of fraud. We estimated that

<sup>25</sup>Nonfinancial losses due to fraud may not pose a direct financial cost but they lead to other potentially harmful outcomes. For example, fraud can impact government outcomes or program reputation. Further, government activities such as passport and Social Security number issuance, or small business certification may result in nonfinancial fraud but not a direct financial loss to the government.

<sup>26</sup>See figure 4 for more information on these studies.

between \$100 billion and \$135 billion (between 11 and 15 percent of total spending) in fraudulent unemployment insurance payments were made between April 2020 and May 2023.<sup>27</sup> This analysis supported even higher fraud rates for the Pandemic Unemployment Assistance payments, which made up a subset of the unemployment insurance payments that were included in our review. The Small Business Administration OIG reported that it estimated \$200 billion in potentially fraudulent pandemic related business loans as of May 2023.<sup>28</sup>

Our estimate of direct annual financial losses due to fraud reflects significant financial impacts to the federal government. For comparative context, the lower range of the estimate—\$233 billion—is greater than fiscal year 2022 obligation levels for all but the eight largest agencies. There are five agencies with total annual obligations greater than the upper range of \$521 billion, based on fiscal year 2022.

#### Monte Carlo Simulation

A Monte Carlo simulation attempts to capture the uncertainty in a process by randomly generating a range of values consistent with that process. Monte Carlo simulations can be useful for understanding the range of potential outcomes that can exist under different assumptions and scenarios. They are useful where there is a high degree of uncertainty, or for where there are limited data.

Source: GAO analysis. | GAO-24-105833

This estimate is based on a Monte Carlo simulation using data from fiscal years 2018 through 2022 (see sidebar). For the Monte Carlo simulation that generated our estimate, we used investigative, OIG semiannual, and confirmed fraud data from 12 selected agencies and other fraud estimate and measurement information from fiscal years 2018 through 2022. The resulting range represents our best estimate of the extent of fraud, given the data available, which have limitations. While we designed our simulation approach and underlying assumptions to account for the inherent uncertainties associated with fraud estimation and data limitations, we cannot eliminate the possibility that the actual amount of fraud could be outside of the range of our estimate. See appendix I for

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<sup>27</sup>[GAO-23-106696](#).

<sup>28</sup>Small Business Administration, Office of Inspector General, *COVID-19 Pandemic EIDL and PPP Loan Fraud Landscape*, White Paper Report 23-09 (Washington, D.C.: June 27, 2023). Using a different approach, the Small Business Administration estimated \$36 billion of pandemic relief emergency program funds that were likely obtained fraudulently from 2020 to 2022. Small Business Administration, *Protecting the Integrity of the Pandemic Relief Programs: SBA's Actions to Prevent, Detect and Tackle Fraud* (Washington, D.C.: June 2023).



additional details on our simulation, data sources, assumptions, and limitations.

Our results reflect a first-of-its kind, government-wide estimate of federal dollars lost to fraud. Our estimate includes known uncertainties associated with the model and underlying data that are important to understand in interpreting and applying the results. Improvements to the availability of fraud-related data could improve future estimation efforts. Current caveats to our estimate include those related to extrapolating a government-wide estimate to (a) programs or agencies, (b) pandemic spending, (c) improper payment estimates, and (d) future years.

**Applying the estimate to agencies or programs.** Our model was developed to estimate government-wide federal fraud losses and the model's dollar range and percent should not be applied to the agency, program, or operation level. While every federal program and operation is at risk of fraud, the level of risk can vary substantially. These variations affect the rate of fraud, both detected and undetected, in each agency, program, or operation. Our model did not account for such variation.

#### **Risk Factors for Fraud**

Factors associated with heightened risk of fraud include

- reliance on self-certification;
- programs that are new to the agency;
- expansions or major changes in program funding, authorities, practices, or procedures;
- a large volume of payments being made;
- payment or eligibility decisions made outside of the agency, such as those by state governments;
- limitations in the experience or training of those making eligibility determinations or payment certifications; and
- challenges related to eligibility and identity, such as lack of information or data systems to confirm eligibility.

Source: GAO, COVID-19: Insights and Actions for Fraud Prevention, [GAO-24-107157](#) (Washington, D.C.: Nov. 14, 2023). | GAO-24-105833

Different factors may impact the fraud risk environment (see sidebar). Factors could include growth or shrinkage in the budget or scope of operations, changes to controls, emergence of new fraud schemes, and changes to investigative and prosecutorial priorities that affect the detection and adjudication of fraud. For example, if two agency programs undertook significant contracting activity but one program relied extensively on sole source acquisition (which can be at higher risk of fraud due to the lack of competition), while the other used

competitive bidding, the extent of fraud might be different between the two programs. Each of these fraud risk factors, and potentially others, could increase or decrease the likelihood of fraud against an agency, program, or operation.

**Drawing conclusions about the extent of pandemic fraud from our estimate.** The pandemic is a recent example of how factors such as the effectiveness of federal fraud risk management, and the nature of new fraud threats, can substantially impact the scale of fraud. We have previously reported on the heightened fraud risk environment associated with some pandemic programs.<sup>29</sup> These prior reviews provided observations about varying fraud risk environments by program, and across delivery years, and included a standalone estimate of unemployment insurance fraud during the pandemic. Unlike this prior work, our current model was designed to estimate government-wide fraud and included agencies and programs with and without pandemic spending. In addition, the fraud and obligation data used in our model reflected pandemic and prepandemic time periods. As such, our estimate includes but is not limited to fraud against federal pandemic spending. Given the scope of our work and the nature of the available investigations data, subsetting the estimate to describe pandemic programs is not possible. Further, our model estimates annual loss within a range, whereas a pandemic estimate would reflect loss across multiple spending years.

**Comparing estimated fraud to improper payment estimates.** Fraud and improper payments are two distinct concepts that are not

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<sup>29</sup>GAO, *COVID Relief: Fraud Schemes and Indicators in SBA Pandemic Programs*, [GAO-23-105331](#) (Washington, D.C.: May 18, 2023); [GAO-22-105715](#); and [GAO-23-106696](#). Further, in November 2023, we reported that there were also federal fraud-related charges pending against at least 599 other individuals or entities involving federal COVID-19 relief programs as of June 30, 2023. GAO, *COVID-19: Insights from Fraud Schemes and Federal Response Efforts*, [GAO-24-106353](#) (Washington, D.C.: Nov. 14, 2023). A charge is merely an allegation, and all defendants are presumed innocent until proven guilty beyond a reasonable doubt in a court of law.

interchangeable but are related.<sup>30</sup> While all fraudulent payments are considered improper, not all improper payments are due to fraud. For example, payments can be determined to be improper due to error or lack of documentation. Given the broader definition, it may seem that fraud estimates are a subset of improper payment estimates. However, there are two key distinctions that lead to different and not comparable estimates. These include differences in

- **the scope of programs included in the estimate.** Our estimate reflects fraud loss associated with direct federal spending in programs and operations government-wide. In contrast, improper payment reporting is required for programs and activities that agencies have determined are susceptible to significant improper payments. For fiscal year 2022, 18 agencies reported improper payment estimates across 82 programs and activities that totaled about \$247 billion.<sup>31</sup> For fiscal year 2023, 14 agencies reported estimates for 71 programs and activities that totaled about \$236 billion.<sup>32</sup> Total reported improper payment estimates for a given fiscal year may not include estimates for certain risk-susceptible programs.<sup>33</sup> For example, the total reported in estimated improper payments for fiscal year 2023 did not include the Department of Health and Human Service's Temporary Assistance for Needy

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<sup>30</sup>An improper payment is defined by law as any payment that should not have been made or that was made in an incorrect amount (including overpayments and underpayments) under statutory, contractual, administrative, or other legally applicable requirements. It includes any payment to an ineligible recipient, any payment for an ineligible good or service, any duplicate payment, any payment for a good or service not received (except for such payments where authorized by law), and any payment that does not account for credit for applicable discounts. 31 U.S.C. § 3351(4). When an executive agency's review is unable to discern whether a payment was proper because of insufficient or lack of documentation, this payment must also be included in the improper payment estimate. 31 U.S.C. §3352(c)(2). Since fiscal year 2003, executive agencies have reported cumulative improper payment estimates of about \$2.7 trillion, including \$247 billion for fiscal year 2022 and \$236 billion for fiscal year 2023.

<sup>31</sup>GAO, *Improper Payments: Fiscal Year 2022 Estimates and Opportunities for Improvement*, [GAO-23-106285](#), (Washington, D.C.: March 29, 2023). Our 2023 priority recommendation letters included 59 priority recommendations related to improper payments.

<sup>32</sup>GAO, *Improper Payments: Information on Agencies' Fiscal Year 2023 Estimates*, [GAO-24-106927](#), (Washington, D.C.: Mar. 26, 2024).

<sup>33</sup>GAO, *Financial Audit: FY 2023 and FY 2022 Consolidated Financial Statements of the U.S. Government*, [GAO-24-106660](#) (Washington, D.C.: February 15, 2024). In our audit reports on the U.S. government's consolidated financial statements, we note that the federal government is unable to determine the full extent to which improper payments occur. Our most recent report was issued in February 2024.

Families. This programs and all others across the federal government are reflected in our estimate of fraud losses.

- **the estimation methodology used.** Our estimate is based on adjudicated and potential fraud, which is then extrapolated to determine the probable range of undetected fraud. This approach was developed to help account for the uncertainties associated with fraud determination. Conversely, improper payment estimates are based on reviews of documentation associated with a statistically valid sample of payments. While the reviews can be rigorous, they are not designed to identify fraud, particularly schemes that cannot be easily detected. For example, improper payment reviews include checking whether certain documentation is present, but they are not designed to identify falsified documentation. Building our estimate around known and potential fraud eliminates one element of uncertainty associated with fraud determination.

**Assuming the estimate is predictive of future federal fraud.** Our estimate is not based on a predictive model. Future federal operations and budgets will present different fraud risk environments and associated fraud losses. Factors such as the amount of emergency spending, the effectiveness of federal fraud risk management, and the nature of new fraud threats could substantially impact the scale of future fraud losses.

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## Fraud Categories and Data Sources

On the basis of our understanding of fraud, investigations, available data, and the findings of other fraud measurement and estimation studies, we identified three fraud categories—adjudicated fraud, detected potential fraud, and undetected potential fraud. Within detected potential fraud, we developed three subcategories. These categories reflect different degrees of certainty about the possibility of fraud. For example, an instance of adjudicated fraud is certainly fraudulent. In contrast, the certainty of fraud may be substantially lower for an instance of potential fraud that has been detected and not accepted for investigation.

Using these fraud categories, we collected and analyzed data from three key sources. Individually, these data do not provide a comprehensive understanding of the extent of fraud but, when analyzed collectively, provide support for a government-wide estimate. These data include

- investigative case data from 12 selected OIGs,






- OIG semiannual reports, and
- confirmed fraud reported to the OMB's Paymentaccuracy.gov dashboard.

Each of these data sources has strengths and limitations, which impact our estimate. The data sources were generally available from all selected agencies and included information on detected potential and adjudicated fraud. However, there was variance in terms and definitions used across the data sources, and not all sources included information on potential fraud. Finally, data for undetected fraud, by definition, do not exist. We considered these strengths and limitations in determining the data to collect and our estimation approach.

Our review of 46 fraud measurement or estimation studies also informed the development of these categories and use of data within them. Studies include those developed by agencies, such as the OIGs for the Small Business Administration and the Department of Labor; academics; professional organizations; and international entities, such as the United Kingdom's Public Sector Fraud Authority.

Figure 7 provides additional information on the fraud categories and the data used in our simulation, by category.

**Figure 7: Fraud Categories and the Data Collected and Used in the Simulation, by Category**

	Adjudicated fraud	Detected potential fraud <small>Potential fraud is detected by the federal government but is not adjudicated as fraud.<sup>a</sup></small>			Undetected potential fraud
	 Court or other adjudicative body determines facts and guilt or liability for fraud.	Stage 3  Department of Justice and agencies initiate adjudicatory proceedings, but guilt or liability for fraud has not yet been formally determined.	Stage 2  Investigative agencies conduct full investigations, but the federal government has not decided to take judicial or administrative actions to remedy.	Stage 1  Potential fraud is detected by the federal government but has not been accepted for full investigation. <sup>b</sup>	 Potential fraud exists but has not been detected by the federal government.
Office of Inspector General (OIG) investigative information	●	●	●	●	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
OIG semiannual reports	●	●	●	●	
Office of Management and Budget confirmed fraud	●	○	○	○	
Fraud studies	●	●	●	●	●

- Source used for cross-government fraud estimate
- Source not available for cross-government fraud estimate

Sources: GAO (information); GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

**Accessible Text for Figure 7: Fraud Categories and the Data Collected and Used in the Simulation, by Category**

		<b>Detected potential fraud: Potential fraud is detected by the federal government but is not adjudicated as fraud.<sup>a</sup></b>	<b>Detected potential fraud: Potential fraud is detected by the federal government but is not adjudicated as fraud.<sup>a</sup></b>	<b>Detected potential fraud: Potential fraud is detected by the federal government but is not adjudicated as fraud.<sup>a</sup></b>	
	<b>Adjudicated fraud: Court or other adjudicative body determines facts and guilt or liability for fraud.</b>	<b>Stage 3: Department of Justice and agencies initiate adjudicatory proceedings, but guilt or liability for fraud has not yet been formally determined.</b>	<b>Stage 2: Investigative agencies conduct full investigations, but the federal government has not decided to take judicial or administrative actions to remedy.</b>	<b>Stage 1: Potential fraud is detected by the federal government but has not been accepted for full investigation.<sup>b</sup></b>	<b>Undetected potential fraud: Potential fraud exists but has not been detected by the federal government.</b>
Office of Inspector General (OIG) investigative information	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
OIG semiannual reports	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
Office of Management and Budget confirmed fraud	Source used for cross-government fraud estimate	Source not available for cross-government fraud estimate	Source not available for cross-government fraud estimate	Source not available for cross-government fraud estimate	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
Fraud studies	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate

Sources: GAO (information); GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

<sup>a</sup>For the purposes of this review, we defined “adjudication” as the legal or administrative process of resolving a dispute and that includes a formal, fact-finding process; due process; and a formal determination of the facts.

<sup>b</sup>For the purposes of this review, we defined “full investigation” as a thorough inquiry into alleged facts to find out the truth about a potential crime or violation and for which a determination can be made on whether there is substantial evidence to refer the case for a judicial or administrative remedy.

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## Key Assumptions

Our estimate was based on our Monte Carlo simulation, which relied upon certain key assumptions that reflect how we collected and used agency and OIG data for our estimate. One such assumption relates to agencies that were not selected as part of our sample of 12. Specifically, we assumed that the relationship between the number of fraud occurrences and the financial loss associated with an individual occurrence of fraud in these agencies was similar to the relationships observed at the 12 agencies in our sample. We took this approach, given that our agency selection included about 90 percent of agency obligations and also reflected a variety of different programs and operations.

We designed our approach so that the financial loss amount of each instance of fraud or potential fraud was lower for the less certain categories. For example, we assumed that instances of potential fraud that were detected by the federal government but not investigated tended to have lower associated financial loss than instances of fraud that were investigated and ultimately adjudicated by U.S. courts and other bodies.

We simulated values for undetected fraud by relying on the information that we had available about detected potential fraud. We considered several potential models of the relationship between detected and undetected fraud to help account for the substantial uncertainty associated with the undetected fraud category.

Across all categories, we did not assume a single value, but rather a range of values was included in our simulation to capture the degree of uncertainty associated with the subject area.

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## Opportunities and Challenges in Estimating Fraud to Support Fraud Risk Management

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### Developing and Using Fraud Estimates Supports Fraud Risk Management

Understanding the extent of fraud supports effective fraud risk management. The Fraud Risk Framework includes several leading practices that highlight the importance of understanding the scope of fraud to better manage the risks, such as for managers to conduct quantitative or qualitative assessments of the likelihood and impact of

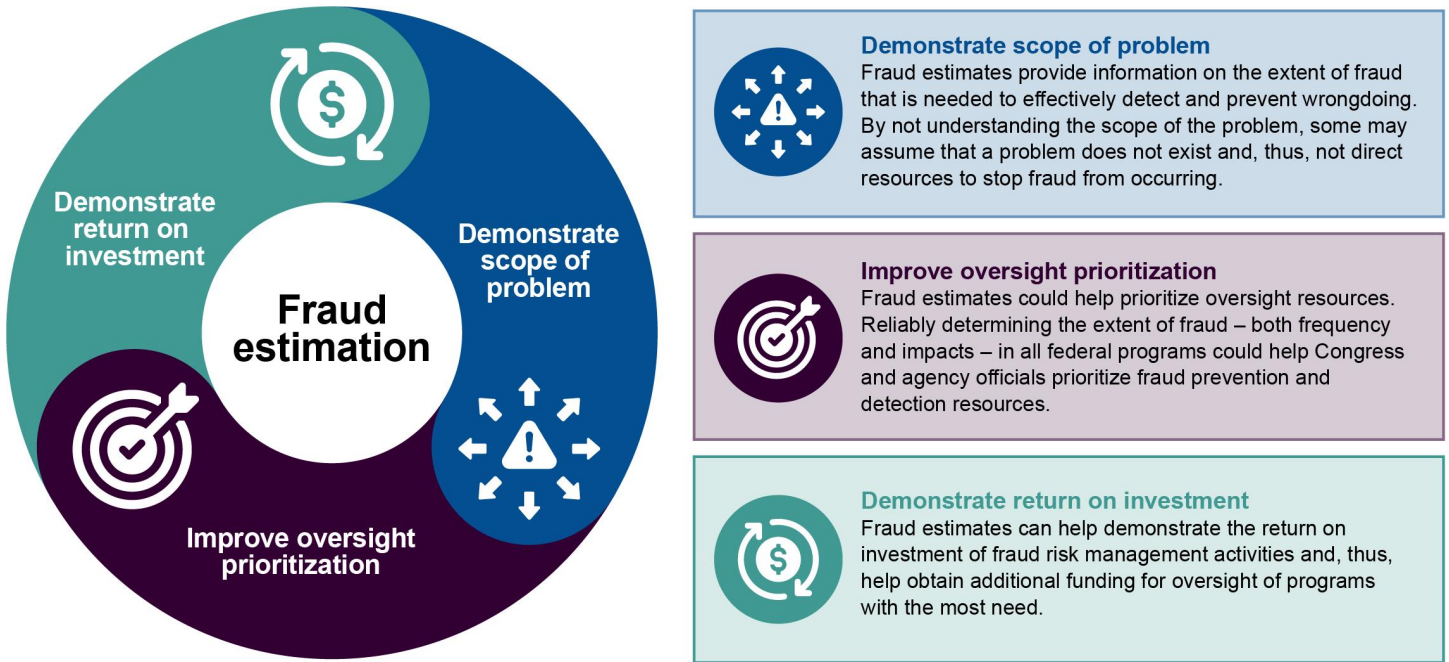


inherent risks on the program's objectives. This helps agencies allocate resources to respond to their more significant fraud risks. The Fraud Risk Framework also notes the importance of including qualified specialists to estimate fraud loss and frequency, among other data-analytics activities.

While our estimate focused on government-wide fraud, multiple agency and OIG officials told us that more granular estimates, such as those at the program level, are particularly helpful. Officials also stated that the likelihood of fraud can vary significantly by program. For example, multiple OIG officials stated that programs that accept self-certification by applicants to obtain government benefits tend to have much higher fraud risks and fraud rates than programs that require additional verification. In addition, Association of Certified Fraud Examiners officials stated that granular estimates provided more actionable information to guide oversight.

Agency and OIG officials and fraud experts identified additional ways that program-level fraud estimates can improve fraud risk management. These include the ability to demonstrate the scope of the problem, improve oversight prioritization, and demonstrate return on investment for oversight investments (see fig. 8).

**Figure 8: How Fraud Estimates Can Improve Fraud Risk Management**



Sources: GAO analysis; GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

**Accessible Text for Figure 8: How Fraud Estimates Can Improve Fraud Risk Management**

- **Fraud estimation**
  - Demonstrate scope of problem
  - Improve oversight prioritization
  - Demonstrate return on investment
- **Fraud estimation information**
  - Demonstrate scope of problem: Fraud estimates provide information on the extent of fraud that is needed to effectively detect and prevent wrongdoing. By not understanding the scope of the problem, some may assume that a problem does not exist and, thus, not direct resources to stop fraud from occurring.
  - Improve oversight prioritization: Fraud estimates could help prioritize oversight resources. Reliably determining the extent of fraud – both frequency and impacts – in all federal programs could help Congress and agency officials prioritize fraud prevention and detection resources.

- Demonstrate return on investment: Fraud estimates can help demonstrate the return on investment of fraud risk management activities and, thus, help obtain additional funding for oversight of programs with the most need.

Sources: GAO analysis; GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833



Sources: GAO; and Icons-Studio/stock.adobe.com. | GAO-24-105833

**Demonstrate scope of problem:** As noted in the Fraud Risk Framework, fraud estimates can be used to help assess program fraud risks.<sup>34</sup> It also states that capturing information on fraud schemes, trends, and outcomes from fraud measurement activities can aid fraud risk management efforts. These risks can be both financial and nonfinancial in nature. Better estimates of the scope of fraud at program, agency, and government-wide levels can help inform decisions about the level of resources to commit to fraud risk management activities. In addition, continued refinement of estimates can help agencies further strengthen their fraud risk assessments.

In November 2023, we reported on factors that are important to agencies when managing fraud risks.<sup>35</sup> In survey responses, 18 officials from the 24 Chief Financial Officers (CFO) Act agencies noted that the amount lost to fraud was an extremely or very important factor when managing fraud risks.<sup>36</sup>

<sup>34</sup>[GAO-15-593SP](#).

<sup>35</sup>GAO, *Fraud Risk Management: Agencies Should Continue Efforts to Implement Leading Practices*, [GAO-24-106565](#) (Washington, D.C.: Nov. 1, 2023).

<sup>36</sup>The 24 agencies surveyed are those listed in the CFO Act of 1990, as amended. These agencies include the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, the Interior, Justice, Labor, State, Transportation, the Treasury, and Veterans Affairs, as well as the Agency for International Development, Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, National Science Foundation, Nuclear Regulatory Commission, Office of Personnel Management, Small Business Administration, and Social Security Administration. Pub. L. No. 101-576, § 205, 104 Stat. 2838 (1990), codified, as amended, at 31 U.S.C. § 901(b).

Fraud experts have also noted how fraud estimation can support fraud risk management. For example, the Director of the University of Portsmouth Centre for Cybercrime and Economic Crime told us that fraud estimation can be used to help raise awareness of the risks of fraud in particular areas and show the importance of making investments to counter fraud. The Director noted that without estimation, some may assume that a problem does not exist and, thus, not direct resources to stop fraud from occurring. The Director also noted that most organizations underestimate their fraud levels because they confuse detected levels of fraud with the real level of fraud. The Director noted that detected levels of fraud represent the small tip of the “fraud iceberg” and that substantial levels of undetected fraud likely remain below the surface.<sup>37</sup>

Officials with an OIG we spoke with stated that fraud rates were likely larger than some assumed, and that estimation could help show the scope of the problem. Through a better understanding of the problem, actions such as additional oversight could be taken. We have previously reported that estimation practices could produce different results, depending on the key assumptions used or how the analysis was conducted.<sup>38</sup> In conducting estimates, multiple agency and OIG officials told us that program-level estimates are particularly helpful because the likelihood of fraud can vary significantly by program. Officials also stated that it is important to estimate fraud in such a way that it would effectively capture the risks to the program and that the estimates were correctly interpreted. In one example, officials said that benefits programs that include a self-certification component tend to have much higher fraud risks and fraud rates than programs requiring additional verification. In another example, an agency official stated that agencies and states use varying definitions of fraud that may vary by the program and relevant legal statutes. Likewise, another official emphasized that there was not a clear definition of potential fraud. By defining fraud or potential fraud differently, fraud rates could differ substantially.

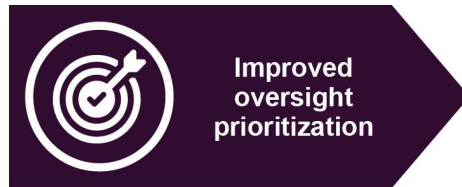
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<sup>37</sup>We recently reported on the stages of fraud detection, including the known and unknown aspects of fraud. See [GAO-24-106353](#).

<sup>38</sup>GAO, *Unemployment Insurance: Data Indicate Substantial Levels of Fraud during the Pandemic, DOL Should Implement an Antifraud Strategy*, [GAO-23-105523](#) (Washington: D.C.: Dec. 22, 2022).

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Officials also noted that organizations needed to develop estimates that reflected the true extent of fraud and, thus, did not misinform decision-making.



Sources: GAO; and Icons-Studio/stock.adobe.com. | GAO-24-105833

**Improved oversight prioritization:** The Fraud Risk Framework notes that effective managers of fraud risk use the program’s fraud risk profile to help decide how to allocate resources to respond to residual fraud risks. As federal fraud estimates mature, additional information on program risks could help refine fraud risk assessments that are documented in the profile.

Officials with several OIGs noted that an estimate of fraud could potentially help prioritize oversight resources. For example, officials at one OIG stated that additional fraud estimates could help guide the OIG to vulnerable programs across the agency. Officials also stated that fraud estimation could help enhance regulatory change to improve oversight for those programs that appeared to have a higher rate of fraud. Officials with another OIG noted that their agency had many different types of programs and operations, all with different potential fraud risks. Officials noted that having more information on the rate of fraud could help better target scarce oversight resources.

Association of Certified Fraud Examiners officials stated that detailed information about the likely extent of fraud can help organizations conduct risk analysis to better target fraud. OIG officials also cautioned that estimation needed to be performed and interpreted correctly, or the results of the estimation could misdirect oversight resources. If a program was determined to have a low rate of fraud when, in fact, it had a high rate, it may receive less oversight than needed.



Sources: GAO; and Icons-Studio/stock.adobe.com. | GAO-24-105833

**Help demonstrate return on investment:** OIG officials told us that fraud estimation could help demonstrate the return on investment of fraud risk management activities. In addition, the CFO Council notes that while it might be difficult to measure outcomes as a result of fraud prevention tactics, it is a vital step to an effective and robust antifraud program and can lead to a significant return on investment.<sup>39</sup> Program Integrity: The Antifraud Playbook states that repeated monitoring and periodic evaluations provide insight into the effectiveness of fraud risk management activities. Knowing the extent of fraud affecting a program through estimates can be a useful data point in determining the effectiveness of fraud risk management activities. This is consistent with what we heard from an OIG official, who stated that more fraud measurement or estimation could help justify investment in fraud prevention and detection techniques.

The Director for the Centre for Cybercrime and Economic Crime at the School of Criminology and Criminal Justice at the University of Portsmouth in the United Kingdom stated that without clear measures of performance, it is difficult for entities involved with combating fraud to demonstrate their contribution to an organization and to see how well they are doing. The Director noted that without clear metrics, it can be challenging for increasingly financially focused organizations in both the private and public sector to answer questions about their performance.

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## Challenges in Estimating Fraud

Estimates of fraud in federal programs are limited, with recent estimation being completed in response to the unprecedented fraud against federal

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<sup>39</sup>Chief Financial Officers Council, *Program Integrity: The Antifraud Playbook* (Oct. 17, 2018), accessed Nov. 27, 2023, <https://www.cfo.gov/assets/files/Interactive-Treasury-Playbook.pdf>. The playbook provides a four-phased approach, with 16 plays drawn from successful practices from the federal government and private sector to help combat the risk of fraud at an agency.

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pandemic programs.<sup>40</sup> The Fraud Risk Framework and other prior work have identified challenges related to determining the extent of fraud.<sup>41</sup> In developing our government-wide fraud estimate, we faced several of these previously identified challenges, among others.

### Data to Support Further Fraud Estimation Are Not Readily Available and Usable

As part of our work to estimate the extent of federal fraud, we considered a variety of data sources. On the basis of discussions with 12 selected agencies, we identified varying amounts of data. While some agencies have data that could be informative for fraud estimation, many do not, or the data they do have require extensive analysis to support fraud estimation.

Some agencies have collected significant program data. These data have been used to detect potential fraud, such as through data matching, data mining, and network analysis.<sup>42</sup> These data could be informative for future program fraud estimates. For example:

- The Centers for Medicare & Medicaid Services Fraud Prevention System uses predictive models and other algorithms to identify medical providers and suppliers exhibiting a pattern of behavior indicative of potential fraud.
- In 2016, the Social Security Administration began implementing a multiphase project to integrate data from multiple sources and use predictive analytics to identify high-risk transactions for review to prevent fraudulent actions from advancing.

In addition, the results of data analytics undertaken for program integrity or OIG audits and evaluations could be useful for understanding the extent of potential fraud facing a program. For example, in 2022, the

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<sup>40</sup>For example, see [GAO-23-106696](#); Department of Labor, Office of Inspector General, Report No. 19-22-005-03-315); and Small Business Administration, Office of Inspector General, COVID-19 Pandemic EIDL and PPP Loan Fraud Landscape, White Paper Report 23-09. (Washington, D.C.: June 27, 2023).

<sup>41</sup>GAO-15-593SP; GAO, *GAO Overview: Fraud in the Federal Government – Challenges Determining the Extent of Federal Fraud*, [GAO-23-106110](#) (Washington, D.C., Jan. 23, 2023).

<sup>42</sup>Network analysis is a quantitative approach to identifying and graphically representing potentially unknown relationships among individuals or organizations.

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Department of Labor's OIG used data analytics to identify potentially fraudulent unemployment insurance claims.<sup>43</sup>

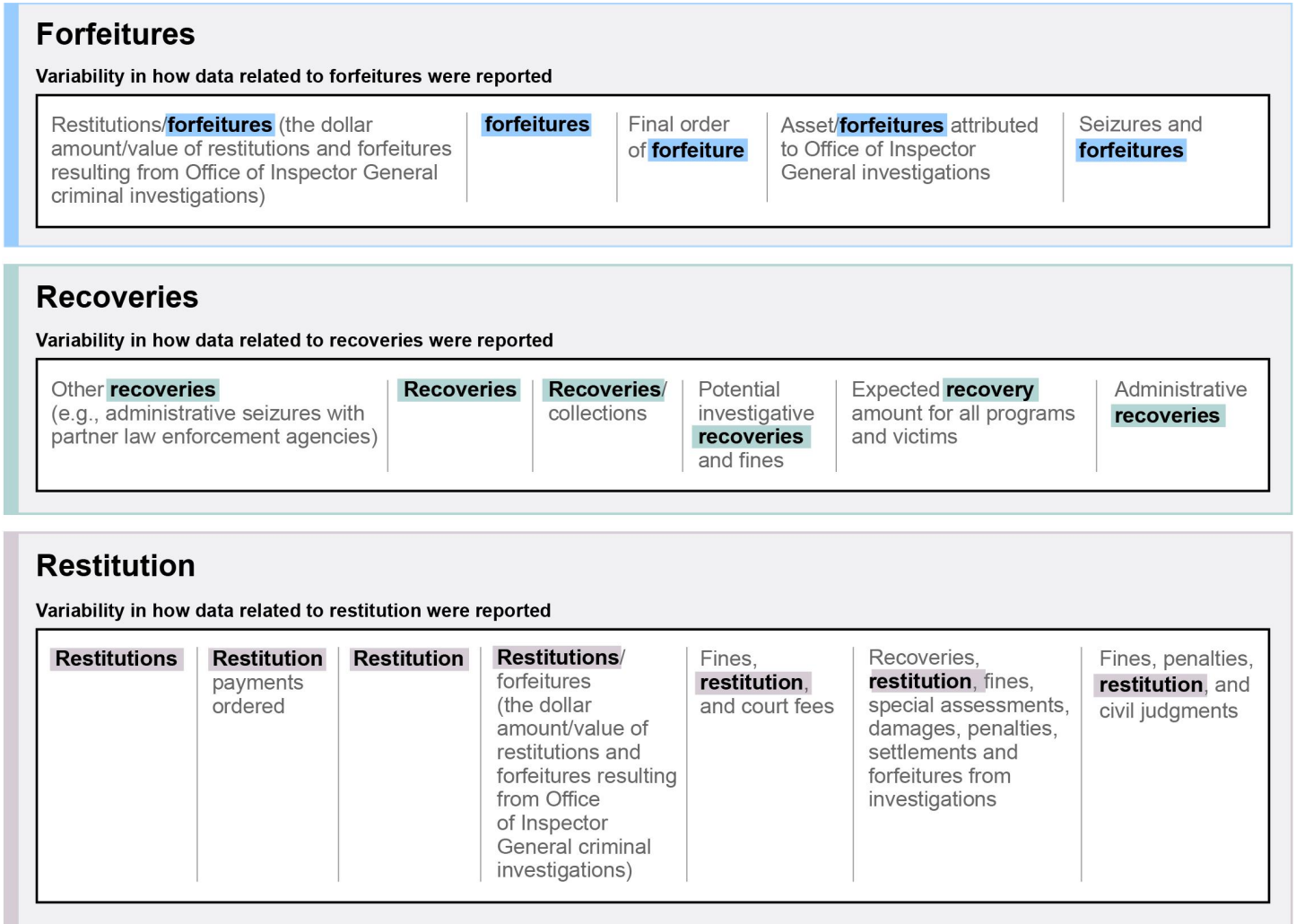
We found that OIG case management data and OIG semiannual reports to Congress contained data to support fraud estimates, but these data did not provide all the information needed. For example, OIG reporting excluded information on potential fraud captured by the agency that was not reported to the OIG for investigation. Further, in reviewing OIG semiannual reports to Congress, we identified variability in how data were reported that affects their usefulness for fraud estimation. For example, we reviewed information related to investigative recoveries. In some data, recoveries were reported as the only data point. In other data, recovered amounts were combined with fines, or limited to only administrative recoveries, and excluded court-ordered recoveries. We found similar variability in reporting of data regarding forfeitures, recoveries, and restitution, as shown in figure 9. This variability results in data that cannot be readily compared or consolidated to understand the financial impacts of fraud across the federal government.

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<sup>43</sup>Department of Labor, Office of Inspector General, 19-22-005-03-315.



**Figure 9: Examples of Variation in How Fraud-Related Data Are Reported in Office of Inspectors General Semiannual Reports to Congress**



Source: GAO analysis of Office of Inspector General Semi-Annual Reports to Congress. | GAO-24-105833

**Accessible Text for Figure 9: Examples of Variation in How Fraud-Related Data Are Reported in Office of Inspectors General Semiannual Reports to Congress**

- Forfeitures: Variability in how data related to forfeitures were reported
  - Restitutions/forfeitures (the dollar amount/value of restitutions and forfeitures resulting from Office of Inspector General criminal investigations)
  - forfeitures

- Final order of forfeiture
- Asset/forfeiture attributed to Office of Inspector General investigations
- Seizures and forfeitures
- Recoveries: Variability in how data related to recoveries were reported
  - Other recoveries (e.g., administrative seizures with partner law enforcement agencies)
  - Recoveries
  - Recoveries/collections
  - Potential investigative recoveries and fines
  - Expected recovery amount for all programs and victims
  - Administrative recoveries
- Restitution: Variability in how data related to restitution were reported
  - Restitutions
  - Restitution payments ordered
  - Restitution
  - Restitutions/forfeitures (the dollar amount/value of restitutions and forfeitures resulting from Office of Inspector General criminal investigations)
  - Fines, restitution, and court fees
  - Recoveries, restitution, fines, special assessments, damages, penalties, settlements and forfeitures from investigations
  - Fines, penalties, restitution, and civil judgments

Source: GAO analysis of Office of Inspector General Semi-Annual Reports to Congress. | GAO-24-105833

We also found that reliable information on the potential effect of fraud in OIG data is often not captured. This can make it difficult to determine the extent of the impact from fraud that agencies and programs might face. For example, multiple OIG officials told us that they did not capture information on the financial impact of a fraud case unless it was formally adjudicated. Further, officials also said that initial information on the total loss to fraud gathered during an investigation can be inaccurate and might vary significantly from the outcome of the case. For example, the initial information provided by a whistleblower tip might be exaggerated. Conversely, an investigation might uncover additional information that would indicate that the fraud was much larger than previously believed.

Our past work has also noted that legal limitations can inhibit sharing of key data with some agencies that could help identify fraud-related payments. For example, in 2023 we reported that the Small Business Administration faced statutory obstacles that prevent the Social Security

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Administration from sharing key data, including Social Security numbers, with the Small Business Administration.<sup>44</sup>

### Use of Varying Fraud Definitions Impacts Reporting

A program official told us that different entities, such as federal and state programs, might use varying definitions of fraud, which can limit the ability to compare and aggregate data. Multiple program and OIG officials told us that there are different definitions of fraud used across the government. For example, a Department of Labor official told us that many state workforce agencies use different definitions of fraud, which complicates attempts to estimate fraud associated with unemployment insurance programs. Department of Health and Human Services' OIG officials also noted that there are differing definitions of fraud that can vary across programs and statutes that can complicate attempts to determine the extent of fraud. We have previously reported that varying definitions of fraud can impact reporting and that some entities use broader definitions of fraud.<sup>45</sup>

### Determining the Amount of Undetected Fraud Is Challenging

Direct measures of undetected fraud, by definition, do not exist. Identifying previously undetected fraud, assessing related proxies, or estimating undetected fraud can be resource intensive and require significant analysis and expertise. Despite these challenges, information on the amount of undetected fraud is necessary to understand the full scope of likely fraud. To help determine the extent of undetected fraud, agencies and OIGs have employed methods, such as statistical sampling,

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<sup>44</sup>GAO, *COVID Relief: Fraud Schemes and Indicators in SBA Pandemic Programs*, [GAO-23-105331](#) (Washington, D.C.: May 18, 2023).

<sup>45</sup>GAO defines fraud as obtaining a thing of value through willful misrepresentation. Willful misrepresentation can be characterized by making material false statements of fact based on actual knowledge, deliberate ignorance, or reckless disregard of falsity. Other entities use broader definitions that include settlements, suspected fraud, or prevented fraud. These varying definitions can result in different reported fraud amounts, which could prevent comparison and summary across agencies. See [GAO-23-106110](#).

to estimate a rate of fraud, or data analytics to attempt to identify previously undetected fraud.<sup>46</sup>

### Fraud Is Not Easy to Detect, Investigate, or Prove

Given the hidden nature of fraud, a certain portion of fraud will go undetected. Further, multiple agency and OIG officials stated that the extended time it takes to investigate and prosecute cases of fraud can also make it more challenging to use existing data to determine the extent of fraud. These time lags can make it difficult to determine the prevalence or amount of fraud at a given time, as the data may reflect events that occurred years in the past. Officials with one OIG stated that while cases generally took 1-1/2 to 2 years to move from identification to conviction, some cases could take a decade to complete.

#### **Case Thresholds Limit Amount of Fraud Investigated and Adjudicated**

Case thresholds can limit what cases are pursued for investigation and potential referral for prosecution and adjudication. Officials at one Office of Inspector General's office stated that for certain contract fraud investigations to be initiated, the size of the contract needed to be at least \$2 million and an estimated fraud loss of at least \$500,000. Other investigations, such as those for certain types of direct assistance, had a lower threshold of \$30,000. Officials did note, though, that if thresholds are not met, the investigation might still occur if there are other concerns, such as corruption by public officials.

Source: Office of Inspector General officials. | GAO-24-105833

Further, not all potential fraud is investigated or prosecuted. For example, an OIG official noted that OIG can only investigate the “worst of the worst” and that OIG does not have the capacity to investigate many possible instances of fraud. To help prioritize scarce investigative resources, some investigative organizations have thresholds that may impact the fraud they investigate (see sidebar). Further, the statute of limitations may cause investigative organizations to prioritize some cases over others.

### Expertise and Data Analysis Capacity Needed for Estimation Efforts

As demonstrated by our and other estimates of the extent of fraud in the federal government or programs, expertise and data-analysis capacity are

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<sup>46</sup>Department of Agriculture, *The Extent of Trafficking in the Supplemental Nutrition Assistance Program: 2015-2017* (Alexandria, VA: September, 2021); Department of Labor, Office of Inspector General, 19-22-005-03-315; Small Business Administration, *Protecting the Integrity of the Pandemic Relief Programs: SBA's Actions to Prevent, Detect and Tackle Fraud*. (Washington, D.C.: June 2023); and Small Business Administration, Office of Inspector General, White Paper Report 23-09.

needed to develop fraud estimates. For example, our government-wide fraud estimate required an investigative data request from the OIGs of the 12 selected agencies, as well as additional data, such as from OIG semiannual reports to Congress. We also made use of significant fraud expertise to interpret these data and statistical expertise to further analyze the data and develop our estimate.

Agency and OIG officials told us that additional fraud expertise and data-analysis capacity would help improve the accuracy of fraud measures and estimates.<sup>47</sup> These officials stated that agencies needed a certain level of sophistication in their oversight efforts before they would be positioned to accurately estimate fraud. For example, if an agency's internal controls and analysis efforts were deficient, it would be difficult to develop data that would be useful for estimation.

**Artificial Intelligence Creates Opportunities for Improved Fraud Detection but Also for Fraud**

We have previously reported that artificial intelligence has created opportunities for improved oversight and fraud detection. Artificial intelligence can use algorithms and models to reveal anomalous patterns, behaviors, and relationships—with speed, at scale, and in depth—that was not possible previously.

Despite these opportunities, artificial intelligence can also pose new risks to agencies and others, such as by creating fake images to assist with developing falsified documentation or to create fake audio to assist in impersonation schemes.

Sources: GAO, "Artificial Intelligence Creates New Opportunities to Combat Fraud," *International Journal of Government Auditing* (Summer 2020); Department of Health and Human Services, Health Sector Cybersecurity Coordination Center: AI-Augmented Phishing and the Threat to the Health Sector (Oct. 26, 2023); and Department of Homeland Security, *Increasing Threat of Deepfake Identities*. | GAO-24-105833

Our 2023 survey of 24 CFO Act agencies identified significant challenges related to expertise, data, and tools for fraud risk management.<sup>48</sup> In particular, agencies reported challenges related to the availability of resources such as staff, access to data-analysis tools and techniques, and access to data to look for fraud as their top challenges to fraud risk management efforts. These challenges could also impact the ability to develop effective fraud estimates.

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<sup>47</sup>In March 2022, we recommended that Congress consider establishing a permanent analytics center of excellence to aid the oversight community in identifying improper payment and fraud. We found that without permanent government-wide analytics capabilities to assist the oversight community, agencies will have limited resources to apply to nonpandemic programs to ensure robust financial stewardship, as well as to better prepare for applying fundamental financial and fraud risk management practices to future emergency funding. See [GAO-22-105715](#).

<sup>48</sup>[GAO-24-106565](#).

OIG officials also expressed concerns about the development and use of estimation redirecting oversight resources to estimation activities versus oversight. The officials stated that estimation activities are typically time consuming and could redirect already scarce staff resources from audit or investigative work.

We previously reported in the *International Journal of Government Auditing* on the opportunities for data analytics, including the use of artificial intelligence to help identify potential fraud, which could further aid estimation.<sup>49</sup> However, agencies have reported that artificial intelligence can also pose new risks to oversight efforts, such as when used by fraudsters to execute new fraud schemes, which may evade detection (see sidebar).

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## Opportunities to Expand Fraud Estimation

Current guidance on the collection of data for fraud estimation is limited to efforts to support OIG semiannual reports to Congress and confirmed fraud reporting to OMB. Further, there are no plans to expand the use of fraud estimation to enhance fraud risk management in the executive branch or to leverage data experts across government to support such estimates. Despite these limitations, opportunities exist government-wide to build on current OIG oversight and agency program integrity efforts and increase the availability of data, expertise, and data-analytics capacity needed to develop estimates. Further, our *Schedule Assessment Guide* notes the value in using timelines and key milestones to help guide implementation for projects, which can include government-wide initiatives.<sup>50</sup>

OMB and CIGIE issue guidance and requirements to the executive branch agencies and OIG community, respectively. While OMB has issued management guidance to agencies, including on their responsibilities for improving payment integrity and fraud risk management, it has not established guidance or plans for guidance on data collection to support fraud estimation. There are also existing requirements for fraud-related data collection and reporting, such as through the Inspector General Act, as well as associated data systems

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<sup>49</sup>GAO, "Artificial Intelligence Creates New Opportunities to Combat Fraud," *International Journal of Government Auditing* (Summer 2020).

<sup>50</sup>GAO, *Schedule Assessment Guide: Best Practices for Project Schedules*, [GAO-16-89G](#) (Washington, D.C.: Dec. 22, 2015).

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and processes to meet those requirements.<sup>51</sup> However, this collection and reporting is not designed to support fraud measurement or estimation. CIGIE has developed Quality Standards for Investigations that require investigative data to be stored in a manner that allows effective retrieval, reference, and analysis, while ensuring the protection of sensitive data. These standards were not developed to enable fraud measurement or estimation.<sup>52</sup>

The federal government has also established data-capacity resources to aid program integrity, and these resources could also aid estimation. For example, the Department of the Treasury's Office of Payment Integrity, which includes the Do Not Pay Business Center and the Payment Integrity Center of Excellence, offers data-analytics capacity to help agencies address payment integrity challenges. These centers have access to data-analysis resources and fraud expertise to help prevent improper payments due to fraud and have worked with numerous datasets for programs with different fraud risks. Specifically, these centers help provide support to agency payment integrity efforts with various expenditure types, such as direct beneficiary payments, contracts, and grants. Because of these efforts, the Department of the Treasury has unique insights that could be used to evaluate and identify methods to expand government-wide fraud estimation. OMB has also directed agencies to use Do Not Pay's analytic capacity to identify potentially fraudulent payments to help enhance program integrity. However, these centers have not been leveraged to evaluate and identify methods to expand fraud estimation to date.

Treasury's Office of Payment Integrity is well positioned— with the expertise, data, and analytic tools—to evaluate and advance approaches the federal government can take to estimate fraud in support of fraud risk management. Moreover, as fraud-related data available to the Office of Payment Integrity expands or improves, it would also be well positioned to refine estimates.

The Fraud Risk Framework notes that assessing the likelihood and impact of inherent fraud risk may include involving qualified specialists, such as statisticians and subject-matter experts.<sup>53</sup> These specialists may

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<sup>51</sup>U.S.C. App. § 5.

<sup>52</sup>The Council of the Inspectors General on Integrity and Efficiency, *Quality Standards for Investigations* (Nov. 15, 2011).

<sup>53</sup>[GAO-15-593SP](#).

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contribute expertise and guidance when employing techniques like analyzing statistically valid samples to estimate fraud losses and frequency.

Federal internal control standards require managers to use quality information.<sup>54</sup> Specifically, internal control standards require management to obtain relevant data from reliable internal and external sources in a timely manner based on the identified information requirements. The standards also direct management to process the obtained data into quality information that supports the internal control system. This involves processing data into information and then evaluating the information so that it is quality information.

By leveraging existing oversight mechanisms and payment integrity data-capacity resources, the government would be better positioned to address the different challenges in fraud estimation. In doing so, agencies and others, such as the OIGs, will be better positioned to use estimation to help demonstrate the scope of the problem, prioritize resources, and demonstrate return on investment for fraud risk management activities.

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## Conclusions

Our estimate of direct annual financial losses from fraud affecting the federal government provides insights not obtained through previous analysis and reporting on the extent of fraud across the federal government. The significant estimated annual loss from fraud—ranging from \$233 billion to \$521 billion—reinforces the importance of fraud risk management, with an emphasis on prevention.

With additional data and more granular estimates, such as at the program level, agencies would be better positioned to leverage this information to strategically manage fraud risk. For example, targeted estimates can provide a better understanding of the scope of the problem in different program areas, help prioritize resources, and demonstrate return on investment from fraud prevention and detection efforts. However, the federal government faces challenges in producing more precise fraud estimates, including incomplete and varying recorded data on identified fraud. A government-wide approach is required to address these challenges. Centralized guidance from OMB for improving data collection

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<sup>54</sup>[GAO-14-704G](#).



to support fraud estimates can provide a more uniform approach to what data are collected, and how. Further, identifying ways to expand the use of fraud estimation—leveraging the significant analytics expertise and data repository of Treasury’s Office of Payment Integrity—will help strengthen antifraud efforts and promote fiscal sustainability government-wide.

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## Recommendations for Executive Action

We are making three recommendations, including one to OMB in collaboration with CIGIE, one to OMB, and one to the Department of the Treasury in consultation with OMB. Specifically:

The Director of the Office of Management and Budget, in collaboration with the Council of the Inspectors General on Integrity and Efficiency, should develop guidance on the collection of Office of Inspector General (OIG) data to support fraud estimation. The guidance should

- identify and establish consistent data elements and terminology for use across OIGs;
- include a timeline for implementation and key milestones; and
- leverage existing data systems and processes, as appropriate. (Recommendation 1)

The Director of the Office of Management and Budget, with input from executive branch agencies, should develop guidance on the collection of executive agency data to support fraud estimation. The guidance should

- identify and establish consistent data elements and terminology for use across agencies;
- include a timeline for implementation and key milestones; and
- leverage existing data systems and processes, as appropriate. (Recommendation 2)

The Secretary of the Treasury, in consultation with the Office of Management and Budget, should establish an effort to evaluate and identify methods to expand government-wide fraud estimation to support fraud risk management. This effort should

- initially prioritize program areas at increased risk of fraud;
- be responsive to changes in the availability or quality of data; and

- 
- leverage data-analytics capabilities, such as within the Office of Payment Integrity, which includes the Do Not Pay program. (Recommendation 3)

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## Agency Comments and Our Evaluation

We provided a draft of this report to OMB, CIGIE, and the Department of the Treasury for review and comment. We received written comments from OMB, which are reproduced in appendix III and summarized below. Both CIGIE and the Department of the Treasury provided comments via email in lieu of formal, written comments. We also provided a draft of the report to the 12 selected agencies and their respective OIGs for technical comments, if any. In response, we received technical comments from the Departments of Health and Human Services, Labor, and Justice; the Small Business Administration; and the Department of Labor's OIG, which we incorporated as appropriate. The other agencies and OIGs did not provide comments.

In its written comments, OMB generally agreed with the two recommendations directed to it and with the need for improved data collection and reporting at the agency and program levels. Separately, OMB informed us that it had been in touch with CIGIE and they will work together to determine appropriate next steps regarding our recommendations.

OMB agreed with several aspects of our report, including the following:

- Federal agencies must do a better job assessing and preventing fraud risk and they should more completely and consistently apply GAO's Fraud Risk Framework to their programs to ensure that fraud risks are properly assessed, mitigated, and monitored on an ongoing basis.
- Rigorous analysis of fraud and fraud risk, at the program level, can be highly valuable in driving agency action and ongoing leadership prioritization of combatting fraud.
- The level of risk can vary substantially between agencies and programs.
- The amount of captured fraud and recoveries underestimates total loss from fraud.

OMB also expressed support for our ongoing analysis of fraud risks, efforts to estimate program-specific fraud rates to inform future program

design, and guidance provided by our Fraud Risk Framework. OMB highlighted its collaboration with us and others to identify and reduce fraud risk. For example, OMB noted collaboration through the Joint Financial Management Improvement Program's Payment Integrity Initiative and the issuance of a Controller Alert on identifying and assessing fraud risks.<sup>55</sup> OMB also described several actions agencies have taken to reduce fraud and improper payments. This includes implementing additional safeguards and investing in antifraud and modernization efforts for state unemployment systems.

We appreciate the past coordination with OMB, as well as its efforts and those of agencies, to combat fraud. We look forward to continued coordination and collaboration government-wide on such efforts. We agree that progress has been made on fraud risk management. We also agree that there is more to be done to prevent and reduce fraud.

Beyond those points of agreement, however, OMB raised concerns about our estimate and how it would be interpreted. Specifically, OMB stated that our estimate was based on a "simulation model" rather than analysis of estimated losses by individual federal programs and that our government-wide estimate would not provide agency- or program-specific insights for fraud prevention. OMB also questioned the plausibility of our estimate.

Our estimated range of fraud loss is based on a well-established simulation model. As we make clear in the report, it was designed to provide a government-wide estimate, as opposed to agency- or program-level estimates. We disagree with OMB's implication that our estimate is not based on fraud loss data from federal agencies or programs. To the contrary, fraud frequency and loss data, covering fiscal years 2018 through 2022, collected from the 12 selected OIGs, serve as the primary basis for our estimate. These data reflect adjudicated and potential fraud activity within the agencies and programs. They also provide the basis for our simulation of undetected fraud. While we aggregated these data in the simulation model for statistical reliability reasons, to suggest that our model is not grounded in relevant, appropriate, agency or program data is

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<sup>55</sup>Joint Financial Management Improvement Program (JFMIP) is a cooperative venture between GAO, OMB, the Office of Personnel Management, and the Department of the Treasury. JFMIP, *Payment Integrity Initiative: A Three Year Plan to Advance Payment Integrity*, [JFMIP-24-02](#) (Feb. 2024). See also Office of Management and Budget, *Establishing Financial and Administrative Controls to Identify and Assess Fraud Risk*, CA-23-03 (Washington, D.C., Oct. 17, 2022).

inaccurate. Because these data are not publicly or readily available in a format suitable for fraud estimation, we developed a rigorous approach to collect, collate, and assure reliability for simulation purposes.

OMB's narrow view of fraud is generally confined to confirmed fraud, which is a subset of adjudicated fraud cases. All adjudicated fraud—but especially what is measured in OMB's confirmed fraud reports—reflects only a small portion of the full extent of fraud. Further, OMB's comments overlook the intent and objective of our effort to develop a first-ever, government-wide estimate of losses due to fraud. A government-wide estimate can help OMB, program officials, or Congress begin to understand and assess the scope of the problem and drive action to address it.

Our estimate also builds on the intent of the Fraud Reduction and Data Analytics Act of 2015 (FRDAA), and its successor, the Payment Integrity Information Act of 2019 (PIIA).<sup>56</sup> FRDAA and certain provisions in PIIA were enacted to improve agencies' controls and procedures to assess and mitigate fraud risks and improve data analytics to identify, prevent, and respond to fraud. PIIA included requirements for OMB to take actions to support agencies' fraud risk management, such as by establishing an Interagency working group on government-wide payment integrity improvement. While OMB has recently initiated such meetings, its lag in doing so represents lost opportunities for agencies to share and receive information that could have supported their payment integrity efforts—particularly amid the challenges associated with pandemic spending. The need—and requirements—for agencies to take action to address fraud was reiterated in our February 2023 testimony, which identified agencies' continued lag in implementing fraud risk management activities as a major factor contributing to pandemic programs' exposure to fraud.<sup>57</sup> In November of that year, we reported that of the 173 recommendations we had made to over 40 agency or program offices to improve fraud risk management since 2015, over half (95) remained unimplemented.<sup>58</sup>

As discussed in our report, we recognize the value of more granular-level estimates, such as those at the agency or program level. This is why we

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<sup>56</sup>Pub. L. No. 114-186, 130 Stat. 546 (June 30, 2016); Pub. L. No. 116-117, § 2(a), 134 Stat. 113, 131-32 (2020) (codified at 31 U.S.C. §3357).

<sup>57</sup>GAO, *Emergency Relief Funds: Significant Improvements Are Needed to Address Fraud and Improper Payments*, [GAO-23-106556](#) (Washington, D.C: Feb. 1, 2023).

<sup>58</sup>[GAO-24-106565](#).

made recommendations to improve the data available so that such estimates could be developed in the future. We see this government-wide estimate as an important first step.

Our report repeatedly cautions against any attempt to use our estimated range to reverse engineer how much may have been lost due to fraud for any particular agency or program or predict future fraud losses. OMB did this, however, in its written comments questioning the plausibility of our estimate. Specifically, OMB took our calculation comparing the fraud estimate to annual obligations and inappropriately applied it to various program areas. In doing so, OMB said that certain areas of federal spending have no or low fraud risk, removed those areas of spend from its calculation, and then applied the upper end of the percentage range to the remaining spending. OMB noted this results in an implausibly high level of fraud loss from all other federal programs and suggests long-standing fraud across many federal programs over multiple years comparable to pandemic spending fraud.

We disagree with OMB's approach, assumptions, and conclusions on this issue. The extent and impact of fraud is not easily identified through informal means, and OMB has not performed a meaningful analysis with supporting data of fraud risk in individual federal programs. For example, OMB summarily concludes that interest on public debt and other large portions of federal outlays are at low or no risk of fraud and generally excludes them in their calculation of a fraud rate. Notwithstanding the fact that fraud can add to the federal debt, which directly increases interest payments on that debt, OMB's argument to exclude large portions of federal outlays from the fraud rate is not supported by evidence. It is not based on actual data, backed by the extensive literature on fraud, or methodologically and statistically grounded. While we recognize that some programs are at a lower risk of fraud, all federal programs and operations are at risk of fraud. Some individuals or groups will seek to gain through fraud when and wherever there is opportunity.

We acknowledge risk varies across programs and environments; that variation is reflected in our estimated range of fraud. OMB's focus on the upper end of the range when considering normal risk environments leads to a distorted view of the reasonableness of our estimate. We note in the report that higher-risk environments, such as we observed with pandemic spending, are associated with estimates on the higher end of the range. Lower risk environments are associated with estimates on the lower end of the range.

As discussed in our report, particularly in our methodological appendix, our analysis was based on fraud frequency and loss data, a review of relevant literature, interviews with subject matter experts, and our extensive knowledge of program fraud across the federal government. We also met with knowledgeable agency and OIG officials and conducted extensive work to analyze, select, and use data for our model. After running our simulations, we took multiple steps to assess the reasonableness of our results before finalizing our estimated range. Our results were further reviewed by the selected agencies and their OIGs. As such, our results provide a reasonable estimate of government-wide fraud loss based on the data collected in the timeframe of our review.

Further, as our report states and OMB acknowledges in its comments, our model was developed to estimate government-wide federal fraud losses, and its dollar range and percent should not be applied to the agency, program, or operation level. It is, therefore, inappropriate for OMB to attempt to apply a percentage based on our estimated range of fraud losses to subsets of programs or outlays.

OMB also commented that we declined to share our methodology or show the specific programs and assumptions that informed our model. We disagree. Our report includes a detailed appendix that outlines our objectives, scope, and methodology. It also describes key assumptions used in our estimate of government-wide fraud. Further, we met with OMB staff throughout our engagement and multiple times after providing our draft report for review and comment to discuss the details of our report and methodology.

OMB also noted that our reliance on a simulation model to produce what it described as unrealistic estimates was concerning given our reporting in this and prior reports regarding the availability of data for fraud estimation. OMB referenced a 2023 report we issued on the challenges associated with determining the total extent of fraud.<sup>59</sup> That report summarizes many of the same issues we discuss in this report, including the limitations with existing data.

OMB's comments take our prior work out of context and do not recognize the substantial data collection, collating, analysis, and expertise that we used to develop this estimated range of fraud loss. First, we developed an estimate of fraud, as opposed to a measure of fraud. An estimate, which

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<sup>59</sup>[GAO-23-106110](#).

is a projection or inference based on fraud or fraud-related measures, assumptions, or analytical techniques, was necessary because direct measures of fraud are incomplete or unreliable. We determined that available data were sufficiently available and reliable to develop an estimated range of fraud loss across the federal government. Throughout our report, we acknowledge the inherent challenges with estimating federal fraud losses. Our recommendations are intended to improve the data available so that more granular estimates can be developed to help the government strategically manage fraud risk in the future.

Second, as we detail in this report, to estimate the range of total direct annual financial losses from fraud, we assessed different methods that could be used to estimate fraud. Given available data and our government-wide scope, we selected a Monte Carlo simulation to develop our estimate. A Monte Carlo simulation is a well-established method that can be used to estimate ranges for events where there is a high degree of uncertainty or limited data. OMB's guidance on regulatory analysis notes Monte Carlo simulations as an analytic approach to account for uncertainty.<sup>60</sup>

We therefore maintain that our methodology, including its assumptions and given its limitations as disclosed in the report, was sound and appropriate. Therefore, our estimated range of annual losses due to fraud, based on fiscal year 2018 through 2022 data, is realistic and reflects various risk environments during that period.

In email communication, CIGIE indicated that it appreciated our work and our statement that federal agencies need robust processes in place to prevent, detect, and respond to fraud. CIGIE also stated that it would work with OMB in fiscal year 2024 to consider how the federal inspector general community might improve the availability of fraud-related data to expand government-wide fraud estimation and support fraud risk management, which relates to our second recommendation.

In email communication, the Department of the Treasury indicated that it concurred with our third recommendation that it establish an effort to evaluate and identify methods to expand government-wide fraud estimation to support fraud risk management. The Department of the

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<sup>60</sup>Office of Management and Budget, Circular No. A-4, Regulatory Analysis, (Washington, D.C.: Nov. 9, 2023).

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Treasury also provided technical comments that we incorporated into the report, as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Director of the Office of Management and Budget, the Executive Director of the Council of the Inspectors General on Integrity and Efficiency, the Secretary of the Treasury, and other interested parties. In addition, the report is available at no charge on the GAO website at <https://www.gao.gov>.



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If you or your staff have any questions about this report, please contact Rebecca Shea, (202) 512-6722, [SheaR@gao.gov](mailto:SheaR@gao.gov) or Jared Smith, (202) 512-2700, [SmithJB@gao.gov](mailto:SmithJB@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.



Rebecca Shea  
Director, Forensic Audits and Investigative Service



Jared B. Smith  
Director, Applied Research and Methods

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*List of Committees*

The Honorable Gary C. Peters  
Chairman  
The Honorable Rand Paul, M.D.  
Ranking Member  
Committee on Homeland Security and Governmental Affairs  
United States Senate

The Honorable James Comer  
Chairman  
The Honorable Jamie Raskin  
Ranking Member  
Committee on Oversight and Accountability  
House of Representatives

The Honorable Pete Sessions  
Chairman  
The Honorable Kweisi Mfume  
Ranking Member  
Subcommittee on Government Operations and the Federal Workforce  
Committee on Oversight and Accountability  
House of Representatives

## Appendix I: Objectives, Scope, and Methodology

This report discusses (1) our estimate of the range of total direct annual financial losses from fraud affecting federal programs and operations and (2) opportunities and challenges in fraud estimation to support fraud risk management. We performed this work under the Comptroller General's authority to conduct evaluations to address the broad interest of Congress on the extent of fraud affecting the federal government.

To inform both objectives, we interviewed agency and Offices of Inspector General (OIG) officials from 12 agencies. We primarily interviewed officials responsible for program integrity, criminal investigations, investigative data collection, and audits. These agencies were selected based on obligation levels for fiscal years 2018 through 2022 and include those agencies with the top 10 obligations for one of the fiscal years. We made these selections using budget obligation data available through the Office of Management and Budget's (OMB) MAX A-11 Data Entry Information System (MAX).<sup>1</sup> Combined, the 12 agencies represent approximately 90 percent of all government obligations from fiscal years 2018 through 2022. The 12 selected federal agencies are the Departments of Homeland Security, Defense, Labor, Transportation, Education, Agriculture, the Treasury, Health and Human Services, and Veterans Affairs, Office of Personnel Management, Small Business Administration, and Social Security Administration. We also reviewed relevant federal government requirements for existing fraud-related data and reporting.

In addition, we interviewed Department of Justice officials, including from the Executive Office for United States Attorneys; Criminal Division; Civil Division; Bureau of Justice Statistics; and the Office of Audit, Assessment, and Management, among others. We also met with officials from the Council of the Inspectors General on Integrity and Efficiency (CIGIE), Pandemic Response Accountability Committee, the Internal

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<sup>1</sup>The Office of Management and Budget's MAX A-11 Data Entry System (MAX) is a government-wide system used to share information and services among government agencies and to collect and process most of the information required for preparing the President's Budget of the federal government.

Revenue Service – Criminal Investigation, and the Congressional Research Service.

We also identified and reviewed fraud measurement and estimation studies to inform both objectives.<sup>2</sup> Specifically, we identified and reviewed fraud measurement and estimation studies developed by U.S. government, international, academic, and others with subject-matter expertise. We generally focused on the studies published between fiscal years 2013 and 2022. In total, on the basis of web and literature database research, we considered 46 studies that were relevant for our review. We used these studies to assess estimation and measurement methodologies, the amount of fraud estimated or measured, and challenges in estimating and measuring fraud. As appropriate, we also used the studies to assess the reasonableness of our fraud estimate. Our estimate was in line with fraud estimates and analysis developed by other governments, as well as relevant nongovernmental organizations with fraud expertise.

We also interviewed selected fraud experts to gather additional information related to fraud measurement and estimation. We selected these individuals based on their wide-ranging knowledge of fraud in the international, academic, or private sector. These experts included those from the Association of Certified Fraud Examiners; the Centre for Cybercrime and Economics Crime at the School of Criminology and Criminal Justice at the University of Portsmouth in the United Kingdom; and the creator of the Corruption, Crime, and Compliance blog.

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## Estimate of the Range of Total Direct Annual Financial Losses from Fraud Affecting Federal Programs and Operations

Information about the extent of fraud across the federal government is limited. Various data are available about fraud that has been investigated and adjudicated, but this information does not provide a complete understanding of the extent of fraud. We considered several factors in determining our methodology for estimating fraud, including our

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<sup>2</sup>For the purposes of this report, we define fraud “measure” as a count of detected fraud or fraud-related activities. We define fraud “estimate” as a projection or inference based on fraud or fraud-related measures, assumptions, or analytical techniques, where direct measures are incomplete or unreliable.

knowledge of likely available data, prior fraud estimation methods, and the known challenges of estimating fraud.

In considering prior methods used to estimate fraud, we found that these methods generally fell into the following three categories:

- studies whereby a group of knowledgeable individuals is surveyed to determine what they think the likely amount or rate of fraud is. Because these surveys rely on people’s perceptions, they can be biased, depending on the views of those surveyed;
- the use of a statistically valid sample of transactions and detailed analysis to attempt to identify fraud that occurred in those transactions in order to extrapolate to the population of transactions. For example, in 2023, we relied on statistical sampling to develop an estimate of unemployment insurance fraud.<sup>3</sup> Given the scope of government activities and transactions, this approach was not feasible for our work. Moreover, given the hidden nature of fraud, even a detailed analysis can still miss instances of potential fraud, which would bias the results to indicate less fraud is present; and
- the use of data analytics to identify transactions with evidence of potential fraud. These analyses are typically not based on statistical samples for the purpose of extrapolation. For example, some agencies have collected program data that have been used to detect potential fraud, such as through data matching, data mining, and network analysis.<sup>4</sup> This type of information can serve as inputs to develop broader models on the extent of fraud in a program area or the risk of fraud in individual transactions. However, aggregate government-wide program-level data and program-specific details needed to pursue this approach were not available.

Due to the limited applicability of these methods for the purpose of producing a broader government estimate, we developed a novel method that relied on Monte Carlo simulation to extend the available data to estimate fraud. Monte Carlo simulation is a well-established probabilistic method for estimating a range of outcomes under different assumptions and scenarios where there is uncertainty. We chose this method because it provided a structured approach to account for the available data and

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<sup>3</sup>GAO, *Unemployment Insurance: Estimated Amount of Fraud during Pandemic Likely Between \$100 Billion and \$135 Billion*, [GAO-23-106696](#) (Washington, D.C.: Sept 12, 2023).

<sup>4</sup>Network analysis is a quantitative approach to identifying and graphically representing potentially unknown relationships among individuals or organizations.

addressed the multiple, substantial sources of uncertainty associated with the application of those data to fraud estimation.<sup>5</sup> The approach has similarities to the three different approaches noted above, in that it involves obtaining information from experts in the field, analysis of existing datasets, and the extension of available information to an unobserved population.

We used the simulation to estimate a range of the total direct annual financial losses from fraud. The simulation was developed primarily using data from fiscal years 2018 to 2022, which was organized into three fraud categories further described below. Our approach is sensitive to the assumptions made about fraud and accounts for data uncertainty and limitations. The data available and used in our simulation had various limitations and assumptions that impact our estimate. The insights offered by simulations should be interpreted carefully. While we used an analytical approach to account for the inherent uncertainties associated with fraud estimation and data limitations, the actual amount of direct annual financial losses resulting from fraud affecting federal programs and operations could be outside of the range of our estimate.

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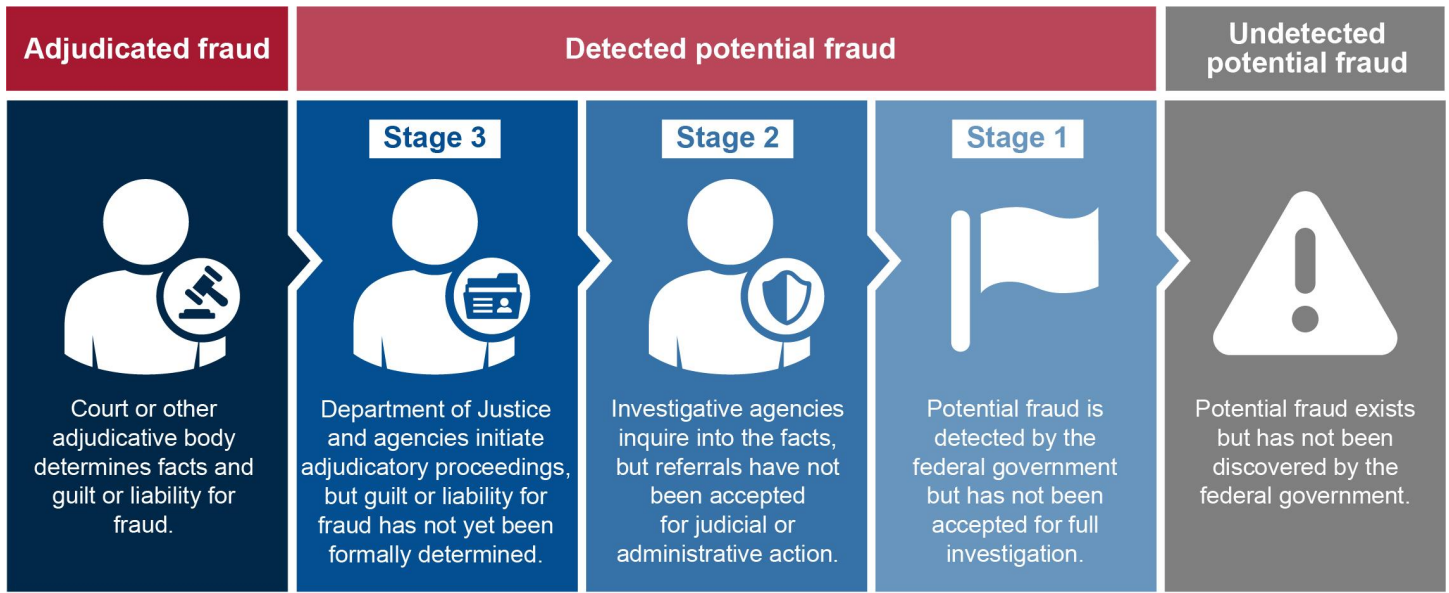
## Fraud Categories

Based on our understanding of fraud, investigations, available data, and the findings of other fraud measurement and estimation studies, we identified three fraud categories—adjudicated fraud, detected potential fraud, and undetected potential fraud. Within detected potential fraud, we developed three subcategories. See figure 10 for additional information on these categories and subcategories.

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<sup>5</sup>The general purpose of a Monte Carlo simulation is to capture the uncertainty in a process by randomly generating a range of values consistent with that process. Monte Carlo simulations can be useful for understanding the range of potential outcomes that can arise under different assumptions and scenarios.

Figure 10: Fraud Categories: Adjudicated, Detected Potential, and Undetected Potential



Sources: GAO (information); Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

Accessible Text for Figure 10: Fraud Categories: Adjudicated, Detected Potential, and Undetected Potential

Adjudicated fraud	Detected potential fraud (stage 3)	Detected potential fraud (stage 2)	Detected potential fraud (stage 1)	Undetected potential fraud
Court or other adjudicative body determines facts and guilt or liability for fraud.	Department of Justice and agencies initiate adjudicatory proceedings, but guilt or liability for fraud has not yet been formally determined.	Investigative agencies conduct full investigations, but the federal government has not decided to take judicial or administrative actions to remedy.	Potential fraud is detected by the federal government but has not been accepted for investigation.	Potential fraud exists but has not been detected by the federal government.

Sources: GAO (information); Icons-Studio/stock.adobe.com (icons) | GAO-24-105833

These categories reflect different degrees of certainty about the possibility of fraud. For example, an instance of adjudicated fraud is certainly fraudulent. In contrast, the certainty of fraud may be substantially lower for an instance of potential fraud that has been detected and not accepted for investigation.






We shared these categories and subcategories with OIG officials from the 12 selected agencies, CIGIE, the Pandemic Response Accountability Committee, and the Department of Justice to obtain their feedback on the appropriateness of the categories. Generally, these officials agreed with

our categories and subcategories. As appropriate, we made clarifications or revisions based on their input.

### Data Collection and Analysis

Using these three fraud categories, we collected and analyzed data from three key sources—OIG investigative systems, OIG semiannual reports, and OMB’s Paymentaccuracy.gov reporting. Data on undetected fraud, by their nature, do not exist. For the undetected fraud category, we relied on fraud studies for model inputs and assumptions. See figure 11 for the information and data sources used for each fraud category.

Figure 11: Information and Data Sources for the Simulation, by Fraud Category

	Adjudicated fraud	Detected potential fraud			Undetected potential fraud
		Stage 3 	Stage 2 	Stage 1 	
Office of Inspector General (OIG) investigative information	●	●	●	●	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
OIG semiannual reports	●	●	●	●	
Office of Management and Budget confirmed fraud	●	○	○	○	
Fraud studies	●	●	●	●	

- Source used for cross-government fraud estimate
- Source not available for cross-government fraud estimate

Sources: GAO (information); GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833



**Appendix I: Objectives, Scope, and Methodology**

**Accessible Text for Figure 11: Information and Data Sources for the Simulation, by Fraud Category**

	<b>Adjudicated fraud</b>	<b>Detected potential fraud: Stage 3</b>	<b>Detected potential fraud: Stage 2</b>	<b>Detected potential fraud: Stage 1</b>	<b>Undetected potential fraud</b>
Office of Inspector General (OIG) investigative information	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
OIG semiannual reports	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
Office of Management and Budget confirmed fraud	Source used for cross-government fraud estimate	Source not available for cross-government fraud estimate	Source not available for cross-government fraud estimate	Source not available for cross-government fraud estimate	Data on adjudicated fraud and detected potential fraud used to simulate undetected potential fraud data
Fraud studies	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate	Source used for cross-government fraud estimate

Sources: GAO (information); GAO and Icons-Studio/stock.adobe.com (icons). | GAO-24-105833

Individually, these data do not provide a comprehensive understanding of the extent of fraud but, when analyzed collectively and in our simulation, provide support for a government-wide estimate.

We generally collected data from each source for fiscal years 2018 through 2022. The data collected have strengths and limitations that impact our estimate. For example, investigative data related to potential and adjudicated fraud were generally available from all 12 selected agencies, but there was variance in the terms used across the sources, and not all agencies had information for each subcategory of potential fraud. We considered these strengths and limitations in determining the data to collect and used information from fraud estimation studies developed by government, international, academic, and others with subject-matter expertise to adjust simulation assumptions and parameters to account for data limitations. Specifically, data sources for our simulation and their related limitations include those related to investigative data, OIG semi-annual reports, and confirmed fraud amounts reports by agencies to OMB.

**Investigative data.** We requested data from the OIGs for the 12 selected agencies using a data collection instrument.<sup>6</sup> The instrument requested OIG information organized into the fraud categories and subcategories, which we had previously discussed with the selected OIGs. The instrument requested information that was known to OIGs, such as hotline complaints and closed case information. We pretested the data collection instrument with three OIGs prior to collecting these data from all 12 selected OIGs.

While we received information from all 12 of the selected agencies' OIGs, the level of detail provided varied. Some OIGs were able to provide information for each of the data elements we requested. However, some did not maintain records in such a way that they could provide all information to us without extensive manual work. For example, some OIGs collected data at the case level, while others collected at the individual or entity level and were unable to consolidate at the case level. We addressed these differences in how our model analyzed the data.

We requested summary statistics and information for fiscal years 2018 through 2022 for the following to inform the detected potential fraud category:

- number of allegations received in the fiscal year;
- number of allegations closed in the fiscal year, including those that were not converted to full investigations;
- number of investigations opened and closed, including details on whether the case was accepted for judicial, administrative, criminal, or civil action; and
- the dollar value of alleged direct federal financial losses for allegations, closed investigations, and judicial and administrative action.

We also requested summary statistics and information for fiscal years 2018 through 2022 for the following to inform the adjudicated fraud category:

- number of cases of adjudicated fraud by criminal, civil, or administrative case types; and

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<sup>6</sup>This information was often maintained in Office of Inspector General case management systems.

- the direct federal financial loss, by criminal, civil, or administrative case types.

We also requested additional summary statistics and information for fiscal years 2018 through 2022 on actions taken jointly with other OIGs.

We also requested that the OIGs

- describe any potential issues or limitation related to the data requested,
- provide their professional perspective on the portion of allegations from hotlines and other sources that are accepted for investigation or ultimately adjudicated as fraud, and
- describe any data system or other changes that might affect the information provided.

Finally, we requested data regarding the progress on actions taken for fiscal years 2013 through 2022 to reflect the extended investigative timelines and the full extent of adjudicated and potential fraud in our simulation. These investigative data included information on the number of unique cases that included a potential financial loss related to judicial and administrative action and the status of certain closed and adjudicated cases for the extended period. We used these data to contextualize and validate the summary statistics collected for fiscal years 2018 through 2022.

**Office of Inspector General Semi-Annual Reports.** OIGs are required to report on their activities through semiannual reports.<sup>7</sup> We collected and analyzed information reported in semiannual reports for the 12 selected agencies for fiscal years 2018 through 2022 to inform the detected potential fraud and adjudicated fraud categories. Specifically, we collected information on

- investigative reports issued;
- cases referred to the Department of Justice for criminal prosecution;
- cases referred to state or local authorities for criminal prosecution;

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<sup>7</sup>Under the Inspector General Act of 1978, as amended, federal inspectors general are required to submit semiannual reports to Congress describing the offices' activities and accomplishments during that reporting period. 5 U.S.C. App. § 5.

- indictments, criminal informations, and convictions that resulted from prior referrals;<sup>8</sup>
- statistical summaries of investigative accomplishments; and
- hotline reporting statistics, and aggregated amounts of fraud.

We assigned data collected from the semiannual reports to the appropriate fraud category or subcategory.

**Confirmed fraud.** We collected and analyzed confirmed fraud data reported by agencies to OMB for fiscal years 2018 through 2022. Confirmed fraud data are reported to OMB by federal agencies and are available on OMB's Paymentaccuracy.gov.<sup>9</sup> These data include our 12 selected agencies and all other agencies that reported confirmed fraud amounts to OMB in our time period. According to OMB's guidance for reporting, confirmed fraud

- is defined as the amount determined to be fraudulent through the adjudication process;
- does not include transactions determined by management to be anomalous or indicative of potential fraud that were referred to the agency's OIG or the Department of Justice, unless the appropriate judicial or adjudicative process has made the determination; and
- does not represent anything settled out of court with or without admission of guilt.<sup>10</sup>

While confirmed fraud provides a direct measure of fraud, it represents only a portion of the total amount of fraud impacting the federal government. Confirmed fraud also does not include cases that never resulted in a conviction or a formal admission of wrongdoing. For these

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<sup>8</sup>A criminal information is a written accusation made by a public prosecutor, without the intervention of a grand jury. On the other hand, an indictment is a formal written accusation originating with a prosecutor and issued by a grand jury against a party charged with a crime.

<sup>9</sup>OMB requires agencies to provide certain information about improper payments and confirmed fraud. OMB publishes this information in a payment-integrity dashboard on Paymentaccuracy.gov.

<sup>10</sup>Office of Management and Budget, *Transmittal of Appendix C to OMB Circular A-123, Requirements for Payment Integrity Improvement*, M-21-19 (Washington, D.C.: Mar. 5, 2021).

reasons, we considered other sources of information about fraud in our model, and we estimated undetected fraud, as well.

To determine the reliability of the investigative data, confirmed fraud data, and OIG semiannual report data, we met with knowledgeable agency and OIG officials and reviewed relevant documentation to identify any relevant data limitations that could impact our simulation. We also manually reviewed the data to verify the quality and completeness of the data. On the basis of the investigative data, confirmed fraud, and OIG semiannual report data collected, we assessed each specific dollar amount and count to identify the data for inclusion in the simulation. Specifically, we selected those data that offered the most credible and complete information for our fraud data categories. We concluded that these data were sufficiently reliable to inform the development of assumptions and parameters in our Monte Carlo analysis and to serve as inputs into that estimate.

In addition to fraud-related information sources, we also used obligation data available through OMB MAX. We used average obligations for fiscal years 2018 to 2022 to account for the size, in dollar amount, for agency operations in our simulation. We obtained these data for our 12 selected agencies and all other agencies.

To determine the reliability of the obligation data from OMB MAX, we reviewed relevant documentation on the data and conducted electronic testing. We concluded that these data were sufficiently reliable to determine the total obligations for each agency and as an input into our Monte Carlo analysis.

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## Simulation Framework, Assumptions, and Limitations

On the basis of the fraud categories, data sources, discussions with officials from the 12 selected agencies and their OIGs, and other experts, we developed a simulation framework to account for three limitations common in efforts to measure or estimate fraud.<sup>11</sup> These are limitations related to the fact that

- not all fraud is adjudicated,
- not all fraud is detected, and

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<sup>11</sup>We use the terms “model” and “simulation framework” both to refer to the general approach that we used to estimate the extent of fraud in the federal government. We use the term “simulation” to describe the implementation of the estimation approach.

- measures and estimates based on potential fraud likely include some nonfraudulent activities.

**Assumptions related to the nature of fraud.** The foundation for our simulation framework is a set of assumptions about the nature of fraud and how information in the different fraud categories relate to each other. For example, because of the hidden nature of fraud, we cannot observe or detect the complete set of fraudulent activities and associated financial loss—some portion of fraud and related financial loss will remain undetected. In addition, the process of investigating and adjudicating fraud can be costly. As a result, even if an agency or OIG is aware of potential financial losses from detected potential fraud, some portion of potential fraud may never be investigated or adjudicated. The statute of limitations could also impact the OIG’s ability to investigate some detected potential fraud. For example, if the statute of limitations were expiring before investigative activity could likely be completed, the case may be deprioritized. Relatedly, the average dollar amounts associated with cases of adjudicated fraud are likely higher than the average amounts associated with cases of detected potential fraud, which, in turn, would be greater than the average amounts associated with undetected fraud.

Given the above considerations, we identified the following baseline assumptions about the nature and characteristics of fraud. To the extent we could confirm the accuracy of these assumptions during our work, we did so.<sup>12</sup> Specifically, we assumed that

- the total financial loss amount of fraud can be reasonably modeled using the number of occurrences of fraud and potential fraud, the financial loss amount associated with each occurrence, the size of agency operations, the characteristics of the agency, and the characteristics of fraud;
- on average, the financial loss amount associated with each adjudicated occurrence of fraud will be higher than the loss amount associated with each occurrence of detected potential fraud. We found that this expectation generally held in our observed data. We applied this assumption when simulating fraud categories with missing data;

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<sup>12</sup>We describe the specific implementation of these assumptions, along with the distributions underlying Monte Carlo simulation, in the simulation procedures below.

- on average, the financial loss amount associated with each occurrence of undetected potential fraud will be lower than the loss amount associated with each occurrence of detected potential fraud. We assumed this relationship held when simulating fraud information categories with missing data. If this assumption does not hold, then the simulation may underestimate the potential loss from undetected fraud;
- on average, the number of occurrences of adjudicated fraud will be smaller than the number of occurrences of detected potential fraud. We found that this expectation generally held in our observed data; and
- the number of occurrences of undetected potential fraud will be closer in scale to the number of occurrences of detected potential fraud than to adjudicated fraud. If this assumption does not hold, then the simulation may under- or overestimate the potential loss from undetected fraud. To reduce the risk associated with this assumption, we performed model sensitivity checks that included different potential relationships between the number of occurrences of undetected potential fraud and detected potential fraud described in more detail later in this section.

**Assumptions related to fraud occurrence and loss.** In addition to the baseline assumptions about the nature and characteristics of fraud, we also applied various assumptions throughout the simulation process. Three additional assumptions related to fraud occurrence, and two related to fraud loss are described below.

- *Assumptions applied to agencies.* We made assumptions about the relationship between fraud at the 12 selected agencies and all other federal agencies. We had total obligations and OMB confirmed fraud data for all federal agencies as inputs to the simulation. We used data collected for the 12 selected agencies to inform our simulation of the number of fraud occurrences at other agencies. We took this approach, given that our agency selection included about 90 percent of agency obligations and also reflected a variety of different programs and operations. Collectively, for these other agencies, we assumed that the relationship between the number of fraud occurrences and financial loss associated with each individual occurrence of fraud was similar to the relationships observed at the selected agencies.
- *Assumptions related to the occurrence of fraud.* We assumed that the number of fraud occurrences for each agency is uniformly distributed between the minimum value and maximum value we identified from

the data collection process.<sup>13</sup> For undetected potential fraud simulations, we assumed that the number of undetected potential fraud occurrences is the sum of the fraud occurrences in the three stages of detected potential fraud.<sup>14</sup>

- *Assumptions about financial loss associated with individual occurrences of fraud.* We assumed that the range of financial losses attributable to individual occurrences of fraud could be reasonably captured using a uniform distribution. This is described in greater detail below. To add variability to our estimate, we randomly generated financial amounts from a uniform distribution with a minimum and maximum defined by the amounts we observed across the 5 years of data for each agency.<sup>15</sup> In cases where agencies did not provide any dollar amount associated with detected potential fraud, we follow the previously described assumption that, on average, the financial loss associated with each adjudicated occurrence of fraud would be higher than the loss associated with each occurrence of detected potential fraud, and we adjusted the financial loss amount based on the financial loss amounts observed in the previous steps of the simulation. The specific adjustments are provided in the simulation description.<sup>16</sup>
- *Assumptions related to financial recoveries and fraud loss.* Financial recoveries include assets or funds regained or ordered restored through a judicial or administrative action after it was determined that the funds or assets were lost, misappropriated, stolen, or misused. Financial recoveries may, but do not always, equate to the direct financial loss from fraud determined through the adjudicative process. In some instances, financial recoveries may include the recovery of

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<sup>13</sup>We also applied different simulations based on the assumptions that the number of fraud occurrences for each agency is uniformly distributed between two (one) standard deviations below the average and two (one) standard deviations above the average of the data.

<sup>14</sup>We also applied different simulations based on the assumption that the number of undetected potential fraud occurrences is the same as the amount in stage 1 of detected potential fraud.

<sup>15</sup>We also applied different simulations based on the assumption that the number of fraud occurrences for each agency is uniformly distributed between two standard deviations below the average and two standard deviations above the average of the calculated financial loss amount associated with each occurrence of fraud. As another approach, we repeated this design using one, rather than two, standard deviations.

<sup>16</sup>We also applied different simulations based on the assumptions that the size of financial loss amount factors is uniformly distributed between zero and the average of results of simulated detected potential fraud stage 1.



another agency's financial loss from fraud, if the fraud was perpetuated against multiple agencies. In this situation, if amounts are reported by both agencies, then the financial recoveries would overstate the financial loss from fraud across the agencies. Conversely, recoveries may be less than the direct financial loss from fraud; for example, when a restitution order is less than the actual funds lost due to fraud.<sup>17</sup> In this situation, recoveries would underestimate fraud.

- *Assumptions related to OIG investigations of fraud relative to other crimes.* OIGs track fraud and nonfraud cases in their case management systems. However, their systems do not always distinguish fraud cases from other crimes. For example, OIGs conduct investigations not related to fraud, such as employee misconduct. We adjusted the dollar losses associated with cases downward to adjust for this issue. Without this adjustment, our simulation would overestimate fraud for this data source.

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## Simulation Procedures

The simulation involved a series of iterative steps. The result of each complete simulation step was an estimate of fraud. We ran the simulation 1,000 times, which produced 1,000 estimates. These estimates were then used to formulate our range of estimated fraud affecting the federal government.

Each iteration of the simulation included the following steps, repeated for each fraud category.

1. Using data on adjudicated fraud, we
  - a. calculated a range for the annual number of occurrences of adjudicated fraud for each agency.<sup>18</sup> We selected the number of occurrences randomly from this range.

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<sup>17</sup>In federal court, a convicted offender may be ordered to reimburse victims for financial losses incurred due to the offender's crime. This reimbursement is called "restitution," and it may be ordered for lost income, property damage, counseling, medical expenses, funeral costs, or other financial costs directly related to the crime.

<sup>18</sup>In this context of this discussion, the term "agency" refers to each of the 12 selected agencies and the group that contained all other federal agencies. For the federal agencies that were not among the 12 selected and for which data were collected, we estimated their fraud using OMB confirmed fraud amounts, obligations, and fraud data from the 12 selected agencies.

- b. calculated a range for the financial loss associated with each occurrence of adjudicated fraud for each agency. We randomly generated values from this range to simulate the losses associated with each potential occurrence of adjudicated fraud. For example, if we simulated that there were 100 occurrences of adjudicated fraud, then we would simulate 100 financial losses, one for each occurrence; and
  - c. combined the financial losses that we simulated for each occurrence and scaled the results based on agency obligations.<sup>19</sup>
2. We repeated steps a) through c) using data from the detected potential fraud category—stage 3. These data include remedies that were obtained using due process but where guilt, liability, or fault of fraud were not formally determined.

If financial information about such agency remedies did not exist for an agency, then we developed a range for the financial loss amount using the average simulated amounts for adjudicated fraud. In these cases, financial loss amounts were randomly drawn from a range defined to be between 50 percent and 150 percent of the mean value of the adjudicated fraud.

3. We repeated steps a) through c) using data from the detected potential fraud category—stage 2. These data include information about investigative inquiries into the facts of a case but where referrals have not been accepted for judicial or administrative actions.

If financial information about such investigative inquiries did not exist for an agency, then we developed a range for the financial loss associated with each individual fraud occurrence using the average simulated loss amounts from the prior step (stage 3—remedies that were obtained using due process but where guilt, liability, or fault of fraud were not formally determined). In such cases, financial loss

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<sup>19</sup>We used obligations to reflect that fraud can occur, and is best prevented, prior to when there is an outlay of funding. An obligation is a definite commitment that creates a legal liability on the part of the federal government for the payment of goods and services ordered or received, or a legal duty on the part of the United States that could mature into a legal liability by virtue of actions on the part of the other party beyond the control of the United States. Payment may be made immediately or in the future. An outlay occurs upon the issuance of checks, disbursement of cash, or electronic transfer of funds made to liquidate a federal obligation.

amounts were randomly drawn from a range defined to be between 25 percent and 100 percent of the mean value of the prior step.<sup>20</sup>

4. We repeated steps a) through c) using data from the detected potential fraud category—stage 1. These data include information about potential fraud detected by the federal government but not accepted for full investigation.

If financial information about such potential fraud did not exist for an agency, then we used the average simulated amounts from our prior step (stage 2—investigative inquiries into the facts of a case but where referrals have not been accepted for judicial or administrative action). In such cases, financial loss amounts were randomly drawn from a range defined to be between 0 percent and 100 percent of the mean value of the prior step. In addition, for 0 percent to 50 percent of the occurrences, we assumed no financial loss to account for uncertainty associated with false positives in fraud reporting.

5. We tested 12 different simulations for undetected fraud, each based on a different model of the relationship between undetected and detected fraud. For example, we ran a simulation that assumed that the number of occurrences of undetected fraud was equal to the number of occurrences of detected fraud. We also ran a simulation that assumed that the average financial loss amount associated with undetected fraud was similar to the average amount associated with cases detected by the federal government but not accepted for full investigation. These different undetected fraud models produced generally consistent simulation results of the total amount of financial loss from fraud.
6. We combined the interim simulation outputs that were generated from each step to develop the government-wide estimated fraud range. The range was calculated as the 5th percentile and 95th percentile of the 1,000 simulated runs. Because our simulation is constructed from the data of fraud occurrence and associated financial information measured on an annual basis, our simulation results are also annual financial loss estimates of the categories affecting federal programs and operations.

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<sup>20</sup>The size of the adjustment depended on the agency. For agencies without financial information for the amounts associated with remedies that were obtained using due process but where guilt, liability, or fault of fraud were not formally determined, financial loss amounts were randomly drawn from a range defined to be between 50 percent and 150 percent of the mean value. The size of the adjustments was calculated by testing the simulation procedures on agencies with information regarding all categories of fraud information.

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## Assessing the Reasonableness of Simulation Results

To assess the reasonableness of the simulation results, we took several steps. First, we compared interim simulation data calculated for each of the 12 selected agencies against information we had collected about fraud at those organizations. This information included 46 estimations and measurement studies from a variety of sources, including the OIGs for the Small Business Administration and the Department of Labor. In addition, we reviewed information that agencies reported on actions taken to combat fraud and obtain financial recoveries.

If the interim simulation data for an agency differed materially from available information, we adjusted the relevant simulation parameters to improve consistency. These adjustments were applied at the fraud category level. For example, the Department of Justice and the Department of Health and Human Services reported that the federal government won or negotiated more than \$5 billion in health care fraud judgments and settlements in fiscal year 2021.<sup>21</sup> On the basis of the findings in this report, we adjusted the simulation parameters for the Department of Health and Human Services to assure that interim simulation data for detected fraud did not conflict with the \$5 billion.<sup>22</sup> Given that the adjustments were made at the fraud category level, an agency might have no adjustment for the portion of the simulation associated with adjudicated fraud weights but an adjustment for the portion of the simulation associated with stage 1 detected potential fraud.

In addition, we ran separate simulations with alternative assumptions to assess the reasonableness of our results. As described previously, we considered multiple approaches to estimating undetected potential fraud. Similarly, we considered different approaches in the simulations based on the certainty in the categories of fraud (i.e., the adjudicated fraud category

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<sup>21</sup>Department of Justice and Department of Health and Human Services, *Annual Report of the Departments of Health and Human Services and Justice, Health Care Fraud and Abuse Control Program FY 2021* (July 2022).

<sup>22</sup>The \$5 billion in health care fraud was used to adjust fraud weights for detected fraud, which includes adjudicated fraud, investigations, and fraud that has been flagged by the government regardless of whether it has been accepted for investigation. We expected that the fraud amounts associated with the broader category of detected fraud would be greater than the amounts associated with civil settlements. To account for uncertainty in this relationship, we set \$5 billion as the 10th percentile for interim simulation values associated with Health and Human Services detected fraud. This approach allowed for the possibility that the total amount of detected fraud could be lower than \$5 billion for any given simulated year.

has higher certainty than the detected potential fraud in any stage). We also considered additional ranges for the simulated financial amounts associated with each fraud category. The purpose of this additional testing was to assess the sensitivity of our reported range to the assumptions underlying our simulation. Sensitivity was determined by examining how much our estimate changed, given the changes to the structure of our simulation. We found our range to be reasonably consistent, given the approaches that we tested.

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## Simulation Interpretation and Uncertainty

The insight offered by simulations should be interpreted carefully. Our approach was not designed to provide precise predictions. Instead, it was meant to extend the current understanding about the likely extent of fraud in the federal government, given available data.

Our methodology results in two primary sources of uncertainty. The first source of uncertainty is the statistical uncertainty arising from the randomness of the simulation process. We intentionally included this randomness to help capture the uncertainty associated with the selected fraud information categories. For example, our simulation has parameters that account for uncertainty in the number of occurrences of fraud and the financial loss associated with each occurrence of fraud. The statistical uncertainty associated with our estimate is reflected in our reported range.

In addition to statistical uncertainty, our approach is affected by the uncertainty associated with the specification of our underlying model and the reliability of the underlying data. The results of our simulations depend on key assumptions we made about how the historical data might correspond to adjudicated fraud, detected potential fraud, and undetected potential fraud.

We believe our assumptions are reasonable, given our historical data and the degree of uncertainty involved. However, our estimates should not be generated to specific past or future results. In part, this is because resulting overall potential annual financial loss of fraud would ultimately depend on how federal agencies manage their specific fraud risks, and other factors, which we did not attempt to model.

If one or more of our assumptions, as implemented in our simulation, are incorrect, then we face an increased risk that our range will not capture

the actual extent of fraud. This risk is especially high with the undetected fraud category. As described in the previous section, we attempted to mitigate this risk by checking if our results were reasonably consistent, given changes to key assumptions underlying our simulation.

In addition, we reviewed published information about government and agency-specific fraud rates to ensure that our fraud estimate was in line with these alternative sources. These included fraud estimation or analysis efforts performed by the federal government, non-U.S. governments, and relevant nongovernmental organizations with fraud expertise. These studies include:

- the United Kingdom Public Sector Fraud Authority, which estimates fraud and error losses between 0.5 and 5 percent of government expenditures in 2020;
- the Association of Certified Fraud Examiners that estimated in 2022 that organizations lost about 5 percent of revenue to fraud each year; and
- the University of Portsmouth Centre for Counter Fraud Studies, which estimated fraud and error losses between 0.02 and 63.96 percent, with average losses of 6.42 percent between 1997 and 2020.

Agencies differed in the methods and assumptions that they used to compile the data that we relied on to calculate our estimate. Our simulation results may be influenced by these differences. We worked to mitigate potential issues with our data sources by working closely with agencies and OIGs to better understand the limits of the underlying source data.

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## Opportunities and Challenges in Fraud Estimation to Support Fraud Risk Management

To identify opportunities and challenges in fraud estimation to support fraud risk management, we reviewed relevant agency and OIG documentation related to existing fraud-related measures, such as fraud estimation studies or documentation discussing existing measures. For example, we reviewed agency reports documenting estimation studies or how fraud measures were developed and any known caveats and limitations. We also reviewed OIG reports discussing known challenges with the data. We reviewed relevant requirements for existing fraud-

related data and reporting, including OIG semiannual reports, confirmed fraud reporting, and CIGIE annual reports to the President.

We evaluated the extent to which these data and information collection and use align with leading practices in GAO's A Framework for Managing Fraud Risks in Federal Programs—specifically, leading practices related to assessing fraud risks and evaluating outcomes using a risk-based approach.<sup>23</sup> We also evaluated the extent to which existing fraud-related data and information collection and use align with the Standards for Internal Control in the Federal Government.<sup>24</sup> Specifically, we determined that the information and communication component of internal control was significant to the objective, along with the underlying principles that management should use quality information to achieve the entity's objectives.

We conducted this performance audit from February 2022 to April 2024 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings based on our audit objectives.

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<sup>23</sup>GAO, *A Framework for Managing Fraud Risks in Federal Programs*, [GAO-15-593SP](#) (Washington, D.C.: July 28, 2015).

<sup>24</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

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## Appendix II: Matters for Congressional Consideration

In a March 2022 testimony before the Senate Committee on Homeland Security and Governmental Affairs, we recommended 10 Matters for Congressional Consideration to strengthen internal controls and financial and fraud risk management practices across the government.<sup>1</sup> As of March 2024, these matters remained open.

- Congress should pass legislation requiring the Office of Management and Budget (OMB) to provide guidance for agencies to develop plans for internal control that would then immediately be ready for use in, or adaptation for, future emergencies or crises and requiring agencies to report these internal control plans to OMB and Congress. (Matter for Congressional Consideration 1)
- Congress should amend the Payment Integrity Information Act of 2019 to designate all new federal programs making more than \$100 million in payments in any one fiscal year as “susceptible to significant improper payments” for their initial years of operation. (Matter for Congressional Consideration 2)
- Congress should amend the Payment Integrity Information Act of 2019 to reinstate the requirement that agencies report on their antifraud controls and fraud risk management efforts in their annual financial reports. (Matter for Congressional Consideration 3)
- Congress should establish a permanent analytics center of excellence to aid the oversight community in identifying improper payments and fraud. (Matter for Congressional Consideration 4)
- Congress should clarify that (1) chief financial officers (CFO) at CFO Act agencies have oversight responsibility for internal controls over financial reporting and key financial management information that includes spending data and improper payment information; and (2) executive agency internal control assessment, reporting, and audit requirements for key financial management information, discussed in an existing Matter for Congressional Consideration in our August

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<sup>1</sup>GAO, *Emergency Relief Funds: Significant Improvements Are Needed to Ensure Transparency and Accountability for COVID-19 and Beyond*, [GAO-22-105715](#) (Washington, D.C.: Mar. 17, 2022).



2020 report,<sup>2</sup> include internal controls over spending data and improper payment information. (Matter for Congressional Consideration 5)

- Congress should require agency CFOs to (1) submit a statement in agencies' annual financial reports certifying the reliability of improper payments risk assessments and the validity of improper payment estimates, and describing the actions of the CFO to monitor the development and implementation of any corrective action plans; and (2) approve any methodology that is not designed to produce a statistically valid estimate. (Matter for Congressional Consideration 6)
- Congress should consider legislation to require improper payment information required to be reported under the Payment Integrity Information Act of 2019 to be included in agencies' annual financial reports. (Matter for Congressional Consideration 7)
- Congress should amend the DATA Act to extend the previous requirement for agency inspectors general to review the completeness, timeliness, quality, and accuracy of their respective agency data submissions on a periodic basis. (Matter for Congressional Consideration 8)
- Congress should amend the DATA Act to clarify the responsibilities and authorities of OMB and the Department of the Treasury for ensuring the quality of data available on USA Spending.gov. (Matter for Congressional Consideration 9)
- Congress should amend the Social Security Act to accelerate and make permanent the requirement for the Social Security Administration to share its full death data with the Department of the Treasury's Do Not Pay working system. (Matter for Congressional Consideration 10)

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<sup>2</sup>GAO, *Federal Financial Management: Substantial Progress Made since Enactment of the 1990 CFO Act; Refinements Would Yield Added Benefits*, [GAO-20-566](#) (Washington, D.C.: Aug. 6, 2020).

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# Appendix III: Comments from the Office of Management and Budget

**Appendix III: Comments from the Office of  
Management and Budget**



EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D. C. 20503

March 26, 2023

Rebecca Shea  
Director, Forensic Audits and Investigative Service  
U.S. Government Accountability Office  
Washington, DC 20548

The Office of Management and Budget (OMB) appreciates the opportunity to review and provide comment on the Government Accountability Office (GAO)'s draft report.

OMB agrees with GAO that Federal agencies must do a better job assessing and preventing fraud risk and has benefitted from the recommendations of GAO as well as Inspectors General, including the Pandemic Response Accountability Committee (PRAC), on reforms to address fraud in specific programs—especially those that were implemented at the onset of the pandemic in 2020. However, OMB has significant concerns that this report will not further efforts to prevent and reduce fraud, but rather will create confusion and promote misleading generalizations that have no factual connection to specific Federal programs. Rigorous analysis of fraud and fraud risk, at the program level, can be highly valuable in driving agency action and ongoing leadership prioritization of combatting fraud. This report, though, does not provide that type of actionable analysis.

Specifically, according to GAO, its efforts to provide an estimate of total annual Federal government losses due to fraud are not based on analysis of estimated losses by individual Federal programs. Instead, GAO's estimated total rests on a "simulation model" that seeks to establish an estimated government-wide loss without the ability to either add up agency-by-agency estimates or decompose a government-wide estimate into specific agencies and programs. The analysis does not provide any agency- or program-specific insight that could be actionable in preventing and reducing fraud for agencies or Congress. And GAO's simulation approach produced an estimated range of annual losses that when subjected to analytical scrutiny is simply not plausible. OMB was unable to inquire further into the simulation or analysis because GAO declined to share its methodology or show the specific programs and assumptions that informed its model or examination.

The annual estimates of losses from fraud, when properly segmenting Federal spend to account for lower-risk spend (*e.g.*, interest payments), imply an implausibly high level of fraud loss from all other Federal programs. In fact, the analysis would suggest that there was long-standing fraud across many Federal programs over multiple years that was comparable to the programs implemented in 2020 that GAO describes as subject to "unprecedented fraud." GAO's

fraud estimate's range represents four to eight percent of average Federal outlays during 2018 to 2022. When outlays are adjusted for programs known to have no or low risk of fraud, such as interest on public debt, these rates climb further to levels consistent with the fraud rates—during a period which GAO again described as “unprecedented”—in three major 2020 pandemic relief programs. GAO estimated that the fraud rate for Unemployment Insurance (UI) programs during the pandemic was between 11% and 16%. Thus, GAO's estimate implies that long-standing Federal programs had comparable rates of fraud to UI programs during the pandemic

GAO's reliance on a simulation model to produce such unrealistic estimates is particularly concerning given GAO's own recognition, in this report and elsewhere, that actual data cannot support such an estimate. GAO itself noted in January 2023 that “[e]xisting data on fraud are insufficient for determining the total amount of federal fraud.”<sup>1</sup> There is not new data in the last year that would undermine GAO's 2023 conclusion. OMB agrees that existing data collection and reporting are insufficient for accurately determining a government-wide fraud estimate. OMB also agrees with the OIG and agency officials who in response to this report “noted challenges in producing fraud estimates, such as limited available fraud-related data and use of varying terms and definitions of fraud for recording data.” Further, OMB agrees that these “data gaps and variability result in information that cannot be readily compared or consolidated to determine the extent of fraud across the federal government.”

OMB agrees with GAO that “the level of risk can vary substantially” between agencies and programs. These significant variations in fraud risk across agencies and programs make developing program-specific fraud estimates difficult, and are further compounded when attempting to develop a government-wide estimate not based on a tangible and comprehensive program-by-program or agency-by-agency analysis. GAO acknowledges in the report that the fraud estimate proposed in the report has “known uncertainties,” including that the estimate and related percentages “should not be applied at the agency or program level,” are not intended for “[d]rawing conclusions about pandemic fraud,” and are “not based on a predictive model.”

We appreciate that GAO states in the report that it is not predictive of future years. It is also vital that the report not be used to suggest potential fraud levels in any specific major Federal programs, and again we appreciate GAO's recognition that the analysis has no bearing on program-specific estimates.

Despite our significant concerns with this report, OMB wants to acknowledge our support of GAO's ongoing analysis of fraud risks, efforts to estimate program-specific fraud rates to inform future program design, and guidance provided by GAO's Fraud Risk Framework and recommendations. OMB and GAO have worked collaboratively to highlight the importance of identifying and reducing fraud risk including through issuance of a Controller Alert, [CA-23-03 Establishing Financial and Administrative Controls to Identify and Assess Fraud Risk](#) and the [Payment Integrity and Fraud Symposium Series](#). The Joint Financial Management Improvement

<sup>1</sup> GAO-23-106110, <https://www.gao.gov/assets/gao-23-106110.pdf>.

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Program, a cooperative venture between GAO, OMB, the Office of Personnel Management, and the Department of the Treasury, also issued the [JFMIP Payment Integrity Initiative: A Three Year Plan to Advance Payment Integrity](#). Further, OMB agrees with many aspects of GAO's report, including the need for improved data collection and reporting at the agency and program level, that the amount of captured fraud and recoveries underestimate total loss from fraud, and that agencies should seek to more completely and consistently apply GAO's Fraud Risk Framework to their programs to ensure fraud risks are properly assessed, mitigated, and monitored on an ongoing basis.

Under this Administration, Federal agencies have taken swift and systemic action to reduce fraud and improper payments. Some examples of those actions include (i) implementing basic safeguards that had not been put in place in 2020, such as checking PPP loan applications against Treasury's Do Not Pay system; (ii) establishing new Joint Review Meetings that bring together OMB, White House officials, agency program staff, the agency IG, and other relevant oversight bodies in one meeting to together discuss potential risks before major implementation starts; (iii) investing \$1 billion in anti-fraud and modernization efforts for state unemployment systems; and (iv) ensuring the Department of Labor IG had—for the first time ever—the needed authority to access data from each state to prevent multi-state fraud. There is more work to do within specific agencies and across the Federal government in preventing and reducing fraud. OMB looks forward to continuing its partnership with GAO and Congress, including the implementation of key legislative proposals included in the President's Budget, to ensure the tools and capabilities are in place across all agencies to prevent and reduce fraud.

Sincerely,



Jason Miller  
Deputy Director for Management

# Accessible Text for Appendix III: Comments from the Office of Management and Budget

March 26, 2023

Rebecca Shea  
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Washington, DC 20548

The Office of Management and Budget (OMB) appreciates the opportunity to review and provide comment on the Government Accountability Office (GAO)'s draft report.

OMB agrees with GAO that Federal agencies must do a better job assessing and preventing fraud risk and has benefitted from the recommendations of GAO as well as Inspectors General, including the Pandemic Response Accountability Committee (PRAC), on reforms to address fraud in specific programs—especially those that were implemented at the onset of the pandemic in 2020. However, OMB has significant concerns that this report will not further efforts to prevent and reduce fraud, but rather will create confusion and promote misleading generalizations that have no factual connection to specific Federal programs. Rigorous analysis of fraud and fraud risk, at the program level, can be highly valuable in driving agency action and ongoing leadership prioritization of combatting fraud. This report, though, does not provide that type of actionable analysis.

Specifically, according to GAO, its efforts to provide an estimate of total annual Federal government losses due to fraud are not based on analysis of estimated losses by individual Federal programs. Instead, GAO's estimated total rests on a "simulation model" that seeks to establish an estimated government-wide loss without the ability to either add up agency-by-agency estimates or decompose a government-wide estimate into specific agencies and programs. The analysis does not provide any agency- or program-specific insight that could be actionable in preventing and reducing fraud for agencies or Congress. And GAO's simulation approach produced an estimated range of annual losses that when subjected to analytical scrutiny is simply not plausible. OMB was unable to inquire further into the simulation or analysis because GAO declined to share its methodology or show the specific programs and assumptions that informed its model or examination.

The annual estimates of losses from fraud, when properly segmenting Federal spend to account for lower-risk spend (e.g., interest payments), imply an implausibly high level of fraud loss from all other Federal programs. In fact, the analysis would suggest that there was long-standing fraud across many Federal programs over multiple years that was comparable to the programs implemented in 2020 that GAO describes as subject to “unprecedented fraud.” GAO’s fraud estimate’s range represents four to eight percent of average Federal outlays during 2018 to 2022. When outlays are adjusted for programs known to have no or low risk of fraud, such as interest on public debt, these rates climb further to levels consistent with the fraud rates—during a period which GAO again described as “unprecedented”—in three major 2020 pandemic relief programs. GAO estimated that the fraud rate for Unemployment Insurance (UI) programs during the pandemic was between 11% and 16%. Thus, GAO’s estimate implies that long-standing Federal programs had comparable rates of fraud to UI programs during the pandemic

GAO’s reliance on a simulation model to produce such unrealistic estimates is particularly concerning given GAO’s own recognition, in this report and elsewhere, that actual data cannot support such an estimate. GAO itself noted in January 2023 that “[e]xisting data on fraud are insufficient for determining the total amount of federal fraud.”<sup>1</sup> There is not new data in the last year that would undermine GAO’s 2023 conclusion. OMB agrees that existing data collection and reporting are insufficient for accurately determining a government-wide fraud estimate. OMB also agrees with the OIG and agency officials who in response to this report “noted challenges in producing fraud estimates, such as limited available fraud-related data and use of varying terms and definitions of fraud for recording data.” Further, OMB agrees that these “data gaps and variability result in information that cannot be readily compared or consolidated to determine the extent of fraud across the federal government.”

OMB agrees with GAO that “the level of risk can vary substantially” between agencies and programs. These significant variations in fraud risk across agencies and programs make developing program-specific fraud estimates difficult, and are further compounded when attempting to develop a government-wide estimate not based on a tangible and comprehensive program-by-program or agency-by-agency analysis. GAO acknowledges in the report that the fraud estimate proposed in the report has “known uncertainties,” including that the estimate and related percentages “should not be applied at the agency or program level,” are not intended for “[d]rawing conclusions about pandemic fraud,” and are “not based on a predictive model.”

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<sup>1</sup> GAO-23-106110, <https://www.gao.gov/assets/gao-23-106110.pdf>.

We appreciate that GAO states in the report that it is not predictive of future years. It is also vital that the report not be used to suggest potential fraud levels in any specific major Federal programs, and again we appreciate GAO's recognition that the analysis has no bearing on program-specific estimates.

Despite our significant concerns with this report, OMB wants to acknowledge our support of GAO's ongoing analysis of fraud risks, efforts to estimate program-specific fraud rates to inform future program design, and guidance provided by GAO's Fraud Risk Framework and recommendations. OMB and GAO have worked collaboratively to highlight the importance of identifying and reducing fraud risk including through issuance of a Controller Alert, CA-23- 03 Establishing Financial and Administrative Controls to Identify and Assess Fraud Risk and the Payment Integrity and Fraud Symposium Series. The Joint Financial Management Improvement Program, a cooperative venture between GAO, OMB, the Office of Personnel Management, and the Department of the Treasury, also issued the JFMIP Payment Integrity Initiative: A Three Year Plan to Advance Payment Integrity. Further, OMB agrees with many aspects of GAO's report, including the need for improved data collection and reporting at the agency and program level, that the amount of captured fraud and recoveries underestimate total loss from fraud, and that agencies should seek to more completely and consistently apply GAO's Fraud Risk Framework to their programs to ensure fraud risks are properly assessed, mitigated, and monitored on an ongoing basis.

Under this Administration, Federal agencies have taken swift and systemic action to reduce fraud and improper payments. Some examples of those actions include (i) implementing basic safeguards that had not been put in place in 2020, such as checking PPP loan applications against Treasury's Do Not Pay system; (ii) establishing new Joint Review Meetings that bring together OMB, White House officials, agency program staff, the agency IG, and other relevant oversight bodies in one meeting to together discuss potential risks before major implementation starts; (iii) investing \$1 billion in anti-fraud and modernization efforts for state unemployment systems; and (iv) ensuring the Department of Labor IG had—for the first time ever—the needed authority to access data from each state to prevent multi-state fraud. There is more work to do within specific agencies and across the Federal government in preventing and reducing fraud. OMB looks forward to continuing its partnership with GAO and Congress, including the implementation of key legislative proposals included in the President's Budget, to ensure the tools and capabilities are in place across all agencies to prevent and reduce fraud.

Sincerely,

Jason Miller  
Deputy Director for Management



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**Accessible Text for Appendix III: Comments  
from the Office of Management and Budget**

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## Appendix IV: GAO Contacts and Staff Acknowledgments

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### GAO Contacts

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In addition to the contacts named above, Heather Dunahoo, Moon Parks, Steven Putansu (Assistant Directors); Nick Weeks (Analyst in Charge); Tracy Abdo, Lisa Fisher, Amber D. Gray, Lijia Guo, and Abinash Mohanty made key contributions to this report. Also contributing to the report were Robert Bastian, Lilia Chaidez, Leia Dickerson, Colin Fallon, Carly McCann, Maria McMullen, Joe Rini, and Sabrina Streagle.

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