

The EPA Needs to Improve the Completeness and Accuracy of the Obligation and Outlay Information That It Reports in USAspending.gov

January 9, 2024 | Report No. 24-P-0014



Report Contributors

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Abbreviations

CIO	Chief Information Officer
COVID-19	Coronavirus Disease 2019
DATA Act	Digital Accountability and Transparency Act of 2014
DEAR	DATA Act Evaluation and Approval Repository
EPA	U.S. Environmental Protection Agency
FY	Fiscal Year
IIJA	Infrastructure Investment and Jobs Act
OCFO	Office of the Chief Financial Officer
OIG	Office of Inspector General

Key Definitions

Award	Occurs when an agency enters into an agreement, such as a contract, grant, or loan. When an award is made, an agency makes a payment or promises to make a future payment.
Obligation	Occurs when an agency promises to make a future payment, such as when an agency places an order, signs a contract, or awards a grant.
Outlay	Occurs when an agency makes a payment—in other words, uses funds to pay for an order or makes a payment toward a contract or grant.

Cover Image

A compilation of graphics showing data entry and reporting. (EPA OIG image)

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At a Glance

The EPA Needs to Improve the Completeness and Accuracy of the Obligation and Outlay Information That It Reports in USAspending.gov

Why We Did This Audit

To accomplish this objective:

The U.S. Environmental Protection Agency Office of Inspector General conducted this audit to determine whether the EPA's reporting of fiscal year 2022 Infrastructure Investment and Jobs Act obligations and outlays in USAspending.gov was complete and accurate. Although our objective focused on the EPA's reporting of Infrastructure Investment and Jobs Act obligations and outlays, the issues we identified were not limited to those obligations and outlays. Therefore, this report includes findings on the EPA's overall fiscal year 2022 reporting of obligations and outlays.

USAspending.gov is the federal government's official public source of spending information. The Digital Accountability and Transparency Act of 2014 requires federal agencies to report complete and accurate spending data to USAspending.gov to facilitate transparency into how they spend taxpayer dollars. Spending encompasses both **obligations**, which are promises made by the government to spend money, and **outlays**, which are money actually paid. Both summary-level spending data and more detailed award-level data must be reported.

To support these EPA mission-related efforts:

- *Compliance with the law.*
- *Operating efficiently and effectively.*

To address this top EPA [management challenge](#):

- *Managing grants, contracts, and data systems.*

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[List of OIG reports.](#)

What We Found

The EPA's initial reporting of its fiscal year 2022 spending in USAspending.gov was not complete or accurate. This occurred because the EPA's Office of the Chief Financial Officer, or OCFO, did not follow its information technology configuration management procedures. Consequently, necessary changes to the OCFO's DATA Act Evaluation and Approval Repository, the system that facilitates the Agency's USAspending.gov reporting, were either unimplemented or incorrectly implemented, and these issues were not identified via configuration audits. Additionally, the OCFO lacked procedures to detect errors and to confirm the completeness and accuracy of the data that it reported to USAspending.gov. For example, the process of moving data between the systems involved in the EPA's USAspending.gov reporting process is manual, fragmented, and overly complex, and the OCFO's procedures do not require its staff to confirm the accuracy and completeness of the data throughout the process. As a result, the EPA's fiscal year 2022 award-level obligations were underreported by \$1.2 billion, and its fiscal year 2022 award-level outlays were underreported by \$5.8 billion. This means that 12.9 percent of the EPA's total award-level obligations and 99.9 percent of the EPA's total award-level outlays were not reported in fiscal year 2022. The EPA also did not report any of its Infrastructure Investment and Jobs Act outlays and underreported its coronavirus pandemic-related outlays.

The lack of complete and accurate reporting also led to taxpayers being initially misinformed about the EPA's spending, and policy-makers who relied on the data may not have been able to effectively track federal spending. Because of our audit, the EPA corrected its fiscal year 2022 reporting in USAspending.gov in May 2023 and made the necessary configuration changes in June 2023 to improve the accuracy and completeness of its future reporting. Although the EPA has since made the necessary corrections, the EPA's initial reporting of its fiscal year 2022 spending was not complete or accurate.

Complete and accurate reporting in USAspending.gov is critical, as it is the primary way the EPA informs the public of the purpose of its federal awards and where its funding ultimately goes.

Recommendations and Planned Agency Corrective Actions

We make five recommendations to the chief financial officer, including updating the OCFO's standard operating procedures related to configuration management, configuration audits, and data quality; developing and conducting training on the requirements of the updated standard operating procedures; conducting periodic configuration audits of OCFO systems to determine whether configuration changes were properly implemented, documented, and approved; and evaluating the manual process used to transfer data among systems involved in the EPA's USAspending.gov reporting process to determine how to reduce vulnerabilities. The Agency agreed with all our recommendations and provided acceptable corrective actions and estimated completion dates. We consider the recommendations resolved with corrective actions pending.



OFFICE OF INSPECTOR GENERAL
U.S. ENVIRONMENTAL PROTECTION AGENCY

January 9, 2024

MEMORANDUM

SUBJECT: The EPA Needs to Improve the Completeness and Accuracy of the Obligation and Outlay Information That It Reports in USAspending.gov
Report No. 24-P-0014

FROM: Sean W. O'Donnell, Inspector General *Sean W O'Donnell*

TO: Faisal Amin, Chief Financial Officer

This is our report on the subject audit conducted by the U.S. Environmental Protection Agency Office of Inspector General. The project number for this audit was [OA-FY23-0046](#). This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

The Office of the Chief Financial Officer is responsible for the issues discussed in this report.

In accordance with EPA Manual 2750, your offices provided acceptable planned corrective actions and estimated milestone dates in response to OIG recommendations. All recommendations are resolved, and no final response to this report is required. If you submit a response, however, it will be posted on the OIG's website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal along with corresponding justification.

We will post this report to our website at www.epaoig.gov.

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Chapter 1

Introduction

Purpose

The U.S. Environmental Protection Agency Office of Inspector General [initiated](#) this audit to determine whether the EPA's reporting of fiscal year 2022 Infrastructure Investment and Jobs Act obligations and outlays in USAspending.gov was complete and accurate. An **obligation** is a promise made by the government to spend money, whereas an **outlay** occurs when money is actually paid. The term **spending** as used in this report encompasses both obligations and outlays.

Although our objective focused on the EPA's reporting of IJIA obligations and outlays, the issues we identified were not limited to the IJIA. Therefore, this report includes findings on the EPA's overall FY 2022 reporting of obligations and outlays.

Top management challenge addressed

This audit addresses the following top management challenge for the Agency, as identified in OIG Report No. [24-N-0008](#), *The EPA's Fiscal Year 2024 Top Management Challenges*, issued November 15, 2023:

- Managing grants, contracts, and data systems.

Background

The EPA's USAspending.gov Reporting Requirements

USAspending.gov is the federal government's official source of spending information and includes information about awarded federal contracts, grants, and loans. As such, USAspending.gov is the EPA's primary means to inform the public of the purpose of its awards and where its funding ultimately goes. The EPA is required to report complete and accurate information to USAspending.gov so that policy-makers and the public can use the information to make decisions. The Digital Accountability and Transparency Act of 2014, also referred to as the DATA Act, and other guidance, such as Office of Management and Budget memorandums, outline the EPA's USAspending.gov reporting requirements, which have changed over time.

The DATA Act

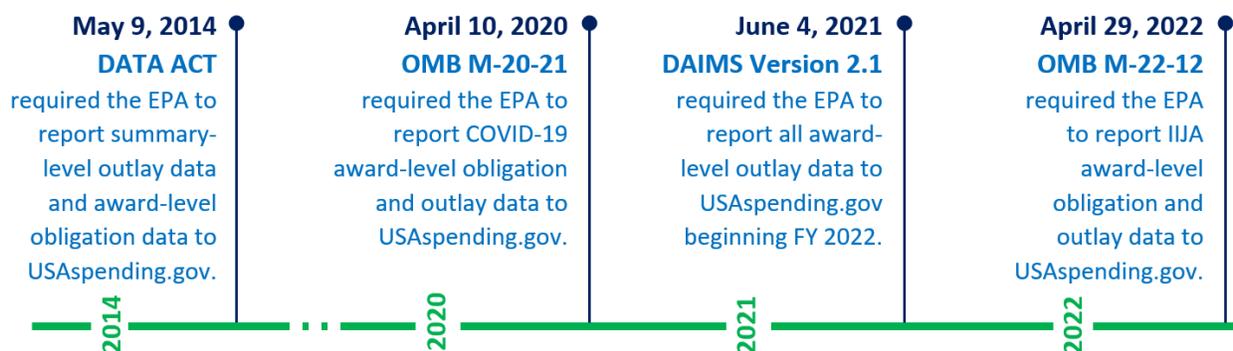
The DATA Act expands upon the Federal Funding Accountability and Transparency Act of 2006 by requiring federal agencies, such as the EPA, to disclose their outlays and to clearly show which programs their federal contract, loan, and grant awards support. The goal of these requirements is to enable taxpayers and policy-makers to track federal spending more effectively. To that end, the DATA Act requires that agencies provide complete, accurate, consistent, reliable, and searchable spending data to display on USAspending.gov. Initially, the DATA Act required that agencies report summary-level outlay data and more detailed award-level *obligation* data to USAspending.gov. However, through the issuance

of additional implementing guidance, the reporting requirements have expanded to also include the reporting of award-level *outlay* data.

Additional Guidance

As shown in Figure 1, the Office of Management and Budget issued memorandums regarding transparency in federal spending and, more specifically, DATA Act implementation and guidance. In addition to these memorandums, the Office of Management and Budget and the U.S. Department of the Treasury developed the *DATA Act Information Model Schema*,¹ which provides more detailed guidance to federal agencies regarding USAspending.gov reporting. Additional guidance is released as USAspending.gov expands its capabilities and as agency reporting requirements change over time. For example, as the EPA received supplemental funding through the IIJA or to address the Coronavirus-Disease-19 pandemic, it was required to report related award-level spending information to USAspending.gov. In other words, the EPA must separately identify its IIJA and COVID-19-related transactions when reporting its award-level spending data.

Figure 1: Timeline showing the EPA’s USAspending.gov reporting requirements



Notes: DAIMS = *DATA Act Information Model Schema*. OMB = Office of Management and Budget.
Source: OIG summary of USAspending.gov reporting requirements. (EPA OIG image)

The EPA’s USAspending.gov Reporting Process

In accordance with the *DATA Act Information Model Schema*, the EPA submits its data to USAspending.gov via the Department of Treasury’s web portal, which is called the DATA Act Broker. The *DATA Act Information Model Schema* requires that the EPA submit Files A, B, and C—referred to collectively as *submission files*—to the DATA Act Broker each month. Table 1 describes these files.

¹ On November 16, 2023, the *Governmentwide Spending Data Model* replaced the *DATA Act Information Model Schema*.

Table 1: The EPA's DATA Act submission files

Name	Detail	Description
File A	Appropriations Account Data	Includes fiscal year cumulative federal appropriation account summary-level data.
File B	Object Class and Program Activity Data*	Includes fiscal year cumulative federal object class and program activity summary-level data.
File C	Award Financial Data	Includes award-level obligation and outlay data for awards made or modified during the reporting period.

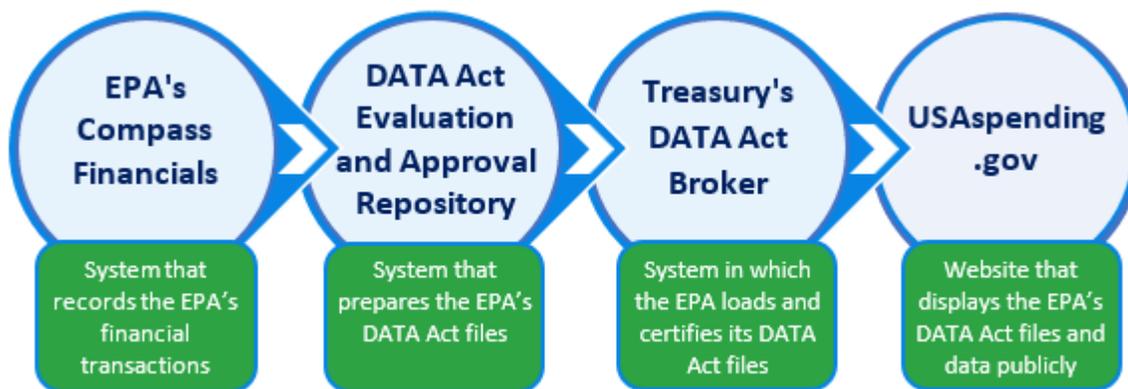
Source: OIG summary of *DATA Act Information Model Schema* guidance. (EPA OIG table)

* Object class categorizes obligations by the type of property or services purchased, whereas program activity classifies obligations by the activity, project, or other programmatic distinction.

To meet its reporting requirements and prepare its submission files, the EPA developed a program called the DATA Act Evaluation and Approval Repository, or DEAR. DEAR retrieves financial data from the EPA's financial system, which is called Compass Financials, and formats the data for submission to USAspending.gov. DEAR also performs data validations using the EPA's executed budget, contract, and grant information.

After the EPA prepares the submission files in DEAR, it uploads them to the DATA Act Broker monthly. The DATA Act Broker performs data validations before sending the information to USAspending.gov. The EPA must also certify the completeness and accuracy of its data submissions in the DATA Act Broker quarterly. Figure 2 summarizes the systems involved in the EPA's DATA Act reporting process.

Figure 2: The systems involved in the EPA's DATA Act reporting process



Source: OIG analysis of the systems involved in the EPA's DATA Act reporting process. (EPA OIG image)

The EPA's Responsibility to Implement Controls

The U.S. Government Accountability Office's *Standards for Internal Control in the Federal Government* outlines the EPA's requirements related to internal controls.² It states that management is responsible for implementing a system of properly designed internal controls to address risks. Internal controls

² GAO-14-704G, *Standards for Internal Control in the Federal Government*, issued September 10, 2014, sets internal control standards for federal entities.

include the plans, methods, policies, and procedures used to fulfill the mission, strategic plan, goals, and objectives of the entity. Control activities are the actions that management establishes through policies and procedures to achieve objectives and respond to risks in the internal control system. Examples of control activities include checking data entered into a system or database; accounting for transactions in numerical sequences; comparing file totals with control accounts; and controlling access to data, files, and programs.

Information system general controls are types of control activities. According to the *Standards for Internal Control in the Federal Government*, information system general controls are the policies and procedures that apply to all or a large segment of an entity's information systems. General controls include configuration management, which is a process to manage and control the baselines and configurations of an organization's hardware, software, and applicable documentation. Configuration management includes internal controls such as restricting who can make configuration changes and performing configuration verifications and audits to ensure that changes were properly made.

Responsible Offices

The EPA's Office of the Chief Financial Officer, or OCFO, maintains responsibility for the EPA's implementation of the DATA Act, including complete and accurate reporting to [USAspending.gov](https://www.usaspending.gov). Within the OCFO are the Office of Technology Solutions and the Office of the Controller, which share responsibility for the EPA's DATA Act reporting. The Office of Technology Solutions is responsible for developing, configuring, deploying, and maintaining systems used for DATA Act reporting. The Office of the Controller is responsible for reviewing data warnings and ensuring the quality of the EPA's data submissions. Other EPA offices responsible for providing data used in the EPA's DATA Act reporting include the Office of Mission Support's Office of Acquisition Solutions and Office of Grants and Debarment.

Scope and Methodology

We conducted this performance audit from February to October 2023 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 and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

We assessed the internal controls necessary to satisfy our audit objective. In particular, we assessed the internal control components—as outlined in the *Standards for Internal Control in the Federal Government*—significant to our audit objective. Any internal control deficiencies we found are discussed in this report. Because our audit was limited to the internal control components deemed significant to our audit objective, it may not have disclosed all internal control deficiencies that may have existed at the time of the audit.

To answer the audit objective, we:

- Obtained an understanding of the EPA’s responsibilities to report obligation and outlay data to USAspending.gov, as established by the DATA Act, Office of Management and Budget memorandums, and *DATA Act Information Model Schema* releases.
- Held interviews and process walkthroughs with staff involved in the EPA’s DATA Act reporting process.
- Reconciled the EPA’s FY 2022 Report on Budget Execution and Budgetary Resources with FY 2022 account balance totals in Compass Financials.
- Evaluated the reliability of data within Compass Financials. Specifically, for a sample of 45 IJJA transactions, including 33 grants and 12 contracts, in Compass Financials, we determined whether the transactions were supported by executed contract and grant documentation. We used stratified random sampling to select the sample, in accordance with the sampling methodology outlined in Appendix A.

Stratified random sampling involves separating data into groups, also called strata, where the items in each group have an equal chance of selection.

- Based on our assessment of data reliability, compared the EPA’s reporting of award-level financial information to financial information in Compass Financials.
- Performed other reconciliations to further evaluate the completeness and accuracy of the EPA’s FY 2022 obligation and outlay reporting.
- Researched the differences that we identified to determine whether errors existed, quantified any errors, and evaluated their root causes.

Prior Reports

We conducted three prior audits evaluating the EPA’s compliance with the DATA Act. Each of the three audits evaluated a quarter of the EPA’s reporting in FYs 2017, 2019, and 2020. EPA OIG Report No. [18-P-0037](#), *EPA Reported Its Fiscal Year 2017 Second Quarter Financial and Award Data in Accordance With the DATA Act*, was issued November 9, 2017, and had no recommendations. EPA OIG Report No. [20-P-0026](#), *EPA’s Fiscal Year 2019 First Quarter Compliance with the Digital Accountability and Transparency Act of 2014*, was issued on November 8, 2019, and contained two recommendations. Most recently, EPA OIG Report No. 22-P-0001, *EPA’s Fiscal Year 2020 Fourth-Quarter Compliance with the Digital Accountability and Transparency Act of 2014*, was issued November 8, 2021, and contained six recommendations. Overall, each report outlined that the EPA complied with the requirements of the DATA Act in submitting financial and award data to the Treasury’s DATA Act Broker, and each determined that the EPA’s data published on USAspending.gov was of “higher” quality. However, the reports also detailed how specific data inconsistencies and control deficiencies caused some data to not be complete

or accurate. These issues indicated that the EPA could improve its internal controls over implementing data standards and preparing its DATA Act submissions. As of September 2023, the EPA had completed corrective actions related to all but one of the recommendations: Recommendation 3 in Report No. 22-P-0001. The EPA is still working to update the fields in its grants management system to align with the DATA Act reporting requirements but expects this work to be completed by September 2024.

We also performed a prior audit examining Compass Financials. In EPA OIG Report No. [17-P-0205](#), *Controls Needed to Track Changes to EPA's Compass Financials Data*, issued on May 8, 2017, we identified that changes made to the Compass Financials database lacked documented approvals and verifications, as required by federal and Agency guidance. In addition, the OCFO did not have a documented process for handling emergency or unscheduled changes to the Compass Financials configuration. We made three recommendations: that the EPA require personnel to follow established standard operating procedures to obtain approvals before implementing changes to Compass Financials and then verify that those changes were implemented correctly; establish procedures for handling unscheduled or emergency changes to OCFO financial systems; and provide training to applicable personnel. The EPA completed all corrective actions associated with these recommendations.

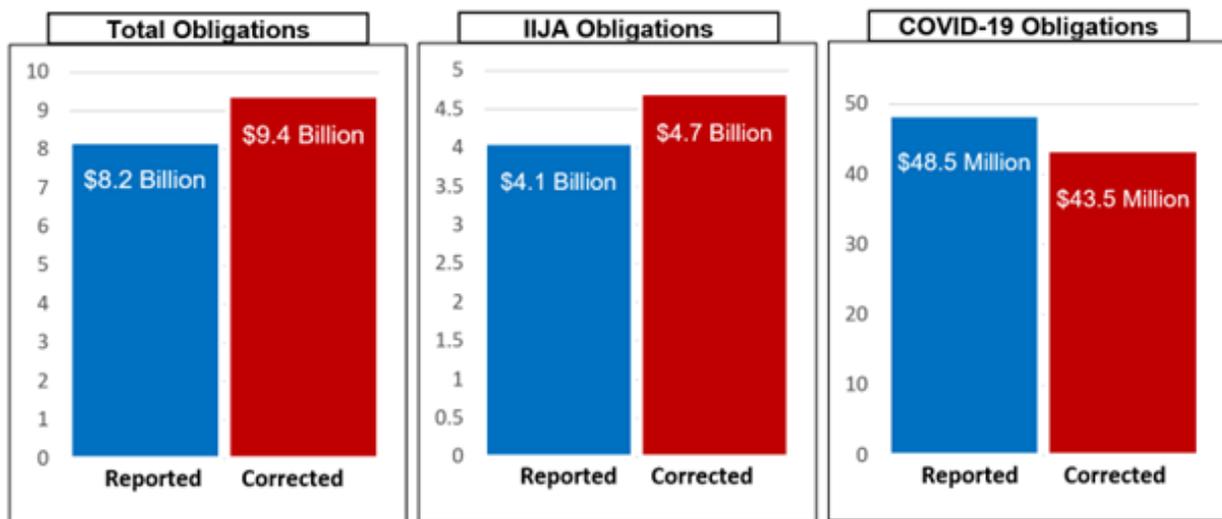
Chapter 2

The EPA Needs to Improve the Completeness and Accuracy of the Obligation and Outlay Information That It Reports in USAspending.gov

The EPA’s initial reporting of FY 2022 obligations and outlays in USAspending.gov was not complete or accurate. This occurred because the EPA did not follow its information technology configuration management procedures, which resulted in changes to DEAR being either unimplemented or incorrectly implemented. Additionally, the EPA lacked procedures to detect errors and confirm the completeness and accuracy of its data reported to USAspending.gov. As a result, the EPA’s FY 2022 award-level obligations were underreported by \$1.2 billion, and its FY 2022 award-level outlays were underreported by \$5.8 billion. This means that 12.9 percent of the EPA’s total award-level obligations and 99.9 percent of the EPA’s total award-level outlays were not reported in FY 2022. Furthermore, the EPA did not report any of its IIJA award-level outlays and significantly underreported its COVID-19 award-level outlays. The lack of complete and accurate reporting led to taxpayers being initially misinformed about the EPA’s spending, and policy-makers who rely on the data may not have been able to effectively track federal spending.

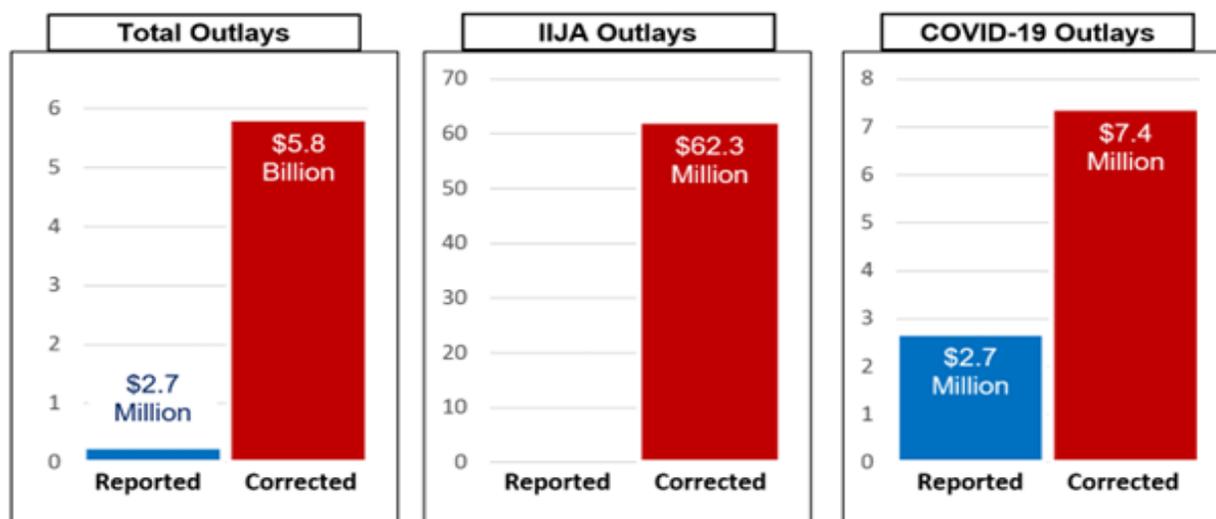
Because of our audit findings, in May 2023 the EPA corrected its FY 2022 reporting in USAspending.gov and in June 2023 made necessary configuration changes to improve the accuracy and completeness of its future reporting. Figures 3 and 4 show the EPA’s reported and corrected award-level obligations and outlays in FY 2022. The EPA also continues to review its policies and procedures to implement additional internal controls to prevent and detect errors in its future reporting.

Figure 3: The EPA’s reported and corrected FY 2022 award-level obligations



Source: OIG analysis of the EPA’s initial and corrected FY 2022 award-level reporting in USAspending.gov. (EPA OIG image)

Figure 4: The EPA’s reported and corrected FY 2022 award-level outlays



Source: OIG analysis of the EPA’s initial FY 2022 award-level reporting in USAspending.gov. (EPA OIG image)

The OCFO Did Not Follow Its Information Technology Configuration Management Procedures

The OCFO did not follow its information technology configuration management procedures. Specifically, the OCFO did not properly document changes to DEAR, which prepares the EPA’s DATA Act submission files. Additionally, the OCFO did not perform configuration audits to confirm that it properly followed its configuration management procedures. As a result, the EPA was unaware that unimplemented or incorrectly implemented configuration changes were contributing to the EPA’s underreporting of \$5.8 billion in award-level outlays in FY 2022.

Configuration management is necessary to prevent unauthorized changes that could jeopardize the functionality of the Agency’s information technology systems. It includes approvals and testing to ensure that only authorized changes are made, that changes have the intended outcome, and that changes are correctly implemented. It also includes restricting who can make configuration changes. Effective configuration management mitigates the risk of a “bad actor” making a system change for fraudulent purposes or of an untested change leading to service interruptions.

The EPA’s *Configuration Management Procedure*, CIO 2123.0-P-01.3, requires that the OCFO document, implement, and maintain configuration and change management processes. The Office of Technology Solutions’ *Configuration Management Standard Operating Procedures* outlines the specific steps needed to make changes to OCFO systems, which include DEAR. It states that a change request requires approval to be implemented and that, once approved, the request must be entered into Solutions Business Manager, which tracks change request routing, testing, and eventual deployment, along with corresponding documentation.

Prior to April 2020, DATA Act guidance required the EPA to report only award-level **obligation** data to USAspending.gov. Office of Management and Budget Memorandum M-20-21, *Implementation Guidance for Supplemental Funding Provided in Response to the Coronavirus Disease 2019 (COVID-19)*, issued in April 2020, changed the EPA's reporting requirements. Beginning in June 2020, the EPA was also required to report COVID-19 award-level **outlay** data to USAspending.gov. To meet this requirement, the OCFO developed a configuration change for DEAR to report COVID-19 award-level outlays. The change followed the Office of Technology Solutions' configuration management procedures: it received approvals, was entered into Solutions Business Manager, and was tested prior to deployment. After this change was deployed in DEAR, however, the OCFO amended the change—without documenting the amendment in Solutions Business Manager—so that DEAR would only report award-level COVID-19 outlays if they had matching obligations within the prior six months. The amended change resulted in the EPA excluding valid COVID-19 award-level outlays in its USAspending.gov reporting, which caused COVID-19 award-level outlays to be underreported by \$4.7 million, or 64 percent, in FY 2022. Because the EPA did not track the change in Solutions Business Manager, there is no documentation of the amended change being approved or tested.

In June 2021, the Department of the Treasury released *DATA Act Information Model Schema* Version 2.1, further updating the EPA's reporting requirements. Beginning in FY 2022, the EPA was required to report **all** award-level outlay data to USAspending.gov. The OCFO developed programming to update DEAR to meet this requirement, but it did so completely outside of the change management process. This change was never entered into Solutions Business Manager and ultimately was never implemented. Because this change was not made to DEAR, the EPA incorrectly continued to report only COVID-19 award-level outlays to USAspending.gov. Therefore, overall award-level outlays, including IJJA outlays, were not reported in FY 2022.

Until we alerted the Agency of our audit findings, the OCFO was under the impression that both changes to DEAR were implemented correctly. After review, OCFO management confirmed that its staff had not followed the Office of Technology Solutions' configuration management procedures. Specifically, OCFO staff did not track all configuration changes to DEAR in Solutions Business Manager, as required. Had the OCFO entered the changes into Solutions Business Manager, the changes would have been approved and tested before deployment, making it less likely for them to not be implemented or implemented incorrectly.

OCFO management also confirmed that the OCFO had not been performing configuration audits. According to the Office of Technology Solutions' *Configuration Management Standard Operating Procedures*, these audits would ensure that established processes are followed as intended and would provide an opportunity to correct any deviations from the established processes. The EPA's *Configuration Management Procedure* also requires that configuration audits be conducted on a periodic basis to, among other things, determine the accuracy and completeness of configuration management processes and ensure project compliance with requirements. Had configuration audits been performed, the OCFO could have identified that the configuration changes described above were not correctly implemented and lacked documentation of approvals and testing.

The OCFO's failure to follow its configuration management procedures not only contributed to the EPA's award-level outlays being underreported by \$5.8 billion, or 99.9 percent, in FY 2022, but it also presents additional risks to the Agency. The OCFO has had previous challenges with configuration management. Specifically, in EPA OIG Report No. 17-P-0205, we identified that changes made to the Compass Financials database lacked documented approvals and verifications. We recommended that the OCFO follow its standard operating procedures to ensure that necessary approvals are obtained and documented. We also recommended that the OCFO verify that configuration changes are implemented correctly. Had these recommendations been broadly implemented for all OCFO systems, the OCFO may have avoided errors related to its outlay reporting.

The OCFO Lacked Procedures to Detect Errors in the EPA's USAspending.gov Reporting

In addition to not ensuring that DEAR was configured properly, the EPA lacked procedures to detect errors and to confirm the completeness and accuracy of its data reported to USAspending.gov. Specifically, the OCFO's procedures did not include checks to confirm the completeness and accuracy of its outlay reporting. The procedures also did not require staff to confirm that the files prepared in DEAR matched the submission files loaded into the DATA Act Broker or posted on USAspending.gov. As a result, the EPA was unaware that its FY 2022 award-level outlays reported to USAspending.gov were underreported by \$5.8 billion, or 99.9 percent. The EPA was also unaware that it had inadvertently posted July data for the month of August, causing FY 2022 award-level obligations to be underreported by \$1.2 billion, or 12.9 percent.

The DATA Act requires that the EPA report complete and accurate data to USAspending.gov to maintain transparency and accountability of its spending. The Office of Technology Solutions' *DEAR Standard Operating Procedure* outlines the steps for OCFO staff to prepare the submission files in DEAR and then submit them to the DATA Act Broker for posting on USAspending.gov. To prepare the submission files, DEAR reformats data from the EPA's financial transactions, executed budget information, and contract and grant data. The EPA also uses DEAR-generated comparisons of the data to confirm the completeness and accuracy of its final submission files. For example, DEAR compares the obligations in the submission files to the obligations reported in other systems that track contract and grant award amounts, and the EPA uses this comparison to ensure that all obligations are included. When the Office of Management and Budget updated its guidance requiring the EPA to report outlays, however, the EPA did not update its procedures to make comparisons for outlays. Had the EPA established and confirmed comparisons for outlays, it would have identified that its FY 2022 award-level outlays were significantly underreported and indicated issues with the underlying DEAR configurations to report outlays.

Once OCFO staff review and confirm that the comparisons are correct, they prepare the submission files for approval and upload the files into the DATA Act Broker. The process of moving the files from DEAR to the DATA Act Broker is manual, fragmented, and overly complex, requiring different OCFO staff members to move and save the data across multiple platforms before loading them into the DATA Act Broker. Once the files are uploaded into the DATA Act Broker, a final OCFO staff member logs into the

system to submit the files for reporting in USAspending.gov. However, the OCFO’s procedures do not require its staff to confirm that the submission files prepared in DEAR match those loaded into the DATA Act Broker or posted on USAspending.gov. In FY 2022, OCFO staff inadvertently submitted July award-level data into the DATA Act Broker as their August submission, and the EPA did not initially identify this error. As a result, until our audit discovered the discrepancy, July data were posted on USAspending.gov twice, while August data were not reported at all. This error caused the EPA’s FY 2022 award-level obligations to be underreported by \$1.2 billion, or 12.9 percent.

The DATA Act Broker provides file total information upon file submission, which can help confirm the completeness and accuracy of EPA’s submission files. As shown in Figure 5, the file total information includes file size, total rows, total obligations, total financial assistance obligations, and procurement obligation information. The OCFO did not use this file total information to check that the totals in the data submitted to the DATA Act Broker match the totals from the data originally prepared in DEAR.

Figure 5: Example of file total information in the DATA Act Broker

	
Total File Size	11.06 MB
Total Data Rows (excludes headers)	32365
Created on	11/10/2022
Total Warnings	2368
Agency Name	Environmental Protection Agency (EPA)
Report Start Date	P12/2022
Report End Date	P12/2022
Award Obligations Incurred (file C)	-\$5,745,373,057.34
Total Financial Assistance Obligations	-\$5,410,950,997.23
Total Procurement Obligations	-\$334,422,060.11

Source: Screenshot from the DATA Act Broker. (EPA OIG image)

The EPA also did not compare the submission files prepared in DEAR to the files posted on USAspending.gov. The OCFO’s procedures do not take advantage of these or any other internal controls that would allow it to detect errors in its reporting, however. If the OCFO had procedures to verify that the correct data files were loaded into USAspending.gov, it could have detected that OCFO staff submitted the incorrect month’s award-level data file into the DATA Act Broker in the August submission.

The combination of a manually laden submission process and insufficient internal controls, such as quality checks, has resulted in mistakes being made and going undetected. Starting in March 2023, as a result of our audit, the OCFO began checking the DEAR award-level monthly submission file to ensure that it was correct before loading it into the DATA Act Broker. The OCFO also began spot-checking contract and grant awards to ensure that the correct obligations and outlays are reflected in USAspending.gov. However, as of August 2023, the OCFO was still not reviewing its award-level

obligation or outlay totals reported to USAspending.gov to detect errors in the completeness or accuracy of its reporting.

Conclusions

Complete and accurate reporting in USAspending.gov is critical, as it informs the public of the purpose and destination of the funds that the EPA has awarded nonfederal entities. Although the EPA has since made the necessary corrections, the EPA's initial reporting of its FY 2022 award-level obligations and outlays was not complete or accurate. As a result, taxpayers and policy-makers initially did not have consistent, reliable, and searchable EPA spending data available to enable them to effectively track EPA spending.

In addition to contributing to inaccurate reporting in USAspending.gov, the OCFO's ineffective configuration management procedures may have security implications, including the potential for fraudulent changes or service interruptions. Because of our audit findings, the OCFO has made several process improvements to prevent incomplete and inaccurate reporting, but additional steps should be taken to update the relevant standard operating procedures, train staff on the content of these updated procedures, and determine how to streamline or automate the manual process for transferring data from DEAR to the DATA Act Broker. These steps would serve to further reduce vulnerabilities.

Recommendations

We recommend that the chief financial officer:

1. Update, circulate, and implement the Office of the Chief Financial Officer's standard operating procedures related to configuration management to describe the process and frequency of configuration audits related to its systems.
2. Conduct periodic configuration audits of the DATA Act Evaluation and Approval Repository, as well as any other Office of the Chief Financial Officer systems that have not had periodic configuration audits, to determine whether all configuration changes were properly implemented, documented, and approved.
3. Update, circulate, and implement the Office of the Chief Financial Officer's standard operating procedures to include procedures to prevent and detect errors and confirm the accuracy and completeness of the EPA's Digital Accountability and Transparency Act of 2014 reporting.
4. Develop and conduct training on the requirements of the Office of the Chief Financial Officer's standard operating procedures for configuration management and Digital Accountability and Transparency Act of 2014 reporting.
5. Evaluate the manual process used to transfer data from the DATA Act Evaluation and Approval Repository to the DATA Act Broker and determine how to reduce vulnerabilities by streamlining

or automating the process. Based on the results of the evaluation, update the standard operating procedures.

Agency Response and OIG Assessment

The OCFO agreed with our five recommendations and provided acceptable planned corrective actions and estimated milestone dates. We consider these recommendations resolved with corrective action pending. Appendix B contains the Agency's response to the draft report.

Status of Recommendations

Rec. No.	Page No.	Recommendation	Status*	Action Official	Planned Completion Date
1	12	Update, circulate, and implement the Office of the Chief Financial Officer's standard operating procedures related to configuration management to describe the process and frequency of configuration audits related to its systems.	R	Chief Financial Officer	2/29/24
2	12	Conduct periodic configuration audits of the DATA Act Evaluation and Approval Repository, as well as any other Office of the Chief Financial Officer systems that have not had periodic configuration audits, to determine whether all configuration changes were properly implemented, documented, and approved.	R	Chief Financial Officer	4/1/24
3	12	Update, circulate, and implement the Office of the Chief Financial Officer's standard operating procedures to include procedures to prevent and detect errors and confirm the accuracy and completeness of the EPA's Digital Accountability and Transparency Act of 2014 reporting.	R	Chief Financial Officer	4/1/24
4	12	Develop and conduct training on the requirements of the Office of the Chief Financial Officer's standard operating procedures for configuration management and Digital Accountability and Transparency Act of 2014 reporting.	R	Chief Financial Officer	4/1/24
5	12	Evaluate the manual process used to transfer data from the DATA Act Evaluation and Approval Repository to the DATA Act Broker and determine how to reduce vulnerabilities by streamlining or automating the process. Based on the results of the evaluation, update the standard operating procedures.	R	Chief Financial Officer	2/29/24

*C = Corrective action completed.

R = Recommendation resolved with corrective action pending.

U = Recommendation unresolved with resolution efforts in progress.

Sampling Methodology

Define Target Population

We downloaded the EPA's FY 2022 IJA general ledger transactions from Compass Financials. These transactions were our target population. Based on our analysis, the target population included 523 transactions: 382 grants and 141 contracts. We identified total obligations as \$4,709,050,760.51: \$4,285,576,745.00 for grant records and \$423,474,015.51 for contracts. There were \$62,269,080.67 total outlays: \$693,857.94 for grants and \$61,575,222.73 for contracts. Our population did not include contract redistribution payments or miscellaneous obligations.

Construct Sampling Frame

As stated in the Government Accountability Office's *Financial Audit Manual*:

For efficiency, the auditor may use a single statistical sample to test a combination of controls, compliance, and balances (test of details) (i.e., multipurpose testing). Alternatively, the auditor may design a statistical sample to test controls alone. For tests of controls, attribute sampling achieves this objective. Attribute sampling requires random or systematic, if appropriate, selection of sample items without considering the transaction's dollar amount or other special characteristics.

Define Stratum Boundaries

We determined that the population should be stratified into two categories: contracts and grants.

Determine Sample Size

We determined that the sample size would be 45 based on the Government Accountability Office's *Financial Audit Manual* for test of controls. The sample size is appropriate for zero deviations, using a 90 percent confidence level and a 5 percent tolerable rate of deviation.

Allocate Sample to Strata

To ensure that both contracts and grants were properly represented in our sample, we used proportional allocation to stratify our sample. The sample size of grants and contracts was assigned based on the percentage of each in the population. For example, 73 percent of the population were grants, so we determined that 73 percent of the sample should be grants. This means that, for our total sample size of 45, there would be 33 grants in the sample: $45 \times 73\% = 33$. See Table A-1 for additional details regarding sample sizes.

Table A-1: Calculation of sample sizes for grants and contracts

Type	Population (# of records)	Percentage of population (%)	Sample size for testing (# of records)
Grants	382	73	33
Contracts	141	27	12
Total	523	100	45

Source: OIG analysis of the size of the population. (EPA OIG table)

Select the Sample Independently in Each Stratum

After identifying the two strata and the appropriate sample sizes, we selected a random sample of 33 grants and 12 contracts, for a sample size of 45. Table A-2 shows the sampled grants and contracts in relation to the population.

Table A-2: Sampled grants and contracts in relation to the total population

Type	Obligations in total population (\$)	Obligations in sample (\$)	Percent of obligations (%)	Number in total population	Number in sample	Percentage of sample to population (%)
Grants	4,285,576,745	255,903,260	6.0	382	33	8.6
Contracts	423,474,016	50,742,661	12.0	141	12	8.5
Total	4,709,050,761	306,645,921	6.5	523	45	8.6

Source: OIG analysis of the obligations in the population and sample. (EPA OIG table)

Agency’s Response to the Draft Report



THE CHIEF FINANCIAL OFFICER
WASHINGTON, D.C. 20460

December 11, 2023

MEMORANDUM

SUBJECT: Response to the Office of Inspector General Draft Report, Project No. OA-FY23-0046, *“The EPA Needs to Improve the Completeness and Accuracy of the Obligation and Outlay Information it Reports in USAspending.gov,”* dated November 15, 2023

FROM: Faisal Amin, Chief Financial Officer **FAISAL AMIN** Digitally signed by FAISAL AMIN
Office of the Chief Financial Officer Date: 2023.12.11 15:03:59 -05'00'

TO: Devon Padula, Director
Drinking Water Investments Directorate
Office of Audit

Thank you for the opportunity to respond to the issues and recommendations in the subject draft report and working with us to address concerns raised by the U.S. Environmental Protection Agency. The following is a summary of the EPA’s overall position, along with its position on the report’s recommendations.

AGENCY’S OVERALL POSITION

The draft report contains five recommendations for the Office of the Chief Financial Officer to address, as one of the original recommendations will be removed in the final report. The EPA agrees with the Office of Inspector General’s remaining five recommendations.

AGENCY RESPONSE TO DRAFT REPORT RECOMMENDATIONS

Recommendation	Office	High-Level Intended Corrective Action(s)	Planned Date
1. Update, circulate, and implement the Office of the	OCFO	<u>Concur</u> . The OCFO’s Office of Technology Solutions will update, circulate, and	2/29/24

Recommendation	Office	High-Level Intended Corrective Action(s)	Planned Date
Chief Financial Officer's standard operating procedures related to configuration management to describe the process and frequency of configuration audits related to its systems.		implement the OCFO's standard operating procedures related to configuration management to describe the process and frequency of configuration audits related to its systems.	
2. Conduct periodic configuration audits of the DATA Act Evaluation and Approval Repository, as well as any other Office of the Chief Financial Officer systems that have not had periodic configuration audits, to determine whether all configuration changes were properly implemented, documented, and approved.	OCFO	<u>Concur.</u> The OCFO's OTS will conduct periodic configuration audits of the <i>Digital Accountability and Transparency Act of 2014</i> Evaluation and Approval Repository, and any other OCFO systems that have not had periodic configuration audits, to determine whether all configuration changes were properly implemented, documented, and approved.	4/1/24
3. Update, circulate, and implement the Office of the Chief Financial Officer's standard operating procedures to include procedures to prevent and detect errors and confirm the accuracy and completeness of the EPA's reporting.	OCFO	<u>Concur.</u> The OCFO's Office of the Controller and the OTS will update, circulate, and implement the OCFO's standard operating procedures to include procedures to prevent and detect errors and confirm the accuracy and completeness of the EPA's reporting.	4/1/24
4. Develop and conduct training on the requirements of the Office of the Chief Financial Officer's standard operating procedures for configuration management and Digital Accountability and Transparency Act of 2014 reporting.	OCFO	<u>Concur.</u> The OCFO's OC and the OTS will develop and conduct a training on the requirements of the OCFO's standard operating procedures for configuration management and <i>DATA Act of 2014</i> reporting.	4/1/24
5. Evaluate the manual process used to transfer data from the DATA Act Evaluation and Approval Repository to the DATA Act Broker and determine how to reduce vulnerabilities by	OCFO	<u>Concur.</u> The OCFO's OTS will evaluate the manual process used to transfer data from the <i>DATA Act</i> Evaluation and Approval Repository to the <i>DATA Act</i> Broker and determine how to reduce vulnerabilities by streamlining or	2/29/24

Recommendation	Office	High-Level Intended Corrective Action(s)	Planned Date
streamlining or automating the process. Based on the results of the evaluation, update the standard operating procedures.		automating the process. Based on the results of the evaluation, the OTS will update the standard operating procedures.	

CONTACT INFORMATION

If you have any questions regarding this response, please contact the OCFO’s Audit Follow-up Coordinator, Andrew LeBlanc, at leblanc.andrew@epa.gov or (202) 564-1761.

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U.S. Environmental Protection Agency

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