



**NASA'S COMPLIANCE WITH
THE PAYMENT INTEGRITY
INFORMATION ACT FOR
FISCAL YEAR 2022**



Office of Inspector General

To report, fraud, waste, abuse, or mismanagement, contact the NASA OIG Hotline at 800-424-9183 or 800-535-8134 (TDD) or visit <https://oig.nasa.gov/hotline.html>. You can also write to NASA Inspector General, P.O. Box 23089, L'Enfant Plaza Station, Washington, D.C. 20026. The identity of each writer and caller can be kept confidential, upon request, to the extent permitted by law.

To suggest ideas or request future audits, contact the Assistant Inspector General for Audits at <https://oig.nasa.gov/aboutAll.html>.

RESULTS IN BRIEF



NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2022

May 16, 2023

IG-23-013 (A-23-02-00-FMD)

WHY WE PERFORMED THIS AUDIT

Improper payments are payments the federal government should not have made or made in an incorrect amount under statutory, contractual, administrative, or other legally applicable requirements. These payments can include overpayments, underpayments, duplicate payments, and payments to ineligible recipients; they also include payments for ineligible goods or services and for goods or services not received. In fiscal year (FY) 2022, agencies across the federal government made an estimated \$247 billion in improper and unknown payments.

Our overall objective in this required annual review was to determine whether NASA complied with requirements of the Payment Integrity Information Act (PIIA) in FY 2022. In addition, we evaluated NASA's risk assessment methodology, improper and unknown payment estimates, sampling and estimation plan, and implementation of recommendations made in our previous reports. In conducting our work, we relied on guidance from the Office of Management and Budget (OMB) and the Council of the Inspectors General on Integrity and Efficiency; we interviewed NASA and contractor personnel, reviewed relevant information in the accompanying materials to the Agency Financial Report (AFR), and reviewed applicable federal laws and regulations and NASA policy and guidance.

WHAT WE FOUND

Based on our review of NASA's AFR, accompanying materials on PaymentAccuracy.gov, risk assessment, and the sampling and estimation methodology plan for programs deemed susceptible to significant improper payments, we found that NASA complied with PIIA for FY 2022. However, we found opportunities for improvement in the Agency's risk assessment and reporting processes. Specifically, we found improvements are needed in NASA's quality assurance review to ensure ratings are properly assigned to risk factor questions and risk condition levels. Additionally, as described in last year's report, NASA did not adhere to OMB guidance to exclude nonpayment transactions, which resulted in incomplete information published on PaymentAccuracy.gov and inappropriate financial factors used in the materiality risk calculation and sampling and estimation methodology. While these matters did not impact the Agency's overall compliance, we believe it essential for the Agency to address these issues to ensure the integrity of its improper payments program.

Additionally, the payment recovery process also included previously identified areas for improvement for which NASA has not yet implemented corrective actions. Specifically, we found that NASA's reported overpayment information on PaymentAccuracy.gov was again inaccurate for the FY 2022 reporting period.

WHAT WE RECOMMENDED

To improve NASA's quality assurance over its risk assessment process, we recommended that the Chief Financial Officer enhance the NASA PIIA Risk Assessment Methodology document by including detailed information and job aids, such as a checklist, and outlining the review procedures to ensure that a thorough review of the risk assessment ratings is performed before approving the risk assessment. The review procedures should include steps to verify that risk factor question ratings are accurate and that risk condition-level ratings correspond to their underlying risk factor ratings.

Additionally, the Chief Financial Officer should continue to implement corrective actions to address our open recommendations from the prior year related to program risk assessment and reporting and the Agency's payment recovery program.

We provided a draft of this report to NASA management who concurred with our recommendation and described planned actions to address it. We consider management's comments responsive; therefore, the recommendation is resolved and will be closed upon completion and verification of the proposed corrective actions.

For more information on the NASA Office of Inspector General and to view this and other reports visit <https://oig.nasa.gov/>.

TABLE OF CONTENTS

Introduction	1
Background	1
NASA Complied with PIIA but Its Risk Assessment Process and Program Reporting Need Improvement	6
NASA Needs to Improve Its Risk Assessment and Reporting Processes.....	7
NASA’s Reported Overpayments Were Inaccurate	10
Conclusion	12
Recommendations, Management’s Response, and Our Evaluation	13
Appendix A: Scope and Methodology	14
Appendix B: Status of Prior Year Recommendations	17
Appendix C: Programs Reviewed	18
Appendix D: Management’s Comments	19
Appendix E: Report Distribution	21

Acronyms

AFR	Agency Financial Report
BW/BOBJ	Business Warehouse/Business Objects
FY	fiscal year
NSSC	NASA Shared Services Center
OCFO	Office of the Chief Financial Officer
OIG	Office of Inspector General
OMB	Office of Management and Budget
PIIA	Payment Integrity Information Act of 2019
QAD	Quality Assurance Division
SAP	System, Applications, and Products

INTRODUCTION

The Payment Integrity Information Act of 2019 (PIIA) was enacted to improve efforts to identify and reduce federal improper payments. The Act requires federal agencies to (1) conduct program-specific risk assessments for each program or activity, (2) publish improper payment estimates for programs susceptible to significant improper payments, and (3) report on corrective actions to prevent and reduce improper payments.¹ The Act also requires Inspectors General to evaluate compliance with PIIA and issue an annual report.

Improper payments are payments the federal government should not have made or made in an incorrect amount under statutory, contractual, administrative, or other legally applicable requirements. They include overpayments, underpayments, duplicate payments, and payments to ineligible recipients; they also include payments for ineligible goods or services and for goods or services not received.² A payment is also considered improper if a discount was available but was not redeemed. In fiscal year (FY) 2022, agencies across the federal government made an estimated \$247 billion in improper and unknown payments.³

Our overall objective in this audit was to determine whether NASA complied with PIIA requirements for FY 2022. We also evaluated NASA's risk assessment methodology, improper and unknown payment estimates, sampling and estimation plan, and implementation of recommendations made in our previous reports.⁴ See Appendix A for details of the audit's scope and methodology and Appendix B for the status of our recommendations from prior years.

Background

Each agency is responsible for ensuring it complies with PIIA. If a program does not meet one or more of the Act's criteria, then it is not compliant under PIIA. Office of Management and Budget's (OMB) Memorandum M-21-19 outlines the following PIIA requirements:⁵

¹ Payment Integrity Information Act of 2019, Pub. L. No. 116-117 (2020).

² An overpayment is a payment in excess of what is due. When an overpayment occurs, the improper amount is the difference between the amount due (identified) and the amount actually paid (collected). Overpayments are monetary loss-type of improper payments.

³ For information on improper payments and annual payment integrity data for FY 2022, see <https://www.paymentaccuracy.gov> (last accessed March 17, 2023). According to OMB, a payment is considered unknown when an agency is unable to determine whether it falls into the proper or improper category.

⁴ NASA OIG, *NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2021* (IG-22-014, June 28, 2022); and *NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2019* (IG-20-016, May 15, 2020).

⁵ OMB Memorandum M-21-19, *Appendix C to OMB Circular A-123, Requirements for Payment Integrity Improvement* (March 5, 2021).

1. Payment integrity reporting:
 - a. Publish payment integrity information with the annual financial statement (e.g., the Agency Financial Report (AFR)) and in its accompanying materials.⁶
 - b. Post the annual financial statement and accompanying materials on the agency's website.
2. Risk assessments:
 - a. Conduct improper payment risk assessments for each program with annual outlays greater than \$10 million at least once every 3 years.
 - b. Adequately conclude whether the program is likely to make improper and unknown payments above or below the statutory threshold.
3. Publish improper and unknown payment estimates for programs susceptible to significant improper and unknown payments in the accompanying materials to the annual financial statement.
4. Publish corrective action plans for each program with an estimate above the statutory threshold in the accompanying materials to the annual financial statement.
5. Improper and unknown payment reduction targets:
 - a. Publish an improper and unknown payment reduction target for each program with an estimate above the statutory threshold in the accompanying materials to the annual financial statement.
 - b. Demonstrate improvements to payment integrity or reach a tolerable rate of improper and unknown payments.
 - c. Develop a plan to meet the improper and unknown payment reduction target.
6. Report an improper and unknown payment estimate of less than 10 percent for each program for which an estimate was published in the accompanying materials to the annual financial statement.

Additionally, all agencies are subject to the reporting requirements in OMB's Circular A-136 and annual data call instructions.⁷ OMB guidance requires agencies to include a link in their AFR to OMB's [PaymentAccuracy.gov](https://www.paymentaccuracy.gov) website. It also requires agencies to provide OMB with data related to the status of their improper payment risk assessments, their identification and recovery of overpayments, and other agency-wide reporting requirements such as improper and unknown payment estimates for programs susceptible to significant improper payments.

⁶ Accompanying materials refer to the payment integrity information provided by NASA to OMB through an annual data call that is subsequently published on [PaymentAccuracy.gov](https://www.paymentaccuracy.gov).

⁷ OMB Circular A-136, *Financial Reporting Requirements—Revised* (June 3, 2022) and OMB Memorandum M-21-19, *Appendix C to OMB Circular A-123, Requirements for Payment Integrity Improvement* (March 5, 2021).

PaymentAccuracy.gov and the OMB Annual Data Call

PaymentAccuracy.gov contains a dashboard and a dataset of federal agencies' reported annual payment integrity information that collectively provide a comprehensive picture of federal payment integrity activities.⁸ To build the dataset, OMB issues an annual data call to federal agencies and provides a survey tool on OMB MAX for those agencies to submit payment integrity information.⁹ The survey tool uses conditional logic to collect information regarding agencies' improper and unknown payments and actions to recover improper payments.¹⁰

NASA's FY 2022 Processes to Estimate and Recover Improper Payments

The NASA Office of the Chief Financial Officer's (OCFO) Quality Assurance Division (QAD) is responsible for ensuring compliance with PIIA and reporting on the Agency's recovery audits and activities program (also known as NASA's Payment Recapture Audit Program). For FY 2022, OCFO used a contractor to conduct a risk assessment and estimate improper and unknown payments. NASA no longer performs payment recovery audits because it concluded during the FY 2019 reporting period that such audits were not cost-effective for any program, activity, or contract type. Instead, NASA reported on its activities to identify and collect overpayments from sources other than recovery audits.¹¹

Assessing Program Risk. NASA identified the total population of its programs subject to risk assessment requirements after reviewing FY 2021 disbursements recorded in its financial management system.¹² As permitted by statute, each NASA program with annual outlays over \$10 million is assessed at least once every 3 years to determine whether the program is likely to have improper payments above the statutory threshold. Out of 108 NASA programs, the Agency assessed the risk of significant improper payments for 24 programs in FY 2022. NASA assessed these 24 programs against 7 risk conditions, judgmentally weighted based on relevance and significance using a 100-point scale. Table 1 lists these risk conditions along with their weights.

⁸ As required by Executive Order 13520, *Reducing Improper Payments* (November 20, 2009) and codified in 31 U.S. Code 3321, the U.S. Department of the Treasury, in coordination with the U.S. Department of Justice and OMB, established PaymentAccuracy.gov to serve as a centralized location to publish information about improper payments made to individuals, organizations, and contractors.

⁹ OMB MAX is a system used by OMB to collaborate with agencies and collect, validate, analyze, model, and publish information relating to government-wide management and budgeting activities.

¹⁰ Conditional logic is a set of rules or conditions that cause a process to change based on input. The OMB survey tool applies conditional logic to generate questions applicable to an agency's programs to gather specific information to publish on PaymentAccuracy.gov.

¹¹ A payment recovery audit is a review and analysis of an agency's or program's accounting and financial records, supporting documentation, and other pertinent information specifically designed to identify overpayments.

¹² Current year reporting is based upon information from the prior year.

Table 1: NASA PIIA Risk Conditions and Weighted Percentages

Risk Condition	Weighted Percentage
Internal Control over Payment Processing	25
Internal Monitoring and Assessments	20
External Monitoring and Assessments	10
Human Capital Risk	5
Program Profile	10
Payment Profile	15
Dollar Value/Materiality of Disbursements ^a	15

Source: NASA, *Fiscal Year 2022 NASA Payment Integrity Information Act (PIIA): Risk Assessment Methodology*.

^a Programs with disbursements less than \$743 million were considered low risk, while those with disbursements greater than \$1.64 billion were considered high risk. Intermediate amounts were considered medium risk.

The risk conditions incorporated factors NASA considered likely to contribute to the susceptibility of significant improper payments. NASA developed specific questions for risk factors identified in the risk conditions to determine the level of risk and responded with a risk rating of 1 (low), 3 (medium), or 5 (high) to each question. Out of these risk factor ratings, NASA takes the highest numerical rating (1, 3, or 5) and assigns that to the risk condition level. For example, one risk condition could have four risk factor questions, where three questions receive a 1 (low) risk rating and one question receives a 5 (high) risk rating. Based on NASA’s criteria, the risk condition level would be assigned a 5 (high), the highest risk rating of all risk factor questions. NASA assigned risk factor ratings using various sources, including internal and external reports, questionnaires, and management reviews. The Agency computed an overall risk score for each program based on the weighted average of all risk condition ratings. NASA considered programs with an overall risk score of 3.33 or higher as susceptible to significant improper and unknown payments and therefore subject to testing the following year to estimate the amount of improper and unknown payments.

Estimating Improper and Unknown Payments

When NASA determines a program to be susceptible to significant improper and unknown payments, the Agency must develop a sampling plan and conduct testing to estimate the amount of improper and unknown payments. In FY 2022, none of the 24 NASA programs assessed reached the 3.33 risk score threshold and, thus, no programs required development of an improper payment and unknown payment estimate. However, NASA had one activity—disaster relief funding within the Institutional Construction of Facilities program—deemed susceptible to significant improper payments by OMB, thus requiring the estimation of improper and unknown payments for that activity.

Disaster Relief Funding Activity. OMB designated any program or activity that received disaster relief funding under the Bipartisan Budget Act of 2018 and disbursed more than \$10 million in one fiscal year as susceptible to significant improper and unknown payments and directed agencies to report an improper and unknown payment estimate.¹³ NASA received disaster relief funding for hurricanes Harvey, Matthew, and Irma. Although the disaster relief funding is an activity within the Agency’s Institutional Construction of Facilities program, it is reported as a separate program for payment integrity reporting purposes. NASA developed a statistical sampling plan and performed testing of the

¹³ Bipartisan Budget Act of 2018, Pub. L. No. 115-123 (2018).

disaster relief disbursements to estimate the annual amount of improper and unknown payments. Based on this testing, NASA did not identify any improper or unknown payments.

Payment Recovery

NASA's process of gathering data on identified and collected overpayments from sources other than recovery audits consists primarily of conducting two types of queries of the Agency's financial management system. These queries generate a list of potential overpayments and collections from the previous fiscal year's accounts receivable and accounts payable activity.¹⁴ Each potential overpayment is then further researched by the funding NASA Center or the NASA Shared Services Center (NSSC) to determine whether it constitutes an overpayment for reporting purposes. In addition, QAD makes inquiries to select offices, such as the Office of Inspector General's (OIG) Offices of Audits and Investigations, the Agency's Office of Procurement, and Procurement's Management and Policy Division, to identify overpayments that may not have been captured in NASA's system queries. QAD reviews and consolidates the information gathered from these sources and is responsible for reporting this information in the accompanying materials to the AFR. As part of this review, QAD seeks to ensure that transactions excluded from reporting contain a reasonable explanation as to why it is not an overpayment and follows up with Centers or NSSC if the explanation is not sufficient and needs more clarity. Similarly, QAD assesses whether transactions included as overpayments are valid overpayments and are not reported twice or in the incorrect period. For the FY 2022 reporting period, NASA reported \$5.74 million and \$4.46 million of overpayments identified and collected, respectively, in the accompanying materials to the AFR.

¹⁴ The accounts receivable data query contains transactions from the prior fiscal year with SAP codes DG (customer credit memo), DR (customer invoice), DX (refund of current year payment), and DW (refund of prior year payment). The accounts payable data query contains transactions related to contract/invoice credits from the prior fiscal year with SAP codes KG (vendor refunds from prior year disbursements) and RE (vendor refunds from current year disbursements).

NASA COMPLIED WITH PIIA BUT ITS RISK ASSESSMENT PROCESS AND PROGRAM REPORTING NEED IMPROVEMENT

Based on our review of NASA’s AFR, accompanying materials, risk assessment of its 24 programs, and the executed sampling and estimation methodology plan for the Institutional Construction of Facilities’ disaster relief activity, we found that NASA complied with the requirements of the PIIA, as noted in Table 2.¹⁵

Table 2: PIIA Compliance Summary

Criteria for Compliance	Criteria Met?
1. Payment integrity reporting: <ul style="list-style-type: none"> a. Published payment integrity information with the FY 2022 AFR b. Posted AFR and accompanying materials on NASA’s website 	Yes
2. Risk assessments: <ul style="list-style-type: none"> a. Conducted improper payment risk assessments for each applicable program b. Adequately concluded whether the program is likely to make improper payments 	Yes
3. Published IP and UP estimates for programs susceptible to significant IPs and UPs in the accompanying materials to the AFR	Yes
4. Published corrective action plans for each applicable program	N/A
5. Improper and unknown payment reduction targets: <ul style="list-style-type: none"> a. Published IP and UP reduction targets for each applicable program in the accompanying materials to the AFR b. Demonstrated improvements to payment integrity or reached a tolerable IP and UP rate. c. Developed a plan to meet the IP and UP reduction targets 	N/A
6. Reported an IP and UP estimate of less than 10 percent for each applicable program	N/A

Source: NASA OIG.

Note: N/A refers to criteria not applicable this year because NASA did not identify any improper payments (IP) or unknown payments (UP) during testing of disaster relief funding and did not publish improper payment estimates in the prior year.

¹⁵ For a complete list of the Agency programs reviewed by the OIG as part of this audit, see Appendix C.

NASA Needs to Improve Its Risk Assessment and Reporting Processes

During our review of NASA's compliance with PIIA, we identified opportunities to further improve the Agency's risk assessment and reporting processes. For example, we found NASA assigned incorrect ratings to its risk factor questions and risk condition levels. Additionally, as described in last year's report, NASA did not adhere to OMB guidance, which resulted in incomplete information published on [PaymentAccuracy.gov](https://www.paymentaccuracy.gov) and inappropriate financial factors used in the materiality risk calculation and sampling and estimation methodology.¹⁶ While these matters did not impact the Agency's compliance, we believe it is essential for the Agency to address these issues to ensure the integrity of its improper payments program.

NASA Incorrectly Assessed Risk Ratings

NASA OCFO's Risk Assessment Methodology requires that a program's risk condition-level rating corresponds to the highest numerical rating given to the risk factor questions for the condition.¹⁷ When assessing FY 2022's risk condition-level ratings for two of the seven conditions—Program Profile and Human Capital—NASA did not adhere to its Risk Assessment Methodology and assigned a 1 (low) rating instead of the highest numerical rating given to the risk factor questions for those conditions. For example, the highest rating for one of Program Profile's risk factor questions was a medium-risk rating of 3. Based on this, NASA should have assigned an overall Program Profile rating of 3. Instead, the Agency assigned an incorrect risk rating of 2. Similarly, NASA assessed one of Human Capital's risk factor questions a high-risk rating of 5 but incorrectly assigned a low-risk rating of 1 for the risk condition-level rating. For NASA's 24 risk assessed programs, this error led to incorrect risk condition-level ratings on 20 programs for Program Profile (83.3 percent) and 24 programs for Human Capital (100 percent).

According to the Risk Assessment Methodology, QAD is accountable for the risk assessment process and review of the risk assessment results for accuracy and consistency. QAD implemented a review process that includes reviews performed by a quality assurance reviewer and two additional reviews by QAD management. However, no detailed review procedures have been documented to ensure a thorough review of the risk assessment ratings before officials approve the risk assessment. This lack of detailed guidance likely contributed to the quality assurance reviewer not detecting the incorrect reporting of the risk condition-level rating for Program Profile and Human Capital. Although these incorrect risk condition-level ratings did not impact the current year's overall risk assessment results and the number of programs deemed susceptible to significant improper payments, NASA should enhance the Risk Assessment Methodology document to include detailed review procedures to ensure the accuracy and consistency of future risk assessment results.

¹⁶ [IG-22-014](#).

¹⁷ NASA OCFO, *Fiscal Year 2022 NASA Payment Integrity Information Act (PIIA): Risk Assessment Methodology* (December 2022).

Previously Identified Issues Not Yet Corrected

Similar to our findings in last year’s PIIA report, NASA continued to include transactions outside the OMB’s definition of “outlays” when determining a program’s outlay total and use inappropriate financial factors in the materiality risk calculation and sampling and estimation methodology.

NASA Did Not Report Six Programs to OMB

OMB Memo M-21-19 defines outlays as payments or any transfer of federal funds to any non-federal person or entity or a federal employee made by a federal agency, a federal contractor, a federal grantee, or a governmental or other organization administering a federal program or activity. We found that NASA applied the outlays definition incorrectly in its program risk assessment process by including nonpayment transactions (receipts and adjustments) that are not part of the OMB’s definition in addition to payment transactions in the Agency’s program outlays population. Because the Agency included nonpayment transactions, six programs with outlays over \$10 million were incorrectly identified as programs below the \$10 million threshold and consequently were not reported in the Agency’s payment integrity information dataset. Table 3 lists the six programs incorrectly identified as programs with outlays below the \$10 million threshold.

Table 3: Six NASA Programs with Incorrect Outlays

Program Name	Outlays—Per OMB Definition	Outlays—NASA Risk Assessment/Reporting
Reimbursable (RMB)-Science Mission Directorate Programmatic	\$893,580,053	\$(151,042,165)
RMB-Space Operations Mission Directorate Programmatic	188,702,530	(32,595,268)
RMB-Aeronautics Research Mission Directorate Programmatic	150,686,204	7,084,197
RMB-Safety, Security, and Mission Services Institution	90,678,619	(1,166,060)
National Historic Preservation	30,223,674	1,174,808
Enhanced Use Lease	25,671,383	(3,953,530)

Source: NASA OIG.

We also found that failing to report those six programs in NASA’s payment integrity information dataset resulted in incomplete information published on PaymentAccuracy.gov, as the website did not show their risk assessment statuses. This in turn reduced transparency by not fully informing stakeholders which NASA programs have outlays greater than \$10 million and their risk assessment status. As a result, our prior year recommendations that the Agency should complete the OMB data call process for all programs with outlays over \$10 million ([IG-22-014](#), recommendation 3) and ensure that program outlays exclude any transactions that do not meet the outlay definition provided by OMB ([IG-22-014](#), recommendation 4) remain open.

NASA Used Inappropriate Financial Factors

NASA continued to use outlay amounts that included payment and nonpayment transactions in calculating and assessing each program’s Dollar Materiality risk condition when it should have used

outlays that only included payment transactions. NASA's method was inappropriate as it factored transactions that OMB Memo M-21-19 does not consider to be payments into the program risk assessments. However, including both payment and nonpayment transactions in its risk materiality calculation did not significantly impact the overall program risk assessments.

Additionally, NASA's disaster relief sampling and estimation methodology plan used an incorrect sampling frame to test the disaster relief funding. NASA used outlays consisting of transactions that included payments and nonpayments as the program's sampling frame, which led NASA to select samples that were not payments. NASA was aware that the sampling frame included nonpayment transactions and purposely selected more samples than necessary to achieve the sampling objective. We found no significant impact on the test results since NASA replaced any nonpayments that were selected for testing.

Since we identified the same deficiencies as last year, our prior year's recommendation to revise the Dollar Materiality risk calculation methodology and sampling and estimation methodology plan to include payment transactions only ([IG-22-014](#), recommendation 5) remains open.

NASA'S REPORTED OVERPAYMENTS WERE INACCURATE

Similar to the risk assessment process and program reporting, the payment recovery process also includes previously identified areas for improvement for which NASA has not yet implemented corrective actions. NASA's reported overpayment information on PaymentAccuracy.gov was again inaccurate because QAD did not thoroughly review the aggregated submissions. Specifically, QAD did not identify several transactions from its system queries that were erroneously included or excluded in the FY 2022 reporting period. QAD also did not reconcile data from NSSC with the data provided by other NASA offices to avoid double counting, as well as reconcile overlapping responses related to credit memos captured by both the accounts receivable and accounts payable system queries.

Accounts Receivable and Accounts Payable Queries. As part of NASA's process to gather data on identified and collected overpayments from sources other than payment recovery audits, Centers research individual transactions from system queries and provide their respective lists of overpayments to QAD. We noted several instances in both the accounts receivable and accounts payable queries where QAD erroneously included or excluded transactions in the FY 2022 reporting period resulting in misstatements of identified and collected overpayments. Specifically, we found 13 issues in the accounts receivable query that resulted in an understatement of identified overpayments of \$4,855 and an overstatement of collected overpayments of \$7,993. Additionally, we found two issues in the accounts payable query that resulted in an overstatement of both identified and collected overpayments of \$1,388. Table 4 summarizes misstated identified and collected overpayments in the system queries.

Table 4: Summary of Misstated Overpayments Identified in System Queries

Summary of Recovery Exceptions	Over(Under)stated Overpayment Identified	Overstated Overpayment Collected	Number of Instances
Accounts Receivable	\$(4,855)	\$7,993	13
Accounts Payable	1,388	1,388	2
Total	\$(3,467)	\$9,381	15

Source: NASA OIG.

Double Counting Overpayments. Another part of NASA's process to gather data on identified and collected overpayments includes a manual process where certain NASA offices are asked to identify and submit to QAD a list of transactions that meet the definition of an improper payment but may not be included in the system queries. QAD reviewed overpayments submitted by NASA offices to verify that they were not duplicates of transactions already reported in the accounts receivable system query. We found six instances where QAD double counted overpayments reported by the OIG Office of Investigations and NSSC and included them in the accompanying materials to the AFR. This resulted in an overstatement of identified and collected overpayments of \$92,960 and \$91,638, respectively.

Additionally, we found nine instances where QAD double counted credit memos (reductions to future invoices) reported as overpayments by Centers in the accounts payable query and by NSSC in the accounts receivable query and included them in the accompanying materials to the AFR. This was a new exception identified during this year’s review, which resulted in an overstatement of identified and collected overpayments by \$357,853 and \$315,413, respectively. Table 5 summarizes misstated identified and collected overpayments due to double counting overpayments.

Table 5: Summary of Misstated Overpayments Due to Double Counting

Summary of Recovery Exceptions	Overstated Overpayment Identified	Overstated Overpayment Collected	Number of Instances
Credit Memos	\$357,853	\$315,413	9
Other Offices	92,960	91,638	6
Total	\$450,813	\$407,051	15

Source: NASA OIG.

While Agency guidance provides direction on the implementation and execution of NASA’s Payment Recapture Audit Program, this guidance is not sufficiently detailed nor includes any type of job aid, such as a checklist, to ensure consistency and completeness in performing the review procedures.¹⁸ This lack of detail and job aids likely contributed to QAD personnel not appropriately including or excluding transactions from the amounts reported. NASA concurred with our similar finding from last year’s audit and developed a draft process narrative to correct this deficiency but did not implement the new process for the FY 2022 reporting period. NASA plans to implement our prior year recommendation ([IG-22-014](#), recommendation 7) by May 31, 2023.

¹⁸ NASA OCFO, *Payment Recapture Audit Program Administration Guidance* (December 2021).

CONCLUSION

Based on our review of the FY 2022 AFR, accompanying materials, and supporting documentation, we concluded NASA complied with PIIA. However, we identified opportunities for improvement in the Agency's risk assessment and reporting process and in the payment recovery program, many of which carried over from the prior year. For example, NASA continued to include nonpayment transactions when identifying, testing, and reporting outlays contrary to OMB guidance. NASA can improve the completeness and accuracy of the information reported in the accompanying materials by updating the current reporting and risk assessment process and performing a more effective quality review of risk assessment and overpayment data.

RECOMMENDATIONS, MANAGEMENT'S RESPONSE, AND OUR EVALUATION

To improve NASA's quality assurance over its risk assessment process, we recommended the Chief Financial Officer:

1. Enhance the *NASA PIIA: Risk Assessment Methodology* document by including detailed information and job aids, such as a checklist, and outlining the review procedures to ensure that a thorough review of the risk assessment ratings is performed before approving the risk assessment. The review procedures should include steps to verify that risk factor question ratings are accurate and that risk condition-level ratings correspond to their underlying risk factor ratings.

Additionally, the Chief Financial Officer should continue to implement corrective actions to address our open prior year recommendations related to program risk assessment and reporting ([IG-22-014](#), recommendations 3, 4, and 5) and its payment recovery program ([IG-22-014](#), recommendation 7).

We provided a draft of this report to NASA management who concurred with our recommendation and described planned actions to address it. We consider management's comments responsive; therefore, the recommendation is resolved and will be closed upon completion and verification of the proposed corrective actions.

Management's comments are reproduced in Appendix D. Technical comments provided by management and revisions to address them have been incorporated as appropriate.

Major contributors to this report include Mark Jenson, Financial Management Audits Director; Taeree Lee, Assistant Director; Andrada Cornea; and Jeremy Watkins. Amanda Perry provided editorial and graphics assistance. Shari Bergstein and Cody Bryant provided sampling assistance.

If you have questions about this report or wish to comment on the quality or usefulness of this report, contact Laurence Hawkins, Audit Operations and Quality Assurance Director, at 202-358-1543 or laurence.b.hawkins@nasa.gov.

Paul K. Martin
Inspector General

APPENDIX A: SCOPE AND METHODOLOGY

We performed this audit from November 2022 through April 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 objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our overall objective was to determine whether NASA complied with the requirements of PIIA in its FY 2022 AFR and accompanying materials. In addition, we evaluated the Agency's implementation of recommendations we made in our previous reports. We used a combination of the requirements in OMB Circular A-123, Appendix C (March 2021); OMB Circular A-136 (June 2022); OMB payment integrity annual data call instructions; OMB Payment Integrity Question and Answer Platform; and the Council of the Inspectors General on Integrity and Efficiency guidance required under PIIA while performing this audit.

We interviewed various personnel from OCFO and its contractor responsible for conducting the risk assessment on NASA's behalf, among others. We also reviewed the PIIA Reporting section of the AFR, accompanying materials, and supporting documentation.

Finally, we reviewed applicable federal laws and regulations as well as NASA policy and guidance related to improper payments including the following:

- Payment Integrity Information Act of 2019, Pub. L. No. 116-117 (2020)
- Bipartisan Budget Act of 2018, Pub. L. No. 115-123 (2018)
- OMB Circular A-136, *Financial Reporting Requirements—Revised* (June 3, 2022)
- OMB Memorandum M-21-19, *Appendix C to OMB Circular A-123, Requirements for Payment Integrity Improvement* (March 5, 2021)
- OMB Memorandum M-18-14, *Implementation of Internal Controls and Grant Expenditures for the Disaster-Related Appropriations* (March 30, 2018)
- OMB Payment Integrity Annual Data Call Instructions (September 2022)
- NASA Procedural Requirements 9010.3A, *Financial Management Internal Control* (February 3, 2020)
- NASA OCFO, *Payment Recapture Audit Program Administration Guidance* (December 2021)
- NASA OCFO, *Procedural Guidance, Payment Integrity Information Act and OMB Circular A-123, Appendix C: Requirements for Effective Measurement and Remediation of Improper Payments* (December 2022)
- Council of the Inspectors General on Integrity and Efficiency, *Guidance for Payment Integrity Information Act Compliance Reviews* (November 8, 2022)

Assessment of Data Reliability

We obtained FY 2021 disbursement data from NASA's core financial system, System, Applications, and Products (SAP), and its financial information reporting application, Business Warehouse/Business Objects (BW/BOBJ). Since NASA's external auditor tested SAP during its audit of NASA's FY 2021 AFR, we relied on their conclusion over the financial system, which was "the results of our tests disclosed no instances in which NASA's financial management systems did not substantially comply with requirements." Although another auditor reported on NASA's financial management systems, we performed additional steps to validate the completeness and accuracy of data. We reviewed FY 2021 disbursement data extracted by NASA from SAP and BW/BOBJ, which the Agency used to determine the universe of programs considered for the FY 2022 risk assessment and reporting to OMB. We validated the data by tracing NASA program names to the President's budget and the NASA spending plan. We also coordinated with the OIG's Office of Data Analytics to sample disaster relief funding transactions tested by NASA for improper payments by tracing the transactions to source documents.

Additionally, we reviewed data system queries of FY 2021 receivables and collections, which the Agency used to identify overpayments related to accounts receivable that the Agency reported in its accompanying materials to the AFR. We traced a sample of transactions from the NSSC's travel audit reports to the receivable and collection transactions in the accounts receivable system query. Finally, we reviewed data system queries of FY 2021 vendor credit memos related to refunds for prior or current year disbursements, which NASA used to identify overpayments related to accounts payable that the Agency reported in its accompanying materials to the AFR.

Overall, we assessed the reliability of the data by reviewing the results of the general and application control testing of the financial management system performed as part of NASA's annual financial statement audit, in addition to tracing various transactions to supporting documents. Based on these actions, we determined that the data was sufficiently reliable for the purposes of this report.

Review of Internal Controls

We assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objective. Specifically, we assessed the information and communication internal control component and the underlying principles relating to the use of quality information and externally communicating the necessary quality information to achieve NASA's reporting objectives. However, because our review was limited to these internal control components and underlying principles, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit. Any internal control deficiencies significant to the audit objective are discussed in this report.

Prior Coverage

During the last 5 years, the NASA Office of Inspector General and Government Accountability Office have issued 12 reports of significant relevance to the subject of this report. Reports can be accessed at <https://oig.nasa.gov/audits/auditReports.html> and <https://www.gao.gov>, respectively.

NASA Office of Inspector General

NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2021
([IG-22-014](#), June 28, 2022)

NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2020
([IG-21-020](#), May 18, 2021)

NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2019
([IG-20-016](#), May 15, 2020)

NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2018
([IG-19-020](#), June 3, 2019)

NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2017
([IG-18-017](#), May 14, 2018)

Government Accountability Office

Improper Payments: Improvements Needed to Ensure Reliability and Accuracy in DOE's Risk Assessments and Reporting ([GAO-20-442](#), June 17, 2020)

The Nation's Fiscal Health: Action Is Needed to Address the Federal Government's Fiscal Future
([GAO-20-403SP](#), March 12, 2020)

Payment Integrity: Federal Agencies' Estimates of FY 2019 Improper Payments ([GAO-20-344](#), March 2, 2020)

Payment Integrity: Selected Agencies Should Improve Efforts to Evaluate Effectiveness of Corrective Actions to Reduce Improper Payments ([GAO-20-336](#), April 1, 2020)

Improper Payments: Selected Agencies Need Improvements in Their Assessments to Better Determine and Document Risk Susceptibility ([GAO-19-112](#), January 10, 2019)

Improper Payments: Additional Guidance Needed to Improve Oversight of Agencies with Noncompliant Programs ([GAO-19-14](#), December 7, 2018)

Improper Payments: Actions and Guidance Could Help Address Issues and Inconsistencies in Estimation Processes ([GAO-18-377](#), May 31, 2018)

APPENDIX B: STATUS OF PRIOR YEAR RECOMMENDATIONS

Based on this year's audit, we closed recommendations from prior audits if corrective actions were completed and verified or if the recommendation was overcome by events. However, if additional corrective actions were necessary, the prior year recommendation will remain open until evidence is provided that adequately satisfies the intent of the recommendation. Table 6 lists the status of prior year OIG recommendations that were open as of May 16, 2023.

Table 6: Status of Prior Year Recommendations

Number	Recommendation	Status
IG-22-014		
1	Complete steps outlined in OMB guidance for when an agency is not compliant with PIIA for one fiscal year. Non-compliant agencies must provide information describing the actions that the agency will take to become compliant in the OMB annual data call.	Closed
2	Report disaster relief funding as a separate program from the Institutional Construction of Facilities program when satisfying payment integrity reporting requirements.	Closed
3	Complete the OMB data call process for all programs with outlays over \$10 million.	Open ^a
4	Ensure that program outlays exclude any transactions that do not meet the outlay definition provided by OMB.	Open ^a
5	Revise the materiality risk calculation methodology and sampling and estimation methodology plan to include payment transactions only.	Open ^a
6	Consider adhering to OMB's \$10 million threshold for program selection for the annual risk assessment.	Closed
7	Develop a detailed review process, such as a checklist or job aid, outlining the review procedures performed by the Quality Assurance Division within the reporting process for overpayments from sources other than recapture audits to ensure that the primary reviewer and the supervisory quality control reviewers are performing a thorough review of the aggregated submissions of overpayments.	Open ^b
8	Determine the specific programs that had overpayments identified and collected during the reporting period and report those amounts by the Agency program as requested by OMB.	Closed
IG-20-016		
2	In accordance with OMB guidance, obtain a statistically valid estimate of the annual amount of improper payments in the SLS program for reporting in the FY 2020 AFR, and complete the associated required reporting.	Closed

Source: NASA OIG.

^a The Agency's estimated completion date was December 30, 2022. We are working with management for a new corrective action estimated completion date.

^b The Agency's estimated completion date is May 31, 2023.

APPENDIX C: PROGRAMS REVIEWED

We reviewed 24 programs from the Agency’s risk assessment. Additionally, we reviewed the disaster relief funding activity within the Institutional Construction of Facilities program that NASA tested to develop an improper payment estimate.

Table 7: Agency Programs Reviewed by NASA OIG

Program Name	
Advanced Air Vehicles Program	New Frontiers
Agency Management	Orion Program
Early Stage Innovation and Partnerships	Outer Planets and Ocean Worlds
Earth Science Technology	Physics of the Cosmos
Earth System Science Pathfinder	Planetary Science Research
Earth Systematic Missions	Radioisotope Power
Heliophysics Research	Small Business Innovation Research and Small Business Technology Transfer
International Space Station Program	Solar Terrestrial Probes
James Webb Space Telescope	Space Communications and Navigation
Living With a Star	Space Launch System
Mars Exploration	Technology Demonstration
Mars Sample Return	Technology Maturation
Disaster Relief Funding Activity within the Institutional Construction of Facilities	

Source: NASA OIG summary of Agency information.

APPENDIX D: MANAGEMENT'S COMMENTS

National Aeronautics and Space Administration

Mary W. Jackson NASA Headquarters
Washington, DC 20546-0001



May 4, 2023

Reply to Attn of: Office of the Chief Financial Officer

TO: Assistant Inspector General for Audits

FROM: Chief Financial Officer

SUBJECT: Agency Response to OIG Draft Report, "Audit of NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2022", (A-23-02-00-FMD)

The National Aeronautics and Space Administration (NASA) appreciates the opportunity to review and comment on the Office of Inspector General (OIG) draft report entitled, "Audit of NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2022", (A-23-02-00-FMD), dated April 14, 2023.

In the draft report, the OIG noted that based on their review of the NASA's Agency Financial Report, accompanying materials on PaymentAccuracy.gov, risk assessment, and the sampling and estimation methodology plan for programs deemed susceptible to significant improper payments, the OIG found that NASA complied with Payment Integrity Information Act (PIIA) for Fiscal Year (FY) 2022. However, the OIG found opportunities for improvement in the Agency's risk assessment and reporting processes. Specifically, the OIG determined improvements are needed in NASA's quality assurance review to ensure ratings are properly assigned to risk factor questions and risk condition levels.

In the draft report, the OIG makes one recommendation to the Chief Financial Officer designed to improve NASA's quality assurance over its risk assessment process.

Specifically, the OIG recommends the following:

Recommendation 1: Enhance the NASA PIIA: Risk Assessment Methodology document by including detailed information and job aids, such as a checklist, and outlining the review procedures to ensure that a thorough review of the risk assessment ratings is performed before approving the risk assessment. The review procedures should include steps to verify that risk factor question ratings are accurate and that risk condition-level ratings correspond to their underlying risk factor ratings.

Management's Response: NASA concurs. NASA currently has a quality control review process in place to review risk assessment results. The Agency will enhance its quality review process in FY 2023 by developing and implementing a Risk Assessment review checklist. The Risk Assessment review checklist will serve as an aid in ensuring

the risk factor question ratings are accurate and that risk condition-level ratings correspond to their underlying risk factor ratings.

Estimated Completion Date: May 31, 2024.

We have reviewed the draft report for information that should not be publicly released. As a result of this review, we have not identified any information that should not be publicly released.

Once again, thank you for the opportunity to review and comment on the subject draft report. If you have any questions or require additional information regarding this response, please contact Jamell Sharpe at (202) 358-1643.

**Margaret
Schaus**  Digitally signed by
Margaret Schaus
Date: 2023.05.05
11:28:47 -04'00'

Margaret Vo Schaus
Chief Financial Officer

APPENDIX E: REPORT DISTRIBUTION

National Aeronautics and Space Administration

Administrator
Deputy Administrator
Associate Administrator
Chief of Staff
Chief Financial Officer

Non-NASA Organizations and Individuals

Office of Management and Budget
Deputy Associate Director, Climate, Energy, Environment and Science Division

Government Accountability Office
Managing Director, Financial Management and Assurance
Director, Contracting and National Security Acquisitions

Congressional Committees and Subcommittees, Chairman and Ranking Member

Senate Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies

Senate Committee on Commerce, Science, and Transportation
Subcommittee on Space and Science

Senate Committee on Homeland Security and Governmental Affairs

House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies

House Committee on Oversight and Accountability
Subcommittee on Government Operations and the Federal Workforce

House Committee on Science, Space, and Technology
Subcommittee on Investigations and Oversight
Subcommittee on Space and Aeronautics

(Assignment No. A-23-02-00-FMD)