



National Science Foundation • Office of Inspector General
4201 Wilson Boulevard, Arlington, Virginia 22230

MEMORANDUM

DATE: May 12, 2016

TO: Dr. France A. Córdova
Director, National Science Foundation

Martha A. Rubenstein
Chief Financial Officer

FROM: 
Allison C. Lerner
Inspector General

SUBJECT: *NSF's Compliance with the Improper Payments Elimination and Recovery Act for FY 2015, Report No. 16-3-005*

Attached please find the final report of our inspection of NSF's compliance with the Improper Payments Elimination and Recovery Act (IPERA) for FY 2015.

We found that NSF complied with IPERA reporting requirements for FY 2015. However, we identified areas for improvement in the agency's IPERA risk assessment process. NSF generally concurred with the recommendations. We have included NSF's response to the draft report as an appendix.

To comply with OMB Circular A-50 requirements for audit follow-up, please provide us your written corrective action plan to address the report recommendations within 60 calendar days. This corrective action plan should detail specific actions and milestone dates.

We appreciate the courtesies and assistance provided by your staff during the inspection. If you have any questions regarding this report, please contact Laura Rainey at 703-292-7302.

Attachment

cc: Richard Buckius Mike Van Woert
Mike Wetklow Fae Korsmo
Marie Maguire Ruth David
Rafael Cotto John Lynskey
Christina Sarris Mike Howe
Susan Carnohan Carol Eyermann
Ann Bushmiller Lawrence Rudolph

**National Science Foundation's
Compliance with the Improper Payments
Elimination and Recovery Act for Fiscal Year 2015**

**National Science Foundation
Office of Inspector General**

May 12, 2016

OIG 16-3-005



Background

The Improper Payments Elimination and Recovery Act of 2010¹ (IPERA) requires agencies to periodically review and identify programs and activities that may be susceptible to significant improper payments. Office of Management and Budget (OMB) implementing guidance for IPERA, OMB M-15-02,² requires Federal agencies to institute a systematic method of reviewing all programs and activities and identify programs susceptible to significant improper payments. OMB requires agencies to assess risk against nine (9) factors³ that are likely to contribute to improper payments.

In addition, IPERA and OMB M-15-02 require each Office of Inspector General (OIG) to annually review improper payment reporting in the agency's Annual Financial Report (AFR) or Performance and Accountability Report. To determine an agency's compliance with IPERA, the Inspector General is required to assess six requirements. If an agency does not meet one or more of these requirements, then it is not compliant with IPERA. Our audit⁴ of NSF's IPERA compliance for Fiscal Year (FY) 2014 found that NSF did not meet IPERA reporting requirements because NSF's FY 2014 risk assessment did not result from a systematic method of review and did not adequately evaluate all the required risk factors.

For IPERA purposes, NSF in consultation with OMB Circular A-11 identified one program – Grants and Cooperative Agreements – and the Improper Payments Elimination and Recovery Improvement Act of 2012 (IPERIA) and OMB M-15-02 identified three activities, Contracts, Payments to Employees (which includes salaries), and Charge Cards (which includes travel and purchase cards), for which a risk assessment needed to be conducted.

NSF Complied with the Technical Requirements of IPERA for FY 2015, but NSF's Risk Assessment Process Needs Significant Improvements

We found that NSF complied with IPERA reporting requirements for FY 2015 based on our review of the agency's AFR, website, and risk assessment. However, we determined that NSF's risk assessment process needs significant improvements to ensure that the agency thoroughly assesses and documents its risk of improper payments.

¹ As amended by the Improper Payments Elimination and Recovery Improvement Act of 2012 (IPERIA).

² OMB Memorandum M-15-02, *Appendix C to Circular No. A-123, Requirements for Effective Estimation and Remediation of Improper Payments*, October 20, 2014.

³ A listing of the nine OMB risk factors can be found at Appendix C.

⁴ *Audit of NSF's Compliance with Improper Payments Elimination and Recovery Act for FY2014, OIG Report No. 15-2-007.*

OMB Memorandum M-15-02 sets forth six requirements that agencies must meet to comply with IPERA. As indicated in the table below, NSF met all applicable criteria in FY 2015:

OMB M-15-02 Requirement	NSF Complied
Published and posted on agency website its FY 2015 AFR	Yes
Conducted program-specific risk assessments	Yes
Published improper payment estimates for all programs and activities identified as susceptible to significant improper payments under its risk assessment	N/A*
Published programmatic corrective action plans in the AFR	N/A*
Published, and is meeting, annual reduction targets for each program assessed to be at risk and measured for improper payments	N/A*
Reported a gross improper payment rate of less than 10 percent for each program or activity for which an improper payment estimate was obtained and published in the AFR	N/A*

*Because NSF's FY 2015 IPERA risk assessment found that the agency was not susceptible to significant improper payments, this requirement was not applicable.

Although we concluded that NSF technically complied with the requirements of IPERA, we identified substantial concerns with the depth, substance, and documentation of the NSF risk assessment. Specifically, we found significant limitations in NSF's analysis of six of the nine OMB risk factors and its assessment of NSF payments to employees. With respect to the first concern, ensuring a thorough risk assessment depends on asking the right questions of the appropriate personnel and making sure that the answers provide enough detail to enable NSF to assess risk that could contribute to improper payments. We found that in some instances, the interviews did not address areas of known risks in sufficient detail to provide a systematic risk assessment. In others, we could not determine why some questions and not others were asked. We also found that in some instances, NSF accepted answers at face value and did not obtain key information to support the information provided. With respect to the second limitation, NSF did not thoroughly assess payments to employees. NSF did not conduct IPERA-specific testing on payroll in FY 2015 or interview NSF's Division of Human Resource Management (HRM), the division responsible for salary and benefits process, to discuss any of the nine OMB risk factors during the IPERA risk assessment. As a result of these limitations, NSF's risk assessment may not have fully explored the agency's susceptibility to improper payments.

We previously made recommendations to address the quality of NSF's risk assessment process based on our audits of the agency's compliance with IPERA for FY 2012 and FY 2014. Although NSF has implemented corrective actions in response to those recommendations, we still have concerns surrounding the quality of the process. While we are closing all recommendations from prior reports, we are issuing new recommendations to address these issues. Below we identify opportunities for improvements in NSF's methodology and documentation for the IPERA risk assessment.

Significant Improvements Would Strengthen NSF's Risk Assessment Process

OMB M-15-02 states, "All agencies shall institute a systematic method of reviewing all programs and identify programs susceptible to significant improper payments." In accordance with OMB guidance, the systematic method may be qualitative, such as a risk assessment questionnaire, or quantitative, such as an evaluation based on a statistical sample, and it must take the nine OMB risk factors into account. NSF utilized a contractor⁵ to perform a qualitative approach in FY 2015, using a questionnaire and leveraging information previously gathered during the OMB Circular A-123 internal control testing to assess its risk of improper payments. While M-15-02 does not require use of a quantitative assessment, given the large amount of NSF funds that are expended outside the agency, it would be helpful for the agency to add a quantitative component to the IPERA risk assessment, as it had in the FY 2014 assessment, in order to gain insight about how NSF funds are used by awardees and assess whether payments were proper.

We found that although NSF's questionnaire included the nine risk factors required by OMB M-15-02, NSF did not obtain information to thoroughly address six of the nine risk factors. In addition, NSF did not thoroughly assess payments to employees. Specific examples of the limitations we identified and the impact they had on the quality of the risk assessment follow. We discuss the causes of these limitations and make recommendations at the end of this section.

Limitations Identified in Analysis of Six of Nine OMB Risk Factors

As noted previously, the determination of risk levels for NSF's IPERA program and activities was supported by an interview questionnaire NSF developed covering the nine OMB risk factors. After leveraging work performed in the FY 2015 internal control assessment (conducted as required by OMB Circular A-123), NSF interviewed senior management in eight NSF Divisions and Offices including the Budget Office, Division of Institution and Award Support (DIAS), Division of Acquisition and Cooperative Support (DACs), Division of Grants and Agreements (DGA), Large Facilities Office (LFO), Division of Financial Management (DFM), Division of Administrative Services (DAS), and Division of Polar Programs (PLR). Notably, NSF did not interview senior management in HRM during the IPERA risk assessment.

We found that NSF did not ask questions to obtain complete information for all nine OMB risk factors from relevant Offices or Divisions responsible for the program and activities covered in its IPERA assessment. Specifically, we found that in its interviews, NSF did not ask all the responsible staff questions related to six of the nine required risk factors.⁶ While we recognize that in certain circumstances it might not be necessary to ask a specific question to an Office or Division, the basis for that determination should be documented so a third party can assess the

⁵ For the ease of the reader, this report does not distinguish between actions performed by NSF staff and actions performed by the contractor.

⁶ NSF thoroughly assessed the following OMB risk factors: (1) whether a program or activity is new to the agency, (2) the volume of payments made annually, and (3) the results from prior improper payment work.

reasonableness of that decision. For example, in many instances, questions were not asked in areas of known, significant risk, and NSF did not document its reasons for not asking. These omissions diminished the thoroughness and quality of the risk assessment. In addition, NSF did not document a crosswalk between the internal control test work and the IPERA risk assessment, which would have supported any differences in risk scores and clearly identified those areas where NSF needed to obtain additional information.

The six risk factors that were not thoroughly examined during the IPERA risk assessment are described below:

- **Complexity of the Program or Activity (OMB risk factor ii):** M-15-02 requires the agency to consider the complexity of the program or activity reviewed, particularly with respect to determining the correct payment amounts. We found that NSF asked three of the eight NSF Divisions and Offices (DIAS, DFM, and DAS) about the complexity of the program or activity risk factor. However, we found that NSF did not inquire about program complexity in its IPERA interviews with DGA, the office that makes the majority of NSF grants and cooperative agreements; nor with LFO, which is responsible for overseeing NSF's large facility projects; nor with DACS, which awards NSF's contracts and its highest dollar-value and complex cooperative agreements; nor with HRM, which is responsible for NSF's salary and benefits process. These offices/divisions are responsible for negotiating, awarding, and monitoring NSF grants, cooperative agreements, and contracts and for administering and overseeing NSF's pay and benefit process. Therefore, staff in these offices/divisions have a keen understanding of the complexities and vulnerabilities of their programs and could provide meaningful insights about their susceptibility to improper payments. Decisions and actions by these offices/divisions could prevent improper payments.

When we asked why it did not address the complexity risk factor with these offices, NSF informed us that it determined that the divisions that processed payments (DIAS, DFM, and DAS), were ultimately responsible for determining correct payment activity. While DIAS, DFM, and DAS do process payments to vendors and staff, we note that individuals within those divisions do not know all the complexities of the program or activity reviewed as they do not solicit, negotiate, award and administer, or monitor NSF awards, nor do they ensure that payments to staff are accurately calculated based on grade levels, timesheets, and travel expense reports.

The fact that NSF did not interview the offices responsible for NSF's largest and riskiest projects, or HRM, which is responsible for employee pay and benefits, about the risk factor related to complexity, means that the agency missed an opportunity to fully consider the factor, which undermined the thoroughness and quality of the FY 2015 IPERA risk assessment.

- **Payments or Payment Eligibility Decisions Made Outside of NSF (OMB risk factor iv):** M-15-02 requires the agency to consider whether payments or payment eligibility decisions are made outside of the agency, for example, by a State or local government, or a regional Federal office. NSF concluded that "Payment eligibility decisions are made by

NSF only” and “no non-agency personnel are involved with making payment related decisions.”

OMB M-15-02 defines “payment” as “any disbursement or transfer of Federal funds... to any non-Federal person, non-Federal entity, or Federal employee, that is made by a Federal agency, **a Federal contractor, a Federal grantee**, or a governmental or other organization administering a Federal program or activity. The term ‘payment’ includes Federal awards subject to the Single Audit Act and the Uniform Guidance for Federal assistance (2 CFR 200 Subpart F) (Single Audits) **that are expended by both recipients and sub-recipients.**” (Emphasis added).

It is important to note that awardees of federal financial assistance routinely make payment decisions. In particular, NSF awardees include large facilities that routinely expend significant sums on sub-awards. For example, sub-awards comprised more than half of the total cost of the \$468 million Large Synoptic Solar Telescope project.

Further, NSF awardees include universities and colleges that pay stipends to students based on grade-point averages and other qualifying factors. The awardee institutions are responsible for determining whether students meet eligibility requirements for stipends. As evidenced by NSF OIG investigations, awardees are making stipend-related eligibility decisions that, in a number of cases, are leading to payments to ineligible students. For example, as a result of an OIG investigation, an institution which receives NSF funds recently returned over \$300,000 that it had improperly paid to ineligible students. This was the third investigation in five years involving this institution to result in returned funds directly due to payments made to ineligible students. In another example, a community college returned \$115,652 in misspent funds resulting from stipends paid to ineligible students.

When asked during our inspection whether NSF considered sub-awards and student stipends to be payment or payment eligibility decisions made outside NSF, the IPERA testing team stated that it did not believe the OMB risk factor included payment or payment eligibility decisions for sub-recipients or student stipends.

In comments on a draft of this report, NSF officials stated that the agency sets eligibility requirements and expects awardees and their sub-recipients to comply with the requirements of award terms and conditions as well as 2 CFR 200. NSF noted that during FY 2015, the agency completed payment testing on cooperative agreements and Graduate Research Fellowship Program (GRFP) grants as a follow-up to the FY 2013 IPERA risk assessment. The payment testing resulted in an estimated unallowable cost amount of \$3.2 million (out of a payment universe of \$1.8 billion). NSF stated that these results enabled the agency to ascertain that there was no significant risk of unallowable costs for cooperative agreements and GRFP grants.

Based on the definition in M-15-02, NSF’s risk assessment should have addressed both payment and payment eligibility decisions made by NSF (primary payments) and payment and payment eligibility decisions made by NSF awardees (secondary payments).

NSF relies on the internal control programs in place at each of its awardees, as well as the agency's post-award monitoring program and OIG audits, to ensure that awardees are complying with the terms and conditions of NSF awards. Although NSF reviewed the post-award monitoring program during its A-123 internal control testing, and conducted follow-up testing in response to previous IPERA risk assessments, the FY 2015 IPERA risk assessment did not include a discussion of the risk of secondary improper payments made by NSF awardees. The lack of an IPERA-specific assessment of the risk that awardees are making improper secondary payments undermined the thoroughness and quality of the IPERA risk assessment. The addition of a quantitative approach to future risk assessments would provide NSF with insight on how funds are used by awardees and assess whether both primary and secondary payments are proper. Also, as discussed above, the use of a crosswalk between the IPERA risk assessment, the internal control testing conducted under OMB A-123, and any testing conducted in response to previous IPERA risk assessments, would further support NSF's overall assessment of the agency's susceptibility to improper payments.

- **Recent Major Changes in Program Funding, Authorities, Practices, or Procedures (OMB risk factor v):** M-15-02 requires the agency to consider recent major changes in program funding, authorities, practices, and procedures. NSF's FY 2015 Risk Assessment Report for Improper Payments, issued in December 2015, stated that implementation of NSF's new financial system, iTRAK, was the *only* major change in FY 2015. This occurred because NSF asked only one office, the Office of Budget, Finance, and Award Management (BFA), about the recent major changes in program funding, authorities, practices, or procedures risk factor.

NSF informed us that it only asked this question of the budget office because the risk factor only applied to changes in appropriations. However, as noted above, M-15-02 includes changes in practices and procedures as components of this risk factor.

During the period covered by the FY 2015 IPERA risk assessment, NSF revised several parts of its Large Facility Manual, including sections related to contingency funding and the inclusion of management fee in awards. In addition, the December 2014 implementation of 2 CFR 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance)," revised requirements with respect to grant administration. The new requirements included an increase to the threshold that triggers the requirement to obtain a Single Audit; a change to how indirect cost rates are negotiated and the introduction of a new "de minimus" indirect cost rate for awardees who have never received a negotiated rate; and changes to the allowability determinations for several cost categories.

While the NSF IPERA risk assessment identified the new Uniform Guidance and the update to the Large Facility Manual under the risk factors of NSF periodic reviews and past OIG audit findings, it did not address the impact of these changes in the risk factor of major changes in practices or procedures.

In light of the changes to the Large Facilities Manual and the implementation of the Uniform Guidance, NSF should have discussed this element with LFO, DACS, and DGA. Because it did not do so, the resulting risk assessment did not adequately assess the impact of the relevant major changes in practices or procedures. Therefore, NSF lacked insight about the impact of these changes that the office and divisions might have provided, which undermined the thoroughness and quality of the IPERA risk assessment.

- **Consideration of Level, Quality of Training, and Experience of Staff (OMB risk factor vi):** M-15-02 requires the agency to consider the level, experience, and quality of training for personnel responsible for making program eligibility determinations or certifying that payments are accurate as part of its risk assessment. We found that NSF did not ask the offices responsible for its high-dollar, high-risk projects (DACS or LFO) about this required risk factor. NSF only asked staff in four of the eight divisions – DGA, DFM, DAS, and PLR – about the risk factor pertaining to the level, quality of training, and experience of staff.

NSF stated that it did not ask the other four offices or divisions for information about this risk factor because the goal of this risk factor/interview question was to determine the level, experience, and quality of training for personnel for making program eligibility determinations or certifying that payments are accurate at NSF. Further, NSF did not consider DACS or LFO staff to be making program eligibility decisions.

As noted previously, significant payment and payment eligibility decisions are made by personnel outside of NSF in programs overseen by DACS and LFO. Accordingly, personnel in LFO and DACS, who are responsible for making award decisions involving multi-million dollar projects, should have been queried about the level, quality of training, and experience of staff outside of NSF who made such determinations.

As a result of its decision not to interview all divisions and offices about this risk factor, NSF did not adequately assess the quality of training and experience of all NSF and non-NSF staff who make program eligibility determinations and certify that payments are correct. This omission undermined the thoroughness and quality of the IPERA risk assessment.

- **Consideration of Inherent Risks (OMB risk factor vii):** M-15-02 requires the agency to consider the inherent risk of improper payments due to the nature of the agency programs or operations. We found that, while all eight divisions and offices that were interviewed were asked about inherent risks, only the interview with LFO resulted in a full discussion of risks due to the nature of the program or activity. Staff in the other seven divisions and offices only provided information about NSF's implementation of certain internal controls, such as segregation of duties and award system flags.

An assessment of inherent risk should include a discussion about the susceptibility of a program or activity to improper payments based on the nature of the program or activity *prior* to implementation of internal controls. As stated in OMB M-15-02, NSF should consider “inherent risks of improper payments due to the **nature of agency programs or**

operations” (emphasis added). An assessment of inherent risk should also consider such factors as the newness of the grant program, how experienced an awardee is in managing federal funds, and the number of sub-awards.

NSF documented the results of its IPERA interviews using five matrices for its program and activities – one each for grants, cooperative agreements, payroll, charge cards, and contracts. We found that, as in the interviews, the matrices did not include complete information to address the inherent risk factor. The matrix for grants included the following question: “Are there any specific types of payments made by NSF to the institutions, or by the institutions themselves, that NSF views as riskier than others?” However, this specific question was not included in the risk matrices for either the cooperative agreements portion of the program identified for review under IPERA or any of the NSF activities under IPERA.

When we asked why a fuller discussion of inherent risk was limited to one office, an NSF official stated that she did not want to push NSF senior management during interviews with the other divisions and offices for a deeper discussion of inherent risk. The same NSF official also agreed that it had not included a specific inherent risk question in each of the IPERA matrices, but noted that NSF considers inherent risk every year as part of the internal control testing under OMB Circular A-123.

As a result of its decision to limit the discussion of inherent risk with seven of the eight divisions or offices that were interviewed, NSF did not adequately assess inherent risk during its IPERA risk assessment. This limitation undermined the thoroughness and quality of the risk assessment.

- **Consideration of Significant Deficiencies in Reports (OMB risk factor viii):** M-15-02 requires the agency to consider, “Significant deficiencies in the audit reports of the agency **including, but not limited to**, the agency Inspector General or the Government Accountability Office (GAO) audit report findings, **or other relevant management findings** that might hinder accurate payment certifications” (Emphasis added). We found that NSF did not consider OIG investigative recoveries of improper payments or NSF’s own internal reviews when considering this factor during the IPERA risk assessment.

It is important to consider OIG investigations and NSF’s own internal reports because they can provide insight on the risk of improper payments. For example, the March 2015 and September 2015 OIG Semiannual Reports to Congress identified approximately \$5.4 million in improper payments resulting from OIG investigations. Examining the basis for these recoveries could provide insights on programs or classes of awardees that are more susceptible to improper payments than others. Analysis of the results of NSF’s own internal reports could yield similar insights on the potential for improper payments. As an example, an FY 2015 Business System Review (BSR) reported that NSF issued a cooperative agreement to one of its large facilities prior to resolving recommendations made by NSF’s Cost Analysis and Audit Resolution (CAAR) branch. As a result, NSF made the award with the incorrect indirect cost rate as well as other errors.

Although NSF reviewed the OIG Semiannual Reports to Congress, which contain information about OIG audits and investigations, it did not obtain and consider information from the OIG Office of Investigations related to its recoveries as part of its risk assessment. NSF also did not consider the results or resolution of NSF's own BSRs, Site Visits, or Desk Reviews to identify risks of improper payments. NSF stated it they did not consider this information because OMB guidance only requires review of "audit" reports from OIGs and GAO.

In addition, NSF only asked three of the eight divisions and offices (DIAS, LFO, and DFM) during IPERA interviews about the process within their division/office for addressing and correcting deficiencies noted in OIG and GAO audit reports related to the IPERA program and activities. Of particular concern, DACS, which resolves OIG audit report recommendations for complex cooperative agreements and contracts, was not asked this question.

We recognize that NSF's IPERA risk assessment for this factor was "high." However, without a thorough review of all available information from OIG investigations and NSF's internal reviews, NSF missed an opportunity to identify additional areas at risk for improper payments and conduct more robust interviews with the NSF divisions and offices responsible for awardees included in the investigations and internal reviews. This omission undermined the thoroughness and quality of the risk assessment.

Limitations Identified in Analysis of NSF Payments to Employees

OMB M-15-02 requires agencies to include payments to employees, including salary, in their IPERA risk assessments. It also states, "For improper payment reporting purposes, when a shared service provider is responsible for the actual disbursements of payments to employees (for example, payroll) on behalf of a customer agency, the customer agency and shared service provider should assess only the portions of the process that are within their respective control."

During its FY 2015 IPERA review, NSF considered the risk of improper payments for payroll by reviewing the internal control testing that had been completed in FY 2014, the FY 2015 Statement on Standards for Attestation Engagements (SSAE) 16 for its payroll processing provider (Department of the Interior), past OIG audit reports, and salary data provided by NSF's Division of Human Resources Management (HRM).

NSF's OMB Circular A-123 narrative on *Pay and Benefits Process*, dated April 8, 2014, states that HRM is responsible for the pay and benefits process, including verifying the eligibility of the employees for selection and pay increases, inputting new employees and pay increases into NSF systems, reviewing timecard edits and completing corrective actions, and completing separation actions in NSF systems.

Because NSF did not identify any internal control weaknesses in previous years' internal control testing, it did not conduct transaction-level internal control testing of payroll in FY 2015 as part of its A-123 internal control assessment. While we take no issue with NSF's decision not to conduct transaction-level testing of payroll as part of the FY 2015 internal control process, we

note that if NSF had conducted the testing, it would have had current internal control information to rely on for the FY 2015 IPERA risk assessment. NSF also decided not to interview HRM during the IPERA risk assessment. NSF stated that its interview of DFM covered the payroll activity because “DFM is ultimately responsible for recording, reconciling, and posting payroll amounts.” However, while DFM is mainly responsible for recording payroll amounts in the general ledger, HRM is responsible for the pay and benefits process. HRM staff negotiate and set pay, and therefore have meaningful insights on the risk of improper payments that should have been considered.

As a result of its decision to not conduct IPERA-specific testing on payroll in FY 2015 or to interview HRM staff to discuss any of the nine OMB risk factors, NSF did not fully assess the risk of improper payments related to the payments to employees, which undermined the thoroughness and quality of the risk assessment.

Conclusion

While NSF technically complied with OMB M-15-02 by conducting a qualitative risk assessment, we found that NSF’s FY 2015 risk assessment contained substantial inadequacies as detailed above, and as a result did not thoroughly assess the agency’s susceptibility of improper payments for the relevant program and activities. The weaknesses were caused in part by the fact that NSF had only two months (November and December 2015) to complete and document its IPERA risk assessment for FY 2015. In addition, NSF interpreted OMB M-15-02 guidance incorrectly in certain circumstances. Further, although NSF had a one-page statement of work for the contract through which it procured its assessment which outlined some of NSF’s methodology for IPERA, NSF did not have specific policies and procedures to guide the risk assessment. Finally, NSF did not adequately document its leveraging of work previously performed under OMB Circular A-123 for use in the IPERA risk assessment. As a result, NSF’s IPERA risk assessment process needs significant improvements to ensure that NSF is properly assessing its risk of improper payments. Given that OMB permits agencies to use quantitative and/or qualitative approaches when conducting IPERA risk assessments, and NSF continues to encounter challenges in performing a qualitative assessment, a return to employing both a quantitative statistical sample approach, which is more structured and less subjective, and a qualitative approach, may be a better solution for NSF.

Recommendations

To strengthen NSF’s IPERA risk assessment in future years, we recommend the NSF Chief Financial Officer take appropriate actions to:

1. Ensure NSF allows sufficient time to conduct a thorough and robust assessment of the agency’s susceptibility to improper payments.
2. Add a quantitative approach for IPERA risk assessments to gain insight on how NSF funds are used by awardees and assess whether both primary and secondary payments were proper.

3. Document the policies and procedures to be followed during the IPERA risk assessment and require staff and contractors to follow these policies and procedures.
4. Discuss all relevant OMB risk factors with the relevant leadership and staff, including a cross-section of those responsible for making and managing individual awards, from NSF's Divisions and Offices responsible for the program and activities under IPERA.
5. Clarify with NSF staff being interviewed for IPERA the meaning of inherent risk as it relates to the IPERA program and activities, and ensure that the assessment of this risk factor includes an analysis of the nature of the programs/activities and their recipients, as well as anything else that might make NSF uniquely susceptible to improper payments.
6. Utilize OIG investigation findings, as well as NSF's own internal reports (including BSRs, site visits, and desk reviews), to identify risks associated with improper payments.
7. Include a thorough review of payments to employees in the IPERA risk assessment.
8. Clearly document the crosswalk between any leveraged internal control test work conducted under OMB Circular A-123 and the IPERA risk assessment and include that crosswalk in the risk assessment.

Summary of Agency Response and OIG Comments

NSF stated in its formal response to the draft of this report that the agency generally agreed with the recommendations and will undertake corrective actions to address the root causes of the finding.

We have included NSF's response to the draft of this report in its entirety as Appendix A.

Appendix A: Agency Response to Draft Report

National Science Foundation
4201 Wilson Boulevard,
Arlington, Virginia 22230

MEMORANDUM

Date: May 11, 2016

To: Marie Maguire, Assistant Inspector General for Audit (Acting)

From: Marty Rubenstein /s/, Head Office of Budget Finance and Award Management and Chief Financial Officer

Subject: Management's Response to Draft Report on NSF's Compliance with the Improper Payments Elimination and Recovery Act for FY 2015

Thank you for the opportunity to comment upon the audit of the National Science Foundation's Compliance with the Improper Payments Elimination and Recovery Act (IPERA) for Fiscal Year 2015. Over the years our offices have worked collaboratively on NSF's management of improper payments and our processes have benefited from your office's recommendations. I am pleased to report that we generally agree with the report's recommendations.

We will ensure our efforts to maintain compliance with IPERA include corrective actions to address the root causes of the control deficiencies and documentation issues raised in the report. Most significantly, we will consider these recommendations as part of our efforts to implement the new GAO Standards of Internal Control in the Federal Government, effective for FY 2016.

I appreciate your staff's work on the report and acknowledgement of our efforts. In closing, we look forward to continue our partnership in implementing corrective actions and most importantly meeting the objectives of IPERA.

Questions about our response and planned corrective actions can be addressed to Mike Wetklow, Deputy Chief Financial Officer and Division Director, Division of Financial Management at mwetklow@nsf.gov.

cc: Christina Sarris, OD
Laura Rainey, OIG
Elizabeth Goebels, OIG
Catherine Walters, OIG
Mike Wetklow, DFM
John Lynskey, DFM
Carol Eyermann, DFM
Mike Howe, DFM
John Sholhead, DFM

Appendix B: Objective, Scope, and Methodology

We performed this inspection to:

- Determine whether NSF complied with the requirements of IPERA, and accurately and completely reported on improper payments in its FY 2015 Annual Financial Report (AFR) and accompanying materials;
- Determine whether NSF's December 2015 risk assessment addressed all of the risk areas identified in OMB M-15-02, provides a systematic method of reviewing all programs, and identified programs susceptible to significant improper payments; and
- Evaluate the corrective actions taken in response to *Audit of NSF's Compliance with Improper Payments Elimination and Recovery Act for FY2014*, *OIG Report No. 15-2-007*, dated June 12, 2015.

The scope of this inspection is improper payment information contained in NSF's FY 2015 AFR and the related work NSF performed to support its IPERA risk assessment. To accomplish our objective, we interviewed staff in BFA and reviewed documentation supporting the risk assessment report issued in December 2015. We also interviewed staff from HRM, DFM, and the Cost Analysis and Resolution Branch of DIAS. Due to time constraints, we did not verify the disbursement amounts in FY 2015 for NSF's program and activities under IPERA.

We conducted this inspection from March through May 2016 in accordance with Quality Standards for Inspection and Evaluation developed by the Council of Inspectors General on Integrity and Efficiency. Similar to *Government Auditing Standards*, the Quality Standards for Inspections state, "...the elements needed for a finding depend entirely on the objectives of the inspection. Thus, a finding or set of findings is complete to the extent that the inspection objectives are satisfied and the report clearly relates those objectives to the applicable elements of a finding." In addition, the Inspection Standards require that, "Evidence supporting inspection findings, conclusions, and recommendations should be sufficient, competent, and relevant and should lead a reasonable person to sustain the findings, conclusions, and recommendations."

Appendix C: OMB Risk Factors for Consideration during IPERA Risk Assessments

OMB M-15-02 requires agencies to consider the following risk factors during their risk assessments of the agency's susceptibility for significant improper payments:

1. Whether the program or activity reviewed is new to the agency;
2. The complexity of the program or activity reviewed, particularly with respect to determining correct payment amounts;
3. The volume of payments made annually;
4. Whether payments or payment eligibility decisions are made outside of the agency, for example, by a State or local government, or a regional Federal office;
5. Recent major changes in program funding, authorities, practices, or procedures.
6. The level, experience, and quality of training for personnel responsible for making program eligibility determinations or certifying that payments are accurate;
7. Inherent risks of improper payments due to the nature of agency program or operations;
8. Significant deficiencies in the audit reports of the agency including, but not limited to, the agency Inspector General or the Government Accountability Office (GAO) audit report findings, or other relevant management findings that might hinder accurate payment certifications; and,
9. Results from prior improper payment work.

Appendix D: OIG Assessment of Prior Year's Recommendations

<u>Finding</u>	<u>Initial Recommendation</u>	<u>Revised Recommendation</u>	<u>OIG Assessment</u>
<p>No. 1 - NSF's risk assessment did not use a systematic method and did not evaluate all required risk factors</p>	<p>1. We recommend that the NSF Chief Financial Officer take appropriate action to improve NSF's compliance with IPERIA. Specifically, we recommend that NSF management execute a full, statistically valid estimate of improper payments for grants, and a separate estimate for contracts. These estimates should adhere to the requirements of OMB Memorandum M-15-02.</p>	<p>1. Conduct a qualitative IPERA risk assessment for FY 2015.</p>	<p>Completed. As agreed upon by NSF and the OIG during audit resolution, NSF conducted a qualitative risk assessment for improper payments for FY 2015, and issued its report in December 2015.</p>
<p>No. 2 - NSF did not properly report on improper payment recoveries in the FY 2014 AFR</p>	<p>2a. Report improper payments identified and recovered through sources other than payment recapture audits, including the NSF audit resolution process and cost incurred audits on high-risk contracts, in order to demonstrate NSF's commitment to recovering federal funds that should not have been paid.</p>		<p>Completed. NSF reported in the AFR information about the audit resolution process and cost-incurred audits on high risk contracts.</p>
	<p>2b. Re-evaluate the analysis for determining whether payment recapture audit and recovery activities are cost-effective for contracts, and retain sufficient documentation supporting the rationale and conclusions made.</p>		<p>Completed. NSF analyzed the need for recapture audits, determined they would not be cost-effective, and sought and received approval from OMB to not perform recapture audits.</p>