

May 12, 2016

Addendum to Attached Letter, Dated April 29, 2016

Please note that Dr. Brett M. Baker, former Assistant Inspector General for Audit at the National Science Foundation Office of Inspector General, signed the attached letter prior to his departure from the National Science Foundation Office of Inspector General (NSF OIG). The point of contact for the NSF OIG is now Allison Lerner, IG; and her telephone number is 703-292-7100.

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National Science Foundation
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4201 Wilson Boulevard
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Date: APR 29 2016

Dr. Larry R. Faulkner, Chair
Committee on Federal Research Regulations and Reporting Requirements
National Academy of Sciences
2101 Constitution Avenue NW
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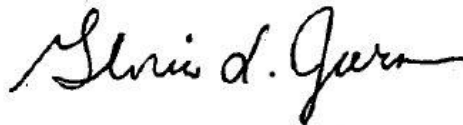
Dear Dr. Faulkner:

As the Deputy Inspector General for Audit Services at the U.S. Department of Health and Human Services (HHS) and the Assistant Inspector General for Audit at the National Science Foundation (NSF), we would like to respond to comments and recommendations in the National Academies of Sciences (NAS), report, *Optimizing the Nation's Investment in Academic Research: A New Regulatory Framework for the 21st Century, Part I*, which was prepared under the aegis of your committee.

For the subsection on the *Audit Climate*, in Chapter 6, the committee heard presentations from Allison Lerner, the Inspector General of the National Science Foundation (NSF), and Julie Taitsman, the Chief Medical Officer at the HHS Office of Inspector General. We would like to clarify or correct certain statements in Chapter 6, including some attributed to them, and also respond to the chapter's five recommendations directed to Inspectors General. Our comments are provided in the attached appendix.

We thank you for this opportunity to respond to the report and its recommendations. Please feel free to contact us if you have any questions about our response. You can reach Ms. Gloria L. Jarmon at 202-619-3155 and Dr. Brett M. Baker at 703-292-7100.

Sincerely,



Ms. Gloria L. Jarmon
Deputy Inspector General for Audit
Department of Health and Human Services
Office of Inspector General



Dr. Brett M. Baker
Assistant Inspector General for Audit
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Office of Inspector General

APPENDIX

This appendix includes clarifications or corrections on *Optimizing the Nation's Investment in Academic Research: A New Regulatory Framework for the 21st Century, Part I*,¹ and in particular, on Chapter 6, for which the committee heard presentations from Allison Lerner, the Inspector General of the National Science Foundation (NSF),² and Julie Taitzman, the Chief Medical Officer at the HHS Office of Inspector General.³ This appendix also responds to the chapter's five recommendations directed to Inspectors General.

Clarifications or Corrections

1. The report states that Inspectors General at federal agencies with smaller budgets and staff “are appointed by agency heads (e.g., National Science Foundation).”⁴ This statement about the NSF Inspector General (IG) is not accurate: The IG at the NSF is not appointed by the agency head, but by the National Science Board (NSB), a separate body that was created by the National Science Foundation Act of 1950. The NSF IG is independent of NSF and reports to the NSB and to Congress, not to the agency.

More generally, the Inspector General Act (IG Act) of 1978, as amended, provides for two kinds of Offices of Inspector General: 1. “Federal entities,”⁵ in which IGs are appointed by the President, with the advice and consent of the Senate,⁶ and 2. “designated Federal entities,” such as NSF,⁷ in which IGs are appointed by the head of the entity.⁸ The IG Act specifically states that in the case of NSF, the term “head of the designated Federal entity” means the National Science Board.⁹

Thus, in accordance with the language in the IG Act, the statement in the report that IGs at federal agencies with smaller budgets and staff “are appointed by agency heads” should say instead “are appointed by the heads of the designated Federal entities.” Further, any reference to NSF in this regard should include the IG Act qualification that at NSF, the term “head of the designated Federal entity” is the National Science Board.

2. The discussion of the Yale investigation under the heading of *Examples of Audit Activity*¹⁰ is factually incorrect, as is the reference to “audit investigations.”¹¹ Audits and investigations are distinct functions of federal OIGs. Audits assess compliance with award requirements, while investigations assess wrongdoing that constitutes violations of federal criminal and civil statutes. Auditors sometimes assist with investigations (and did so in the Yale

¹ National Academy of Sciences Report (hereinafter NAS), issued September 22, 2015. The version referenced here is the prepublication copy on the National Academy of Sciences' website.

² Ibid., p. 82, footnotes 8-9.

³ Ibid., p. 83, footnote 11.

⁴ Ibid., p. 79, footnote 2, lines 6-7.

⁵ Inspector General Act of 1978, as amended (hereinafter the IG Act), §8 G (a) (1).

⁶ Ibid., §3 (a).

⁷ Ibid., §8 G (a) (2)

⁸ Ibid., §8 G (c).

⁹ Ibid., §8 G (a) (4)(A).

¹⁰ NAS, p. 81, Box 6-1.

¹¹ Ibid., p. 80.

investigation), but investigators do not participate in audits. Fundamentally, this was not an audit and should not be discussed under this heading.

In addition, the discussion of the Yale investigation included several factual errors, as indicated below.

Here is the version in the report:

*In 2008, HHS, NIH, DOD, NSF, and several other federal agencies jointly performed a comprehensive audit of Yale University. Yale cooperated with federal authorities in an investigation of research grant accounting over a period from January 2000 to December 2006. The auditors suggested that Yale had undertaken improper cost transfers to “spend down” grant funds and had overstated effort reports that resulted in salary overcharges. In a settlement, announced in late 2008, Yale agreed to pay \$7.6 million to the government, half of which represented actual damages for false claims, and half of which were penalties. The false claims reflect 0.15 percent of Yale’s federal funding for the period of the audit. One important and beneficial outcome of the audit was that Yale strengthened its research compliance administration and infrastructure.*¹²

Here are factual corrections, and some suggested revisions to the report’s version:

In 2008, HHS, ~~NIH~~, DOE, DOD, NSF, and NASA OIGs, the FBI, and several other federal agencies jointly performed an **investigation** ~~comprehensive audit~~ of Yale University. **Following the issuance of multiple OIG subpoenas**, Yale cooperated with federal authorities in an investigation of research grant expenditures ~~accounting~~ over a period from January 2000 to December 2006. The investigation revealed ~~auditors suggested~~ that Yale researchers had undertaken improper cost transfers ~~designed~~ to “spend down” grant funds and had overstated effort reports that resulted in salary overcharges. In a civil False Claims Act settlement, announced in late 2008, Yale agreed to pay \$7.6 million to the government, half of which represented actual damages for false claims, and half of which were penalties. **The false claims reflect 0.15 percent of Yale’s federal funding for the period of the audit.** One important and beneficial outcome of the audit investigation was that Yale strengthened its research compliance administration and infrastructure.

Yale “cooperated” because it was required to do so, pursuant to award requirements and OIG subpoenas. Also, it is incorrect to state that a “comprehensive audit” resulted in payment of “0.15 percent of Yale’s federal funding for the period,” implying that that number approximates the actual rate of mischarges, which it does not. There are numerous considerations that contribute to a compromise settlement amount, and extrapolation from the settlement amount is not appropriate.

¹² Ibid., p. 81, Box 6-1.

3. The report states incorrectly that “NSF’s OIG has begun to publish on the NSF website the final outcomes of its audit resolution agreements.”¹³ It is NSF, not OIG, which has started to publish final outcomes on the agency website at <http://www.nsf.gov/bfa/responses.jsp>.
4. The report cites the amount of questioned versus sustained (disallowed) costs on NSF OIG audits at six universities. A footnote¹⁴ indicates that those universities and reports cited were:

Institution	Report No.
University of Wisconsin	13-1-001
UCLA	14-1-004
Virginia Tech	14-1-002
SAFOD	13-1-005
New York University	14-1-001
U. California Santa Barbara	12-1-005

The reports states that amount of questioned costs in these six audits totaled more than \$12.8 million. It also states that \$580,000 (or about 4.5 percent) of the total \$12.8 million was sustained/disallowed after final audit resolution. However, the record below indicates that a total of \$610,121(4.8 percent) was sustained/disallowed on these audits.¹⁵

Amounts Questioned and Sustained/Disallowed on Six NSF OIG Audits

Institution	Report No.	Questioned	Sustained/Disallowed	Comment
U. Wisconsin	13-1-001	2,134,379	-	
UCLA	14-1-004	2,358,380	130,469	
Virginia Tech	14-1-002	1,604,129	64,138	
SAFOD	13-1-005	339,277	296,217	
New York University	14-1-001	75,494	75,746	During audit resolution, NSF found and sustained an additional \$252 of unallowable costs.
U. California Santa Barbara	12-1-005	6,325,483	43,551	
Total		12,837,142	610,121	
% Sustained			4.8%	

¹³ Ibid.

¹⁴ Ibid., footnote d.

¹⁵ <http://www.nsf.gov/bfa/responses.jsp>

5. The report states that HHS OIG “reports only final audit findings”¹⁶ and “[t]he HHS OIG publishes only the results of final audit resolution....”¹⁷ These statements are incorrect. While HHS OIG published reports include only final audit findings, as part of the audit process, an entity subject to an HHS OIG audit, such as colleges and universities, have the opportunity to comment on draft audit findings and related recommendations. Based on comments received and supporting documentation, the HHS OIG, as appropriate, will revise an audit finding or a recommendation before issuing the final audit report. Once an HHS OIG final audit report is published, a separate process is initiated to begin the audit resolution process. Audit resolution involves several steps, including obtaining the Department’s management decision on actions taken or planned to resolve the reported audit findings and recommendations. This information is reported in the HHS OIG’s semiannual reports to Congress, which are posted on the HHS OIG website. Some of this published information represents audit recommendations that have gone through the audit resolution process.

The NSF OIG follows the same process as HHS OIG. Specifically, NSF OIG also submits draft reports to grantees, such as colleges and universities, for comment; and as appropriate, will revise an audit finding or recommendation before issuing the final audit report, which is posted on the NSF OIG website. The list of reports issued each semiannual period, and the dollar amount of any questioned costs or funds put to better use for each report are included in the OIG’s semiannual reports to Congress, which also are posted on the NSF OIG website. Also, after a final NSF OIG audit report is issued, audit resolution begins; and during that process, NSF OIG obtains NSF management’s decision on actions taken or planned to resolve the findings and recommendations. After audit resolution has occurred, NSF OIG also reports the dollar amount of any questioned costs/funds put to better use with which NSF management agreed (costs disallowed/sustained) or disagreed (costs allowed/ not sustained) in tables included in the semiannual reports to Congress.

It should be noted these processes are required by the IG Act. The Act requires OIGs to report semiannually to Congress audit findings/recommendations, and dollar amount of questioned costs and funds put to better use.¹⁸ It also requires OIG to provide statistical tables showing the total number of audit reports and total dollar value of questioned costs–

- For which no management decision has been made by the commencement of the reporting period;
- Which were issued during the reporting period;
- For which a management decision was made during the reporting period, including –
 - The dollar value of disallowed (sustained costs); and
 - The dollar value of costs not disallowed (allowed or not sustained); and

¹⁶ NAS, p. 81, Box 6-1.

¹⁷ Ibid., p. 83. Julie Taitsman, Chief Medical Officer, HHS OIG, is cited as the source for this statement.

¹⁸ IG Act, §5 (a).

- For which no management decision has been made by the end of the reporting period.¹⁹

In addition, the IG Act requires that OIG's post issued audit reports (which include findings and recommendations) on their websites:

The Inspector General of each agency shall –

(A) not later than 3 days after any report or audit...is made publicly available,²⁰ post that report or audit...on the website of the Office of Inspector General....²¹

Thus, OIGs are required to report audit findings to Congress on a semiannual basis and to post issued audit reports on their websites within 3 days of their being publicly available. If OIGs reported ONLY the results of final audit resolution (and not the actual findings and recommendations), they would not be in compliance with the Act.

In its discussion on *Findings*, the report erroneously states that NSF OIG “recently began posting comparisons of initial findings and the final outcomes of audit resolutions on its website.”²² The cited source is <http://www.nsf.gov/bfa/responses.jsp>, which is an NSF, not an OIG, webpage. As previously noted, NSF, not OIG, has started posting final audit-resolution outcomes on the NSF website.

However, NSF OIG does report resolution outcomes for audits of research institutions in its semiannual reports to Congress, in the *Audit Resolution* section. These reports are available on the NSF OIG website.

6. In its discussion of *Reporting of Compensation for Personnel Expenses*,²³ the report states that institutions were “awaiting the outcome of NSF and...[NIH] Inspectors General audits of [payroll certification] pilots.”²⁴ However, by September 22, 2015, when the NAS report was issued, the results of two pilot audits had already been posted publicly. HHS OIG had posted the results of its first pilot audit (issued December 11, 2014) on its website.²⁵ Further, as the report correctly states subsequently,²⁶ NSF OIG had posted the report of its pilot payroll-certification-program audit at George Mason University (issued July 31, 2015) on its website. As an aside, since the publication of the NAS report, NSF OIG has issued its second pilot payroll certification audit -- at Michigan Technological University.²⁷

¹⁹ Ibid. The IG Act requirement for statistical tables for questioned costs is at §5 (a) (8). A similar provision for funds put to better use is at §5 (a) (9).

²⁰ NSF OIG has interpreted “publicly available” to mean after a report has been redacted consistent with 5 U.S.C. §522 (b) (Freedom of Information Act exemptions).

²¹ IG Act, §8 M (b) (1).

²² NAS, pp. 82-83.

²³ Ibid, pp. 83-86.

²⁴ Ibid, p. 85.

²⁵ See <http://oig.hhs.gov/oas/reports/region4/41301027.asp>.

²⁶ NAS, p. 85, note 24.

²⁷ See <https://www.nsf.gov/oig/pdf/15-1-023-MTU.pdf>. The report was issued September 30, 2015.

7. In its discussion of *Cost Accounting Standards*, the report states that the cost accounting Disclosure Statement (DS-2) is “simply a restatement of accounting policies and practices that are already documented in the official published policies of an institution.”²⁸ The report states further: “Auditors generally do not request cost accounting disclosure statements when conducting annual audits, and all information contained in such statements is generally available on university websites.”²⁹ The report recommends that the Office of Management and Budget (OMB) amend Uniform Guidance (2 CFR 200) so that research universities are not required to submit a revised disclosure statement each time they change their accounting practices, as long as these practices comply with the Uniform Guidance (UG), and the universities post their practices on their websites promptly.³⁰ Instead, the report recommends that universities provide initial and revised disclosure statements to their cognizant agencies when the universities submit their indirect cost proposals to them.³¹

The statement that the disclosure statement is “simply a restatement of accounting policies and practices that are already documented in the official published policies of an institution” does not recognize the significance of the Disclosure Statement, which was designed to meet the requirements of Public Law 100-679.³² According to the UG, institutions of higher education (IHE) are required to comply with CAS³³ as well as to file DS-2s.³⁴ Eliminating the requirement to file changes to DS-2s, would violate the UG requirement to follow CAS, which requires amending DS-2s when there is proposed change in accounting practices.³⁵ In addition, CAS requires that amendments and revisions to Disclosure Statements be accurate³⁶ and approved by federal agencies.³⁷ Changes in accounting practices posted on university websites are not required to be approved by federal agencies, and there is no federal assurance that they are complete and accurate.

Further, substituting posted changes in accounting practices for revised DS-2s would be contrary to CAS, which states that IHE’s Disclosure Statements “will be determinative” as to whether costs are correctly charged as direct or indirect.³⁸ Eliminating the requirement that IHEs submit amended DS-2s to their cognizant agencies whenever the IHEs propose changes in their accounting practices would thus violate a major provision of CAS, a separate UG requirement for research universities. Adequate DS-2s provide the basic regulatory foundation that prevents IHEs from charging indirect costs as direct, or double charging costs both as direct and indirect expenses.

²⁸ NAS. p. 90.

²⁹ Ibid.

³⁰ Ibid., p. 91.

³¹ Ibid.

³² *Cost Accounting Standards Board Disclosure Statement Required by Public Law 100-679 Educational Institutions*, FORM CASB DS-2 (REV 10/94); Form Approved OMB No. 0348-0055.

³³ 2 CFR 200.419 (a).

³⁴ 2 CFR 200.419 (b).

³⁵ 48 CFR 9905.502-60 (a) (1) and (2).

³⁶ 48 CFR 9903.202-3.

³⁷ 48 CFR 9905.502-50 (b); 48 CFR 9903.201-7.

³⁸ 48 CFR 9905.502-50(b).

Without adequate DS-2s, the universities could more easily charge increased costs to the federal government, which, according to CAS, is not permissible.³⁹ Further, CAS states that failure to comply with practices disclosed in the Disclosure Statement requires the IHEs to pay back any increased costs plus interest.⁴⁰ Without accurate, current, and complete DS-2s, it would be more difficult to detect impermissible charges and to ensure that increased costs and interest were repaid to the government.

For reasons originally expressed in June 2013 by the Council of Inspectors General for Integrity and Efficiency's Grant Reform Working Group (GRWG) regarding OMB's draft Uniform Guidance, which proposed to eliminate CAS requirements (including DS-2 Disclosure Statements),⁴¹ we also disagree with the report's recommendation that OMB eliminate the requirement that IHEs submit DS-2s whenever they change their accounting practices, and instead, permit the IHEs to post the changes on their websites as long as the practices comply with the UG, and only submit initial and revised DS-2s to their cognizant agencies when they submit their indirect cost proposals. Implementation of this recommendation would erode the controls over IHE's charges of direct and indirect costs. The GRWG cited four examples from audits of our offices, in which IHEs either had inadequate Disclosure Statements or did not follow them, resulting in direct charging indirect costs, or double charging costs, such as proposal preparation, as both direct and indirect expenses. The removal of the requirement to submit a revised DS-2 each time accounting practices change would further weaken controls over federal award expenses IHEs claim, and result in additional unallowable costs being charged to the government.

³⁹ 48 CFR 52.230-5(a) (4) (ii).

⁴⁰ 48 CFR 52.230-2(a) (5).

⁴¹ OMB did not eliminate the DS-2 requirement in the final Uniform Guidance. 2 CFR 200.419 (b).

Reponses to Recommendations Pertaining to OIGs

The report issued five recommendations for actions Congress should require OIGs to take. We are responding to each of these recommendations in the order in which they were presented.

Recommendation No. 1

*Resolve issues regarding their interpretation of agency policies and priorities with the agency before conducting formal audits of research institutions; this should not apply in those situations in which the audit itself is directed toward inconsistent agency policy interpretations.*⁴²

Response:

We agree that it is appropriate for OIGs to provide audit recommendations to an agency when the agency has inconsistent policies. However, we do not agree that OIGs should cease conducting formal audits of research universities when the OIG and the agency cannot agree on the interpretation of agency policies and priorities beforehand. In accordance with the IG Act, OIGs are to conduct independent and objective audits of agency programs and operations.⁴³ Thus, OIG auditors are required to apply criteria as they interpret them. If OIGs accepted agency interpretations of applicable criteria that were inconsistent with their own interpretations, OIGs would lose their mandated independence.

In addition, when OIGs and their agencies cannot agree on the interpretations of audit criteria, OIGs still need to demonstrate the results of the agencies' interpretations. Issuing repeated findings and questioning associated costs, knowing that the agency will not sustain them, is consistent with audit mandates in the IG Act to report questioned costs because of "an alleged violation of a provision of a law, regulation, contract, grant, cooperative agreement, or other agreement or document governing the expenditure of funds,"⁴⁴ or "a finding that the expenditure of funds for the intended purpose is unnecessary or unreasonable."⁴⁵

Repeated reporting of previously un-sustained recommendations increases the visibility of the larger impact of agency decisions -- specifically, the cumulative amount of unallowable costs at issue, according to the OIG interpretations of applicable criteria. Continuing to report the same finding in multiple audits keeps agency stakeholders, such as agency management, Congress, and members of the affected recipient community, constantly apprised of the differences of opinion between OIGs and agencies, and, appropriately, provides an opportunity for non-agency stakeholders to offer their input on agency policies and priorities.

⁴² NAS, p. 83.

⁴³ IG Act §2 (1).

⁴⁴ Ibid., §5 (f) (1) (A).

⁴⁵ Ibid., §5 (f) (1) (C).

Recommendation No. 2

*Include in their semiannual reports, publish on their websites, and highlight in their presentations to Congress examples of effective, innovative, and cost-saving initiatives undertaken by research institutions and federal research agencies that both advance and protect the research enterprise.*⁴⁶

Response:

This recommendation is consistent with the report's call for "a renewed spirit of collaboration among Inspectors General, agencies and universities...."⁴⁷ However, the IG Act calls for OIG "independence" from the agency,⁴⁸ not "collaboration" with it. Collaboration is acceptable only when OIG independence is not compromised in fact or in appearance.⁴⁹ Publishing examples of agencies' and research institutions' initiatives cited in the recommendation could give rise to the appearance that OIGs were not independent of the agencies and their awardees, as the IG Act requires. It would also result in an actual conflict of interest if OIGs were to audit later the examples of "initiatives" it had previously appeared to endorse. Highlighting agencies' and research universities' positive initiatives would be more appropriately carried out by the agencies or institutions themselves, not OIGs.

Recommendation No. 3

*Provide to Congress and make publicly available information generated each year on the total costs (agency and institutional) of Inspectors General audits of research institutions, the total amounts of initial findings, the total amounts paid by institutions after audit resolution, and any significant management, technology, personnel, and accountability steps taken by research institutions as the result of a completed audit.*⁵⁰

Response:

With regard to the first part of the recommendation – publish information on agency and institutional costs per audit, and provide this information to Congress -- OIGs could not provide such information without verifying it first. For OIGs to verify agency and institutions' costs per audit would require additional audit work, involving substantial opportunity costs. Audit offices have limited resources, and use a risk-based approach to select auditees that are the highest risk of misuse of taxpayer funds. Given the constraints of the audit process, verification of agency and institutional costs per audit would utilize resources that otherwise could detect serious flaws in internal controls at the agency or institutions that could result in the return of misused taxpayer funds to the government, or identification of funds that could be put to better use. However,

⁴⁶ NAS, p. 83.

⁴⁷ Ibid., p. 82.

⁴⁸ IG Act, § 2.

⁴⁹ For example, OMB Circular A-50, *Audit Followup*, provides for a joint (or collaborative) audit resolution process, but clearly defines the roles of the agency and the audit organization to ensure that the responsibilities of audit management and independent auditors, such as OIGs, are separate.

⁵⁰ NAS, p. 83.

agencies and institutions could provide such information to Congress and the public, noting whether it has been audited or independently verified.

The second part of the recommendation – publish total amounts of initial findings -- already occurs in semiannual reports to Congress, which are posted on OIG websites. OIGs are required by the IG Act to report total amount of questioned costs⁵¹ and of funds put to better use⁵² on open recommendations, both for the period and cumulative.

The third part of the recommendation -- publish total amounts paid by institutions after audit resolution -- is addressed by the agencies, which provide their responses to semiannual reports when the reports are transmitted to Congress. At NSF, the most current response, which includes a report on the total amount repaid during the latest six-month period, is also posted on a National Science Board webpage at http://www.nsf.gov/nsb/NSBActivities/semiannual_report.jsp.

The fourth part of the recommendation -- publish any significant management, technology, personnel, and accountability steps taken by the research institutions as the result of a completed audit -- pertains to information about the implementation of audit recommendations. In accordance with OMB Circular A-50, *Audit Followup*, OIGs work jointly with the agencies to resolve audit recommendations. During this process, recommendations are not usually deemed resolved until institutions propose acceptable corrective actions, such as agreeing to repay the questioned costs, and/or making recommended management, technology, personnel, or accountability steps; or the agency makes a management decision that no corrective action is necessary. Thus, at the audit-resolution stage, OIGs know about the corrective actions that institutions agree to take to resolve audit recommendations.

However, during the subsequent implementation stage, OIGs often do not know if the institutions actually implemented their proposed corrective actions -- or, if they did, if the implementation adequately addressed the recommendations. To determine that, could require additional follow-up (audit work), possibly including on-site visits to the institutions. Thus, any OIG concerns about the adequacy of auditees' implementation of corrective actions are factors considered in the OIG risk assessments used to select future audits.

Recommendation No. 4

*Reexamine the risk-based methodology in identifying institutions as candidates for agency audits to take into account the existing compliance environment and oversight on campuses, recognizing that many research institutions have clean single audits, are well managed, and have had long-standing relationships with the federal government.*⁵³

Response:

The recommendation refers to “agency” audits. Since the recommendation is addressed to OIGs, presumably the reference was meant to be to “OIG” audits. This response makes that assumption. As mentioned in the response to Recommendation No. 3, OIGs’ risk-based

⁵¹ IG Act, § 5(a) (8).

⁵² Ibid., § 5(a) (9).

⁵³ NAS, p. 83.

methodologies may include follow-up work on prior audit recommendations. In addition, OIGs consider other factors, which are constantly evolving. What may begin with fairly simple risk factors (e.g., number and size of awards, total dollar amount at risk) may become more sophisticated with the use of supervised (predictive or directed) modeling, such as decision trees and neural networks; and unsupervised (descriptive or undirected) modeling, such as Kohonen networks and K-means clusters.

OIGs' innovative use of constantly-changing data analytics in audit risk assessments has the potential to discover institutional risks that annual single audits do not detect, and even the institutions with the very best management may not uncover. OIGs are continuously reexamining their "risk based methodology in identifying institutions as candidates for...audits...." as they refine their analytical methodologies based on prior experience. Thus, it would be inappropriate for OIGs to rely only (or even primarily) on institutions' past performance as evidence of reduced risk given the potential to uncover new risks with the use of the powerful tools currently available in data analysis.

Recommendation No. 5

*Encourage all federal agencies to report only final audit resolution findings on their websites and in their semiannual report to Congress.*⁵⁴

Response:

This recommendation is somewhat confusing. Agencies do not issue semiannual reports to Congress; OIGs issue them. So federal agencies would not be issuing "final audit resolutions in their semiannual report to Congress."

There are separate stages involved in OIG audits -- 1) the audit stage, and 2) the post-audit follow-up stage, which has two phases, resolution and implementation. In the audit stage, OIG auditors (or those under contract with them) develop audit plans, perform tests, reach conclusions, and develop recommendations based on criteria such as federal law or regulations, or agency-specific policies. The culmination of the audit stage is issuance of the audit reports; and these are posted on OIG websites. Further, any associated monetary findings are posted in tables in OIG's semiannual reports to Congress.

The second stage, audit follow-up, begins on the date the audit is issued. During the audit resolution phase of follow-up, agencies provide corrective action plans (which in the case of grantee audits, the agency develops in consultation with the grantees) to OIGs in response to audit findings and recommendations. Throughout the audit resolution stage, OIGs and agencies also work collaboratively, but without compromising OIG independence, to reach mutually agreeable corrective actions. For grantee audits, at the end of this stage, the agency issues a management decision letter. As noted previously, NSF currently posts these letters on its website at <http://www.nsf.gov/bfa/responses.jsp>.

After there is agreement at the resolution stage (or in cases of disagreement, the agency makes management decision that resolves the findings/recommendations), the implementation phase

⁵⁴ Ibid.

begins. At NSF, agency management reports monetary recoveries of agreed-to questioned costs to Congress. Specifically, when NSF OIG sends its semiannual reports to Congress, the NSF management responses are also sent. Those responses list the monetary recoveries for that six-month period on questioned costs that management agreed with (i.e., on the post-resolution repayment of sustained questioned costs). As previously noted, the most current version of that response is on a National Science Board webpage at http://www.nsf.gov/nsb/NSBActivities/semiannual_report.jsp.

At NSF OIG, the results of audit resolution of grantee audits are also generally discussed in the text section of the semiannual reports to Congress. The results of implementation (i.e., final action) of internal audits of agency programs and operations are also generally discussed in the text section of these reports.

Based on the section *Nature of Concern* in the report,⁵⁵ it is possible that the intent of Recommendation No. 5 was that OIGs not post audit findings, but only the results after audit resolution. However, as noted in response number 5 above,⁵⁶ that scenario is not feasible. The IG Act requires OIGs to report audit findings and recommendations to Congress semiannually;⁵⁷ and to post issued audit reports – which perforce, include findings and recommendations -- on their websites within 3 days of their being “publicly available.”⁵⁸ Thus, in accordance of the IG Act, it is not possible to prevent OIGs from reporting audit findings and recommendations to Congress, or from posting them on their websites.

⁵⁵ Ibid., p. 80.

⁵⁶ See pp. 4-5, above.

⁵⁷ See note 18, above.

⁵⁸ See notes 20 and 21, above.