

**GAO-IG ACT EXHIBITS**

Pursuant to P.L. 115-331, the Good Accounting in Government Act, the following three tables report on outstanding NSF OIG and GAO recommendations and their associated status as of December 31, 2019.

**Open OIG Recommendations – Internal Audits**

**Open OIG Recommendations - Internal Audits**

OIG Number	Title (Final Audit Report Date)	OIG Recommendation	Status of Recommendation <sup>1</sup>	Timeline for Final Implementation
17-2-009	Audit of Preservation of Electronic Records and Cooperation with Congressional Requests (7/6/17)	2. Develop policies, procedures, and controls to capture and retain work-related text messages, social media posts, and electronic records created on government and non-government accounts to meet NARA requirements.	Resolved	Implementation date to be determined, at this time. Implementation of the Smarsh tool, which NSF identified as a system to automate capture and retention of work-related text messages, has been delayed because Smarsh's FedRAMP certification has been delayed. FedRAMP certification was originally projected to be complete June 30, 2019, later extended to September 30, 2019, and then further extended, with no projected date at this time. As such, NSF is looking to consider other options to meet this requirement.
18-2-005	Audit of NSF's Oversight of Grantees' Subrecipient Monitoring	Continue efforts to update NSF's policies and procedures to ensure they align with the Uniform Guidance, including: a. FL-99 Pre-Award Review b. BFA Business Systems Review Guide c. SOG 2016-4, BFA's DACS Cooperative Support Branch Standardized Cost Analysis Guidance d. Large Facilities Manual	Resolved	Partial implementation of recommendation as of 12/31/2019. Projected implementation date for all corrective actions is June 30, 2020.
18-2-005	Audit of NSF's Oversight of Grantees' Subrecipient Monitoring	Ensure NSF's guidance includes a specific mechanism to verify that PTEs of large and complex awards completed subrecipient risk assessments.	Resolved	Projected implementation date is June 30, 2020.
19-2-003	NSF Could Improve its Controls to Prevent Inappropriate Use of Electronic Devices	Ensure that all existing NSF-owned mobile devices (iPhones and iPads) are enrolled in AirWatch.	Resolved	Projected implementation date is February 15, 2020.
19-2-003	NSF Could Improve its Controls to Prevent Inappropriate Use of Electronic Devices	Develop an enforcement mechanism for offices and directorates to complete the annual recertification process for mobile devices and have all users sign the certificate of awareness.	Unresolved	NSF is evaluating the potential to combine the annual recertification process for mobile devices with the annual IT security awareness training. Projected resolution and implementation date is February 15, 2020.
19-2-003	NSF Could Improve its Controls to Prevent Inappropriate Use of Electronic Devices	Annually educate users on acceptable mobile device use and the consequence of personal and inappropriate use.	Resolved	Projected implementation date is April 1, 2020.

<sup>1</sup> "Resolved" status indicates where NSF and OIG have agreed upon the appropriate corrective action to address the recommendation but where implementation is ongoing or closing of the recommendation is pending OIG review to confirm responsiveness. "Unresolved" status indicates where NSF and the OIG have not yet agreed upon the appropriate corrective action to address the recommendation.

Performance and Management

Open OIG Recommendations – External Audits

Open OIG Recommendations - External Audits

OIG Number	Title (Final Audit Report Date)	OIG Recommendation	Status of Recommendation <sup>1</sup>	Date Resolved	Costs Questioned	Costs Disallowed	Costs Allowed	Timeline for Final Implementation
16-1-004	University of Washington (2/11/2016)	1.1) Repay \$1,824,117 of questioned senior salaries.	Resolved	12/11/2019	\$1,824,117	\$ -	\$1,824,117	1/31/2020
16-1-004	University of Washington (2/11/2016)	1.2) Strengthen controls over senior salaries.	Resolved	12/11/2019	\$ -	\$ -	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	2.1) Resolve \$122,893 questioned equipment, materials, and supplies costs.	Resolved	12/11/2019	\$ 122,893	\$ 44,143	\$ 78,750	1/31/2020
16-1-004	University of Washington (2/11/2016)	2.2) Strengthen controls over equipment, materials, and supplies.	Resolved	12/11/2019	\$ -	\$ -	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	3.1) Resolve \$36,240 of questioned purchase card transaction costs.	Resolved	12/11/2019	\$ 36,240	\$ 12,868	\$ 23,372	1/31/2020
16-1-004	University of Washington (2/11/2016)	3.2) Strengthen controls over purchase card transactions charging costs to awards.	Resolved	12/11/2019	\$ -	\$ -	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	4.1) Resolve \$8,821 of questioned promotional and interest costs.	Resolved	12/11/2019	\$ 8,821	\$ 8,821	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	4.2) Strengthen controls over unallowable costs such as promotional items.	Resolved	12/11/2019	\$ -	\$ -	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	5.1) Resolve \$6,648 of preaward costs questioned.	Resolved	12/11/2019	\$ 6,648	\$ 6,648	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	5.2) Strengthen controls over preaward purchases.	Resolved	12/11/2019	\$ -	\$ -	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	6.1) Resolve \$2,650 of questioned meal expenditures.	Resolved	12/11/2019	\$ 2,650	\$ 2,650	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	6.2) Strengthen controls over approving meal expenditures.	Resolved	12/11/2019	\$ -	\$ -	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	7.1) Resolve \$1,740 of questioned travel costs occurring after award expiration.	Resolved	12/11/2019	\$ 1,740	\$ 1,740	\$ -	1/31/2020
16-1-004	University of Washington (2/11/2016)	7.2) Strengthen controls over travel near or after award expiration.	Resolved	12/11/2019	\$ -	\$ -	\$ -	1/31/2020
18-1-007	University of Montana (9/27/2018)	1.1) Repay \$342,020 in unallowable research base salaries.	Resolved	8/29/2019	\$ 342,020	\$ 342,020	\$ -	1/31/2020
18-1-007	University of Montana (9/27/2018)	1.2) Update salary policies to use employees' IBS rates when allocating salary expenses to awards.	Resolved	8/29/2019	\$ -	\$ -	\$ -	1/31/2020
18-1-007	University of Montana (9/27/2018)	2.1) Repay \$18,932 in inappropriately allocated expenses.	Resolved	8/29/2019	\$ 18,932	\$ 18,932	\$ -	1/31/2020
18-1-007	University of Montana (9/27/2018)	2.2) Strengthen controls over allocating expenses incurred within the final 90 days of an award.	Resolved	8/29/2019	\$ -	\$ -	\$ -	1/31/2020
18-1-007	University of Montana (9/27/2018)	2.3) Strengthen controls over allocating tuition expenses to sponsored projects.	Resolved	8/29/2019	\$ -	\$ -	\$ -	1/31/2020
18-1-007	University of Montana (9/27/2018)	3.1) Repay \$6,827 in unallowable expenses.	Resolved	8/29/2019	\$ 6,827	\$ 6,827	\$ -	1/31/2020
18-1-007	University of Montana (9/27/2018)	3.2) Strengthen controls over allocating travel expenses to sponsored projects.	Resolved	8/29/2019	\$ -	\$ -	\$ -	1/31/2020
18-1-007	University of Montana (9/27/2018)	3.3) Strengthen controls over direct charging non-standard expenses to sponsored projects.	Resolved	8/29/2019	\$ -	\$ -	\$ -	1/31/2020

Open OIG Recommendations - External Audits

OIG Number	Title (Final Audit Report Date)	OIG Recommendation	Status of Recommendation <sup>1</sup>	Date Resolved	Costs Questioned	Costs Disallowed	Costs Allowed	Timeline for Final Implementation
18-1-007	University of Montana (9/27/2018)	3.4) Develop a written policy for mailroom expense distribution based on actual costs incurred.	Resolved	8/29/2019	\$ -	\$ -	\$ -	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	1.1) Unallowable costs incurred due to lack of supporting documentation.	Resolved	9/30/2019	\$ 44,330	\$ 44,330	\$ -	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	1.2) Strengthen controls over documentation requirements.	Resolved	9/30/2019	\$ -	\$ -	\$ -	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	2.1) Unallowable relocation costs.	Resolved	9/30/2019	\$ 15,581	\$ 15,581	\$ -	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	2.2) Strengthen controls over prior approvals for relocation costs.	Resolved	9/30/2019	\$ -	\$ -	\$ -	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	2.3) Strengthen controls over proposing relocation costs.	Resolved	9/30/2019	\$ -	\$ -	\$ -	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	3.1) Inadequate support for cost transfers.	Resolved	9/30/2019	\$ 381,772	\$ 147,365	\$ 234,407	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	3.2) Strengthen controls over cost transfers.	Resolved	9/30/2019	\$ -	\$ -	\$ -	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	4.1) Strengthen controls over approvals of personnel activity reports.	Resolved	9/30/2019	\$ -	\$ -	\$ -	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	5.1) Strengthen controls over timely submission of personnel activity reports.	Resolved	9/30/2019	\$ -	\$ -	\$ -	1/31/2020
19-1-002	University of Wyoming (12/21/2018)	6.1) Strengthen controls over purchase card limits.	Resolved	9/30/2019	\$ -	\$ -	\$ -	1/31/2020

<sup>1</sup> "Resolved" status indicates management decisions have been agreed upon by the awardee, NSF Management, and NSF OIG.

GAO Open Recommendation Over One Year as of February 2020

GAO Open Recommendations over 1 Year as of February 2020

GAO Number	Title (Final Audit Report Date)	GAO Recommendation	Status of Recommendation	Timeline for Final Implementation
GAO-18-656	Science and Technology: Considerations for Maintaining U.S. Competitiveness in Quantum Computing, Synthetic Biology, and Other Potentially Transformational Research Areas	Recommendation 4: As the QIS Subcommittee moves forward, the National Science Foundation co-chair, in coordination with other co-chairs and participating agency officials, should take steps to fully implement leading practices that enhance and sustain collaboration.	Open	The QIS subcommittee is preparing a Strategic Plan that will set forth recommendations for moving the US QIS effort forward, including agency collaborations. The plan will be released following approval by the NQI-authorized Advisory Committee. The tentative date for release is spring 2020. Implementation of recommendations should begin in FY 2021.
GAO-18-656	Science and Technology: Considerations for Maintaining U.S. Competitiveness in Quantum Computing, Synthetic Biology, and Other Potentially Transformational Research Areas	Recommendation 5: As the Interagency Working Group on Synthetic Biology moves forward, the Director of the National Science Foundation, in coordination with participating agency officials, should take steps to fully implement leading practices that enhance and sustain collaboration.	Open	NSF implemented the recommendation by the formation of the Interagency Synthetic Biology Working Group (SBWG), chartered in Q4 FY 2018 under the Biological Sciences Subcommittee of the Committee on Science at NSTC. The SBWG is comprised of 16 agencies across USG and meets regularly to facilitate communication, coordination and collaboration across agencies with an interest in synthetic biology. A key SBWG activity Q4 FY 2019 was the convening of a workshop that included representatives across USG, academia, and industry to examine and refine a roadmap for basic research, technology, infrastructure, and workforce needs for synthetic biology. Workshop results will inform priorities for SBWG collaboration in FY 2020 and beyond.
GAO-18-533	National Science Foundation: A Workforce Strategy and Evaluation of Results Could Improve Use of Rotating Scientists, Engineers, and Educators	Recommendation 1: The NSF Director of Human Resource Management should complete the development of an agency-wide workforce strategy for balancing the agency's use of IPA and VSEE rotators with permanent staff as part of NSF's current agency reform planning efforts or updates to its human capital operating plan.	Open	Accomplishments: -Q4 FY 2019: New permanent HRM Division Director and Deputy Assistant Director of the Directorate of Social, Behavioral, and Economic Research assigned co-ownership of Renewing NSF Goal 1: Adapting the Workforce to the Work.  Planned Activities: - Plan implementation of activities to advance Renewing NSF Goal 1. - HRM and Budget Divisions conduct a "roadshow" to all NSF components to discuss resource management including how FTE and IPA resources are used.

GAO Open Recommendations over 1 Year as of February 2020

GAO Number	Title (Final Audit Report Date)	GAO Recommendation	Status of Recommendation	Timeline for Final Implementation
GAO-18-533	National Science Foundation: A Workforce Strategy and Evaluation of Results Could Improve Use of Rotating Scientists, Engineers, and Educators	Recommendation 2: The NSF Director of Human Resource Management should evaluate the contributions of the IPA and VSEE rotator programs toward NSF's human capital goals and the contributions the programs have made toward achieving programmatic results.	Open	NSF is working on an evaluation and anticipates providing a status report on March 31, 2020.
GAO-18-93	Federal Chief Officers: Critical Actions Needed to Address Shortcomings and Challenges in Implementing Responsibilities	Recommendation 22: The Director of the National Science Foundation should ensure that the agency's IT management policies address the role of the CIO for key responsibilities in the five areas we identified.	Open	NSF has implemented this recommendation by establishing new agency IT management policies and updating existing policies to more specifically address the role of the CIO in the five areas identified by GAO. NSF plans to provide updated documentation to GAO in Q2 FY 2020.
GAO-18-370	National Science Foundation: Revised Policies on Developing Costs and Schedules Could Improve Estimates for Large Facilities	Recommendation 1: The Director of NSF should revise the agency's policies for estimating the costs of large facilities projects, and for reviewing those costs, to better incorporate the best practices in GAO's cost guide.	Open	The Major Facilities Guide (NSF 19-68; September 2019) has been revised to incorporate GAO's "purpose" of the cost estimate, methods for sensitivity analysis, minimum requirements for a 3-tier Work Breakdown Structure, and application of GAO's 12-steps of a high-quality cost estimate. Internal Standard Operating Guidance on selection of independent cost estimate reviews in support of NSF's cost analysis has been finalized. New internal Standard Operating Guidance related to more effectively utilizing external review panels to address elements of cost has been drafted and is planned for implementation in Q3 FY 2020.
GAO-18-370	National Science Foundation: Revised Policies on Developing Costs and Schedules Could Improve Estimates for Large Facilities	Recommendation 2: The Director of NSF should revise the agency's policies for developing schedules for large facilities projects, and for reviewing those schedules, to better incorporate the best practices in GAO's schedule guide.	Open	Section 4.3 of the Major Facilities Guide (MFG) has been reserved, an outline developed, and content is being created to describe NSF's expectations in relation to the GAO Schedule Guide. A targeted interim update to the MFG is (which will include Section 4.3) is planned for Q3 FY2020. Internal Standard Operating Guidance related to the NSF cost analysis has been updated to incorporate an assessment of schedule. New internal Standard Operating Guidance related to more effectively utilizing external review panels to address elements of schedule has been drafted and is planned for implementation in Q3 FY 2020.

GAO Open Recommendations over 1 Year as of February 2020

GAO Number	Title (Final Audit Report Date)	GAO Recommendation	Status of Recommendation	Timeline for Final Implementation
GAO-16-511	Information Technology Agencies Need to Improve Their Application Inventories to Achieve Additional Savings (09/29/2016)	Recommendation 17: To improve federal agencies' efforts to rationalize their portfolio of applications, the Secretaries of Defense, Homeland Security, the Interior, and Labor; and the Director of the National Science Foundation should direct the CIOs and other responsible officials to modify existing investment management processes to address applications more completely. Specifically, the Director of the National Science Foundation should direct the CIO to consistently document evaluations for all applications and report cost information for them in the roadmap or other documentation.	Open	The NSF has implemented this recommendation. In March 2019, the Foundation provided examples of how applications are documented and reported on in the rationalization process. Closure of the recommendation is pending GAO review.
GAO-16-573	Federal Research Grants: Opportunities Remain for Agencies to Streamline Administrative Requirements (06/22/2016)	Recommendation 9: To further standardize administrative research requirements, the Secretary of Energy, the NASA Administrator, the Secretary of Health and Human Services, and the Director of NSF should coordinate through Office of Science and Technology Policy's (OSTP) Research Business Models working group to identify additional areas where they can standardize requirements and report on these efforts.	Open	NSF is an active member of the former OSTP Research Business Models working group, now the Coordinating Administrative Research Requirements subcommittee of the NSTC Joint Committee on the Research Environment. In serving as both a member and co-chair of the group, NSF continues to provide strategic leadership to identify additional areas where standardization or reduction of requirements may help reduce administrative burden.

GAO Open Recommendations over 1 Year as of February 2020

GAO Number	Title (Final Audit Report Date)	GAO Recommendation	Status of Recommendation	Timeline for Final Implementation
GAO-12-791	Organizational Transformation: Enterprise Architecture Value Needs to Be Measured and Reported (09/26/2012)	Recommendation 21: To enhance federal agencies' ability to realize enterprise architecture benefits, the Secretaries of the Departments of Agriculture, the Air Force, the Army, Commerce, Defense, Education, Energy, Homeland Security, the Interior, Labor, the Navy, State, Transportation, the Treasury, and Veterans Affairs; the Attorney General; the Administrators of the Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, and Small Business Administration; the Commissioners of the Nuclear Regulatory Commission and Social Security Administration; and the Directors of the National Science Foundation and the Office of Personnel Management should fully establish an approach for measuring enterprise architecture outcomes, including a documented method (i.e., steps to be followed) and metrics that are measurable, meaningful, repeatable, consistent, actionable, and aligned with the agency's enterprise architecture's strategic goals and intended purpose.	Open	The NSF implemented GAO's recommendation by establishing an approach for measuring enterprise architecture outcomes. In November 2019, NSF provided GAO with supporting documentation. Closure of the recommendation is pending GAO review.
GAO-12-791	Organizational Transformation: Enterprise Architecture Value Needs to Be Measured and Reported (09/26/2012)	Recommendation 45: To enhance federal agencies' ability to realize enterprise architecture benefits, the Secretaries of the Departments of Agriculture, the Air Force, the Army, Commerce, Defense, Education, Energy, Homeland Security, the Interior, Labor, the Navy, State, Transportation, the Treasury, and Veterans Affairs; the Attorney General; the Administrators of the Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, and Small Business Administration; the Commissioners of the Nuclear Regulatory Commission and Social Security Administration; and the Directors of the National Science Foundation and the Office of Personnel Management should periodically measure and report enterprise architecture outcomes and benefits to top agency officials (i.e., executives with authority to commit resources or make changes to the program) and to OMB.	Open	The NSF has implemented this recommendation. In November 2019, the Foundation provided evidence to GAO that it periodically measures and reports Enterprise Architecture outcomes to top agency officials. Closure of the recommendation is pending GAO review.