National Science Foundation
Office of Inspector General

Performance Plan
2017
INTRODUCTION

This performance plan is presented in two sections: the Office of Inspector General (OIG) Strategic Plan for 2017-2022, and the OIG Annual Plan which this year will cover the 12-month period from October 1, 2017, through September 30, 2018.

The OIG Strategic Plan (p. 2) identifies the OIG’s vision, mission, basic values, five-year strategic focus, and management challenges for the National Science Foundation (NSF), and core functions. It also includes the OIG Workforce Plan (p. 10) which describes the human capital needed to meet the office’s strategic goals over the next three years.

The OIG Annual Plan (p. 14) describes the goals and strategies we will use to focus our operations over the next year to achieve our strategic objectives, as well as the measures we will use to determine our progress. Our goals include: (1) promoting NSF efficiency and effectiveness, (2) safeguarding the integrity of NSF programs and resources, and (3) using OIG resources effectively and efficiently.

The purpose of our performance plan is to present 1) OIG’s broad priorities and objectives for the time period FY 2017 through FY 2022, 2) an estimate of resources needed to achieve these objectives, and 3) specific strategies and measures for the current year that will advance us toward accomplishing those objectives. We are committed to integrating this plan into our ongoing management system, assessing its progress on a regular basis, making adjustments as needed, and achieving our goals.
VISION

We will use our diverse and talented staff to assist NSF in improving its programs and meeting the needs of the communities it supports. We will help prevent problems, address existing issues in a timely and proportionate manner, keep abreast of emerging challenges and opportunities, and facilitate positive change.

MISSION

Under the authority of the Inspector General Act of 1978, as amended, the OIG conducts independent and objective audits, investigations, and other reviews to provide effective oversight of NSF activities. Our specific aims are to promote the effectiveness and efficiency of NSF programs and operations and to safeguard their integrity. We strive to address the concerns of our stakeholders: the National Science Board (NSB), the Congress, NSF, the research communities, the Executive Branch, and the American public.

BASIC VALUES

Professionalism. We follow accepted technical and ethics standards of our disciplines; do our work fairly and thoroughly; represent our results accurately, objectively, and with a sense of proportion; and complete our work within a reasonable time so that it is available for relevant decisions.

Accountability. We take responsibility for the quality of the work we perform and promote integrity, objectivity, and consistency in all our efforts.

Flexibility. We make every effort to anticipate changing information, environmental conditions, and potential opportunities and obstacles; adjust our priorities and work methods as needed; and employ effective communications to increase the positive impact of change.

Innovation. We think creatively, adopt new ways of addressing issues tailored to unique circumstances, take reasonable risks in resolving problems, and build on successful processes to make them better.

Teamwork. We are respectful of others; seek common ground when differences occur; are honest, trustworthy, and straightforward; and are cooperative without compromising our independence. We engage employees at all levels in developing and continually improving our work methods and products.
5-YEAR STRATEGIC FOCUS

The OIG’s strategy focuses primarily on providing independent oversight to ensure the effectiveness, efficiency, and integrity of NSF’s business activities. We are not responsible for managing any NSF program operations, nor do we attempt to assess the scientific merit of research funded by the agency. Our oversight mission requires that we concentrate our resources on performing audits of the agency’s financial statements and grant funds, monitoring and evaluating management functions that may pose significant financial or administrative risk, investigating allegations of criminal behavior or other misconduct, and recommending proactive solutions to NSF management. In determining our priorities, we consider the results of prior audits and investigations and consult closely with the NSB and the Congress, NSF managers and staff, the Office of Management and Budget (OMB), and members of the research communities supported by NSF. Over the five-year period covered by this strategic plan, OIG has identified the following NSF issue areas for priority attention:

- Relocation to the new headquarters
- Establishing accountability over large cooperative agreements
- Improving grant administration
- Management of the Intergovernmental Personnel Act (IPA) program
- NSF’s business operations
- Management of the U.S. Antarctic Program
- Encouraging the ethical conduct of research.

**Internal Audits of NSF.** Internal audits and reviews enable OIG to assess priority areas listed above. In addition, OIG auditors will continue to oversee an Independent Public Accounting (IPA) firm that performs annual audits of NSF’s financial statements and the IT security reviews required by the Federal Information Security Management Act. Auditors will also assess NSF’s compliance with the Improper Payments Elimination and Recovery Act of 2010, and the Digital Accountability and Transparency Act of 2014 (DATA Act), which requires federal agencies to report financial and payment data on a public website starting in 2017.

**External Audits.** Audits of NSF awards generally focus on the risks that the auditee is: 1) using NSF funds for unallowable, unallocable or unreasonable costs; and 2) failing to comply with applicable federal and agency requirements. Consequently, OIG will continue to allocate a significant portion of its resources to audits of selected high-risk awardees to evaluate their financial accountability, underlying internal controls, and compliance with federal requirements and the terms and conditions of their NSF awards. OIG will continue to use its own staff, and IPA firms under contract with OIG to conduct audits of high-risk programs and institutions.

**Single Audits.** Audits performed under the Single Audit Act are intended to provide federal agencies with assurance that their awardees are properly accounting for and managing federal grant funds. NSF’s substantial reliance on CPA audits performed under the Single Audit Act requires OIG monitoring of their quality.
Investigations. We will continue to react promptly and effectively to allegations of fraudulent practices and research misconduct, while maintaining a focus on proactive measures such as prevention and detection of grant fraud and contribution to the development of effective training throughout the research community on the responsible conduct of research. This will include, to the greatest degree possible in accord with budgetary constraints, outreach activities to ensure that NSF staff and awardees understand the rules and regulations that apply to them. It also includes efforts to determine if violations identified during individual investigations are more widespread, identify any that may undermine the integrity of the data upon which NSF relies, and evaluate indicators of grant fraud found during audits and other reviews.

We will continue to identify opportunities to assist awardee institutions, other government agencies, and other IG offices in deterring misconduct, fraud, and other violations. Within the federal IG community, we will continue to play a leadership role in the establishment of more effective coordination in the area of grant fraud prevention and detection and in promotion of best practices in the investigation of research misconduct. For example, over the past five years the Office of Investigations has led a working group of OIGs to improve federal law enforcement efforts involving fraudulent Small Business Innovation Research Program/Small Business Technology Transfer Program (SBIR/STTR) grants. During that period, we have opened over 145 SBIR/STTR cases and expect our caseload in this area to continue to grow.

We will also continue our involvement in national and international discussions about the global impact of research misconduct. We have joined with other federal investigative agencies with Statutory Law Enforcement Authority to ensure maintenance of the highest professional investigative standards through an effective peer review process. Finally, we will continue to lead IG community efforts to promote the use of government-wide suspension and debarment to protect taxpayer funds.

The Immediate Office / Office of Management. The Immediate Office and Office of Management together provide a full-range of professional legal and management services to OIG, as well as handling communications with Congress, and managing public and external affairs. The two support organizations were reorganized in 2013 under the executive direction of the Counsel to the IG.

Two important priorities of the Office of Management is to more effectively integrate our annual OIG performance plan within the individual performance appraisal process; and to seek ways to continually improve the efficiency and execution of office administrative functions. The success of these initiatives in support of OIG staff will enhance the overall effectiveness of OIG’s audit and investigative operations.

Management Challenges. To a significant extent, OIG’s priorities are governed by its annual list of the most serious management and performance challenges facing NSF. In many cases, these difficult challenges will extend over at least the next several years, and they largely reflect the results of our past work, the priorities enunciated for the federal government by the Congress and the Administration, and
our staff’s knowledge of agency operations. Management challenges for FY 2017 include:

- Establishing Accountability over Large Cooperative Agreements
- Management of NSF’s Business Operations
  - Finding and Eliminating Improper Payments
  - Protecting Agency Information and IT Resources
  - Promoting Accountability and Transparency
  - Managing the Government’s Records
- Management of the Intergovernmental Personnel Act (IPA) Program
- Moving NSF Headquarters to a New Building
- Management of the U.S. Antarctic Program
- Improving Grant Administration
- Encouraging the Ethical Conduct of Research

**CORE FUNCTIONS**

In keeping with our statutory mission, we perform an oversight role and do not engage directly in program operating functions. Broadly speaking, our work may be divided into three functional areas: (1) **audits and reviews**, which provide information about how well systems function, determine whether activities comply with financial and compliance standards, and identify how systems can be improved; (2) **investigations**, which address allegations of serious civil, criminal, administrative or research misconduct; and (3) **education and outreach**, which establish and maintain effective communication between OIG and NSB, Congress, OMB, NSF, research communities, and other stakeholders. Such outreach is essential in facilitating our mission of promoting the efficiency and effectiveness of NSF programs and operations and safeguarding their integrity. In each area, we strive to focus on substantive matters, and are committed to perform our duties fairly and to work cooperatively without compromising our independence.

Certain issues require interdisciplinary coordination across these functional areas, such as information technology security. We aim to develop a coherent approach to computer security so that we can investigate possible security breaches, audit the capacity of NSF computer systems to withstand attempted intrusions, and develop preventive measures to meet the security needs of both NSF and OIG. Our approach involves assembling teams with diverse skillsets such as auditors, investigators, attorneys, and/or outside experts in information technology and related fields. This is one of several areas in which we believe interdisciplinary collaboration holds great promise for advancing our mission. Others include involving forensic auditors at early stages of investigations into alleged financial improprieties, creating teams of auditors and investigators to work on compliance issues, and bringing together scientists and auditors for comprehensive performance reviews of awardees.

**Audits and Reviews**

Audits and reviews focus on NSF’s programs and operations (internal focus), or on awardees’ compliance with federal and NSF requirements (external focus). In the former, we assess effectiveness and efficiency. In the latter, we assess awardees’ compliance with federal and NSF requirements. In both cases, we are concerned with detecting and preventing fraud, waste, and abuse of federal resources.
The internal focus includes statutorily required audits of NSF’s financial statements, including an evaluation of agency financial internal controls, and reviews of information security. In addition, internal issues include NSF’s management of: 1) the award processes from inception to closeout, 2) major programs, and 3) business operations.

Externally OA conducts audits that determine whether costs claimed by awardees are allowable, reasonable, and properly allocated and whether the awardees’ internal control systems are adequate for monitoring their NSF awards. Auditors use data analytics to identify institutions to audit and what to audit at the selected institutions. Unlike traditional audit risk assessment techniques, which examine only selected transactions, data analytics enables auditors to examine 100 percent of transactions to pinpoint anomalies that need further research and may indicate improper use of NSF funds. By better identifying audit risk, we increase the impact of audits.

We focus our audits and reviews on issues of substantial concern and prospective importance to NSF and its goals. We select and design projects based on assessments of the risk involved in the activity to be reviewed and the likelihood that an audit or review would lead to improvements.

Focusing on Substantive Matters

- We consider program, management, and financial risks.
- We conduct our audits and reviews in accordance with government standards and in ways that assist NSF in pursuing its mission.
- We develop and explain our recommendations in terms of how they will improve NSF effectiveness and efficiency.
- We establish priorities for our work by selecting reviews that promise the greatest substantive benefit for NSF.

Conducting Reviews Fairly

- After we collect and analyze our data, we solicit feedback from the affected parties and give full consideration to their views.
- To ensure that our reports are thorough, fair, and accurate, we follow accepted quality control practices in the IG community and comply with all relevant federal and professional standards.

Working Cooperatively without Compromising our Independence

- We keep affected parties informed, invite them to identify issues of special concern, and endeavor to address the issues they identify.
- We seek to develop analyses and recommendations that enable NSF management and awardees to make improvements.
- We work with NSF managers and awardees to familiarize them with federal requirements and explore ways they can comply without undue burden.

Investigations

We are responsible for investigating possible wrongdoing involving organizations or individuals who submit proposals to, receive awards from, conduct business with, or
work for NSF. We seek to perform focused, well-documented investigations addressing evidence of serious wrongdoing. When appropriate, the results of these investigations are referred to the Department of Justice or other prosecutorial authorities for criminal prosecution or civil litigation, or to NSF for administrative resolution. In addition, systemic issues identified in the course of investigations or investigative proactive reviews are brought to the attention of NSF management in order to increase the economy and efficiency of NSF programs and operations.

Our civil, criminal, and administrative investigative activities have resulted in millions of dollars in actual recoveries and funds put to better use. Further, they have protected the federal government from unscrupulous individuals and entities, have served as a deterrent against similar wrongdoing, and have led to positive systemic changes in NSF programs and operations. Investigating allegations of research misconduct, specifically falsification of data, fabrication of data, and plagiarism, is similarly a high-impact investigative activity and is among our most important responsibilities. Often leading to suspension and/or debarment of unscrupulous researchers and entities, research misconduct strikes at the core of NSF’s mission and compromises the research enterprise, which operates increasingly on a global scale. It is therefore a special concern for our office.

Focusing on Substantive Matters

- We concentrate our investigative resources on the most serious cases, as measured by such factors as the amount of money involved, the seriousness of the alleged offenses or ethical violations, and the strength of the evidence.
- We give highest priority to cases that will directly affect future NSF activities, including cases that involve protecting the integrity of federal funding and decision-making processes, allegations of wrongdoing by NSF staff, and allegations that concern ongoing awards.
- We give priority to cases that will create significant issues for NSF management if they remain unresolved.
- Our research misconduct cases focus on serious violations of the ethical standards that are important to the scientific community.

Handling Cases Fairly

- Our investigative process includes internal review by staff who have not yet formed an opinion in the case and who bring different disciplinary perspectives to bear on it. Our reviews ensure that matters are kept in proportion and that similar matters are treated consistently.
- We make every effort to collect relevant information in a manner that minimizes the burden on the providers while also allowing a thorough analysis of the facts.
- We protect the privacy of investigative subjects by seeking information directly from them when appropriate. To the greatest extent practicable, we conduct our investigations discreetly to avoid inadvertent damage to reputations.
- We value timeliness and recognize that delay can undermine fairness. We give priority to resolving cases in which we have already contacted the subject of the investigation.
• We review past cases as a frame of reference for how to handle new cases, in order to foster consistency without sacrificing flexibility.

Working cooperatively without compromising our independence

• When handling allegations of research misconduct, we seek to accommodate variations in the investigatory procedures at awardee institutions. We require that awardees follow fair and reasonable procedures consistent with NSF regulations.
• We work with awardee institutions to ensure that our investigations meet the expectations of all parties (NSF, OIG, and awardee) by articulating our concerns at the outset and offering assistance throughout.
• We explain our practices and procedures to all affected parties, and when we cannot share substantive information, we explain why.
• We coordinate our work closely with Department of Justice attorneys, law enforcement officers, research university administrators, and officials at other agencies and institutions.
• Based on our experience with research misconduct, we play a leadership role among federal agencies.

Education and Outreach

An effective education and outreach program is essential to the successful performance of our mission of preventing and detecting problems. Our outreach program also plays a key role in reinforcing NSF’s support for the integrity of and compliance with its rules, policies, and procedures.

Outreach activities within NSF, such as our liaison efforts with the directorates, make us more accessible to managers and staff and increase the likelihood that we will hear about important issues within the agency. These activities also help educate NSF employees about their obligations to report alleged research misconduct and other issues of fraud, waste, and abuse. Through external outreach to the communities NSF supports, we help NSF foster the responsible use of government funds and promote integrity in government-supported research programs. We also communicate that our work focuses on matters of substantial concern to NSF and is done with sensitivity to the perspectives and practices of the research community.

Outreach activities are also a valuable learning tool for OIG staff, as they help familiarize us with NSF and its people, further our understanding of agency operations and the communities it serves, and keep us abreast of changing conditions. They also build trust among NSF staff in our ability to handle sensitive matters with tact, fairness, thoroughness, and a sense of proportion. Such trust is essential for our office to sustain high quality audits, reviews, and investigations.

Office-wide Functions

In addition to conducting audits and investigations, we pay special attention to developing our staff and rationalizing our operations and administrative processes. These practices support our core functions. To perform those functions well, we need a capable staff, sound policies and procedures, in-depth knowledge of NSF and the communities it serves, and a coordinated education and outreach effort.
We are committed to developing the skills of our staff through formal training, challenging work assignments, and a work environment that encourages teamwork, diversity, open communication, and learning. Through collaboration among staff members in the various disciplines represented in OIG, we help our staff develop a broader appreciation of the different aspects of effective performance in NSF-funded activities.

We continue to improve our management information systems and technologies to create a more productive and satisfying work environment, in which work is planned better and executed in accordance with office-wide priorities. We work with NSF to continue to improve human resource support, and manage our training resources effectively. Our individual performance plans are tied closely to the OIG annual plans.
OIG WORKFORCE PLAN

Overview. The NSF Office of Inspector General workforce plan serves as a guide for identifying human capital needs, developing and implementing solutions, and evaluating progress toward achieving OIG’s strategic goals over the next three years. The plan represents our best estimate of how our current workforce will be adjusted in response to future challenges. OIG will update this plan each year in conjunction with its annual performance plan. In an era of tighter government budgets, we are committed to organizing our operations and using our people in the most efficient way possible.

Our current strategic plan describes issue areas on which we expect to focus attention over the next three years, including NSF’s: move to its new headquarters; planning, construction, and operation of its large research facilities; management of the Intergovernmental Personnel Act (IPA) program, including participants’ conflicts of interest; business operations, including compliance with the Improper Payments Elimination and Recovery Act of 2010 (IPERA) and with the DATA Act of 2014; grant administration; management of the U.S. Antarctic Program, and investigation of fraud and research misconduct.

OIG has pursued a number of initiatives that have changed the way we work in order to maximize the productivity of our staff. For example:

- The Office of Audit (OA) uses software that extracts financial data from NSF and external sources, including general ledger data from awardees, to evaluate audit risk and identify anomalies among transactions for further research and analysis.
- OA employs commercial software to create electronic workpapers, track the utilization of staff and financial resources, and issue reports on the status of audit recommendations. In the next three years, OA plans to use this software to prepare the statistical tables in Semiannual Reports to Congress.
- The Office of Investigation (OI) has selected and has begun deploying its system for electronic management of case files to increase its efficiency and reduce the use of paper. Full deployment of the system is expected during this performance year.
- OIG audit and investigative staffs utilize technology to better target high-risk situations.
- MLE will continue to support the operational divisions through a variety of means, including proactive legal-oriented training and document review and analysis.

OIG currently has 66 staff: in addition to the IG, 27 work in audit, 31 in investigations, and 8 in Support and Front Offices. OIG’s workforce has declined from a high of 79 staff at the start of FY 2013, due to the effects of the Budget Control Act. The office assumes that budgets will remain flat for the next three years.

NSF is moving to new offices in Alexandria VA beginning September 2017. The new office space will present several workforce planning challenges. For example, it will effectively limit the number of staff we can house at headquarters to 81 (including contractors). OIG expects that the level of comfort with telework will
increase over time among both managers and staff, and help to mitigate any space limitations. The move to Alexandria is also expected to result in an increase in retirements among those who are eligible. Consequently the office has increased its training expenditures to prepare younger staff to assume greater roles in the very near future.

**Audits.** OA has strengthened its in-house information technology audit capability, which enables greater control over the audit process, resulting in better quality and more timely audits at a lower price. Some audits are performed by internal OA auditors; but the Office also contracts with Independent Public Accounting (IPA) firms to supplement its resources. These outside auditors also provide additional expertise and resources necessary to accomplish OA’s varied and complex audit projects.

Internal performance audit and reviews will address federal and OIG priorities as they pertain to NSF programs and operations, such as: (1) NSF’s management of:

- its large facility projects, including the cooperative agreements used to construct and operate them
- the Antarctic Support Contract, which provides logistical support for NSF’s management of the U. S. Antarctic Program
- relocation of NSF offices from Arlington, Virginia, to Alexandria, Virginia
- its Intergovernmental Personnel Act (IPA) program, including conflicts of interest for rotators, who often come from awardee institutions for a period of years and then return to those institutions
- costs associated with frequent staff travel

Internal audits will also include audits mandated by law, such as the annual Financial Statements Audit and the related Federal Information Security Management Act independent evaluation report. In addition, OA will audit NSF’s compliance with the Improper Payment Elimination and Recovery Act of 2010 (IPERA) and with the Data Act of 2014.

**Information Technology:** The AIG for Audit is also the OIG’s Chief Information Officer. In FY 2016 OIG will be reducing its use of KMS, as certain functions move toward other platforms (e.g., e-Loc for investigative case management). We will support the implementation of other enterprise systems, and upgrade our existing computers and communication devices to increase mobility and versatility.

**Investigations.** Our investigative cases continue to become more complex, requiring increased interaction with NSF, institutional administrators, other federal agencies, international organizations, and the Department of Justice and other prosecutorial authorities in order to bring about effective resolutions. We have institutionalized the impact on our workload resulting from the Attorney General’s grant of Statutory Law Enforcement Authority has been great. The workload of our Office of Investigations came under greater stress as we incorporated the mandatory requirements of that status into our practice. Our caseload per special agent remains exceptionally high by community standards at approximately 15 cases per agent. In addition, the Office of Investigations serves as the focal point within the agency for investigating allegations of research misconduct and making recommendations for appropriate actions when such allegations are substantiated. We have experienced an increase of approximately 300 percent increase in both the number of allegations received and
the number of substantive investigations conducted over the past decade with no corresponding increase in staffing. As these trends continue and budgets allow, we would like to recruit at least one additional scientific investigator, special agent, and investigative attorney, as well as one computer forensics investigator in order to handle the increased workload in the areas of civil/criminal cases, research misconduct cases, and outreach efforts to prevent and detect fraud, waste and abuse.

OI has taken a lead role in the federal IG community in addressing questions of fraud within the SBIR/STTR Programs and in the effort to increase the use of suspension and debarment authority as an important tool to protect federal grant funds. These efforts are essential to ensuring the protection of federal funds but require significant staff hours to complete. OI will need to continue to recruit staff with exceptional legal, administrative, investigative and communications skills to conduct these critical functions.

In response to the America COMPETES Act, NSF established a requirement that grantees establish plans for Responsible Conduct of Research (RCR) training programs. OI has recently completed a survey of institutions regarding grantee RCR plans and programs. We randomly selected and reviewed 50 grantee RCR plans and programs, interviewed appropriate individuals at the institutions, and are in the process of reporting our findings and recommendations to NSF and the research community. Important initiatives such as these make significant contributions to the successful completion of our “prevent” mission, increasing the knowledge, skills, and insights of personnel in NSF and throughout the research community in order that they may better protect federal grant funds and prevent civil and criminal frauds and misuse of scarce federal funds.

Over the next few years we will continue to conduct proactive reviews to the extent that personnel strength and investigator workload permits. These reviews serve to detect grant fraud and to deter fraudulent behavior in the research community; through our improved targeting of high-risk institutions and activities, they have been remarkably successful in detecting fraud and mismanagement. In recent years, these efforts have benefitted from the use of a forensic analyst with financial and computer system skills.

Prevention activities also include outreach to ensure that NSF staff and awardees understand the rules and regulations that apply to them. As NSF programs have increased in funding, complexity, and number, OIG has seen a commensurate increase in requests from universities, research institutions, and individual researchers for presentations and information. Due to budgetary constraints, however, we have not had the funds or personnel to adequately respond to this demand in the research community. We have had to reduce the number of outreach events and largely limited them to the local area unless remote participation through webinars, etc. was possible.

**OIG Support Offices (Office of Counsel, Immediate Office, Office of Administration).** The office’s legal, legislative and external affairs functions were combined with its administrative offices in FY 2013 under the direction of the Counsel to the IG. As a result, Counsel and Administration coordinate more closely to ensure the proper execution of all transactions and documentation. Counsel is also more involved than previously in setting office policy.
During FY 2015 Office of Counsel hired an Assistant Counsel in order to ensure that the Office’s expanding legal requirements remained fully supported. This includes proactive measures, such as training, which will be aimed at identifying and addressing problems at an early stage.

The office’s administrative staff reorganized during FY 2014, shedding its IT responsibilities and streamlining its administrative support function. We are also continuing to work on an integrated performance management system within OIG, with a more effective integration of our annual OIG performance plan with the individual performance appraisal process.

Summary. Due to the difficult budget environment that has prevailed in recent years, OIG has been forced to reduce its staff by 16 percent since the start of FY 2013. Lean budgets are expected to continue, and OIG will seek to further leverage technology and to “work smarter” to maintain and potentially increase office production. We expect that staffing will remain between 65 and 70 FTEs over the next three years.
OIG GOALS

We have three goals that provide the framework for our performance plan:

1. Promote NSF efficiency and effectiveness.

2. Safeguard the integrity of NSF programs and resources.

3. Utilize OIG resources effectively and efficiently.

Our success is directly related to how well NSF accomplishes its programmatic responsibilities. Consequently, we will ensure that our work focuses on priority agency issues and that we provide useful, timely feedback to agency managers, the National Science Board (NSB), and the Congress. This plan covers the period from October 1, 2016-September 30, 2017.
Goal 1
Promote NSF Efficiency and Effectiveness

Goal 1 involves increasing OIG’s impact on NSF’s effectiveness and efficiency. In recent years, we have identified a wide range of issues concerning NSF management and operations, analyzed their causes, and made recommendations for improvements to the cognizant agency managers. In some cases, despite our efforts, issues previously identified have continued to pose problems for NSF. Recognizing that we play an advisory role and have limited control over how issues are ultimately resolved, we believe we can make our work achieve better results for NSF. The following performance measures and strategies describe the steps we will take to increase our impact on NSF effectiveness and efficiency.

How We Will Measure Progress

Specific strategies and performance targets (goals) associated with accomplishing this strategic goal are listed on the following page, along with a set of performance measures, as necessary, to ensure that each action is fully implemented and that the efficiency and effectiveness of the agency will be improved as a result.

Performance targets are divided between those that are quantitative and qualitative. Quantitative targets, on their face, reflect measurable results that are capable of being met and exceeded during the twelve month period. Qualitative targets are those that are less concrete. They reflect activities that will enhance or benefit NSF or OIG operations, but which do not lend themselves to a predetermined baseline performance level.
STRATEGIES AND ASSOCIATED TARGETS

The following describes the strategies for achieving this overall goal, as well as associated quantitative and qualitative targets.

1. Identify and implement approaches to improve product quality and timeliness.

Quantitative

- Complete 50 percent of OIG internal audit products performed by OIG staff within 1 year of the engagement letter.
- Issue one internal quality control review report during the performance year.
- 80% of all investigative cases and FOIA requests are assigned to appropriate staff teams within 30 days of being opened/received.
- Investigative referrals to other offices or organizations are made within 30 days of the need for referral being identified and are conducted in a manner consistent with timeliness guidelines.
- Provision of legal reviews or opinions within agreed upon timeframes 60% of the time to ensure that the office’s operations stay within the bounds of governing legal requirements and that courses of action are promptly taken to minimize legal risk.

Qualitative/Other

- Ensure work remains on schedule through at least bi-weekly tracking and monitoring of the status of the teams’ audits and other reviews.
- Ensure that audit programs are in accordance with the IG Act, CIGIE standards, generally accepted audit standards, and OIG policies and procedures with less than 10% discrepancies (as reflected in Supervisory Review Checklist and Peer Review Guidelines).
- Issue the annual internal control and quality assurance report, as required by Government Auditing Standards.
- Review all OIG policies and update as needed.
- Review records practices and develop approaches for enhancements needed for accuracy or completeness.
- Data necessary for tracking and monitoring status of investigations will be provided to appropriate managers on a weekly basis to ensure work remains on schedule.
- The recently deployed Investigative Case Management System (eLoc) will be employed by staff for a period of 12 months, during which corrections and refinements will be identified and addressed.

We will use the following measures to assess progress in implementing this strategy:

- Percent of OIG-performed internal audit products completed within one year of the engagement letter date.
- Weekly tracking and monitoring of the status of investigations.
• Issuance of internal quality control review reports for one audit team/division.
• Issuance of at least bi-weekly reports on the status of audits.
• Completed Supervisory Review Checklists/audit procedure steps as applicable.
• Issuance of an annual internal quality control review report.
• Inventory of policies, reviewed, updated, created.
• Percent of all investigative cases and FOIA requests are assigned to appropriate staff teams within 30 days of being opened/received.
• Number of eLoc corrections/refinements identified and addressed.
• Percent of Investigative referrals to other offices or organizations are made within 30 days of the need for referral being identified.
• Completion of MLE policy review.
• Percent of legal assignments completed within agreed upon timeframes.
• Percent of timely responses to congressional and media requests; implementation of an effective tracking tool.
• Written assessment of certain records practices with recommendations for improvement, as needed.

2. **Strengthen our focus by refining approaches for selecting work and setting priorities.**

**Quantitative**

- 80% of investigations are opened in accord with investigative management intake recommendations

**Qualitative**

- *Develop the annual audit plan.*

We will use the following measures to assess progress in implementing this strategy:

- Initiation of investigations according to specified priorities.
- Issuance of the annual audit plan.
Goal 2
Safeguard the Integrity of NSF Programs and Resources

In order to properly safeguard the integrity of NSF programs and resources, OIG must continually enhance its ability to detect and address improper, inappropriate, or illegal activities; and balance reactive and proactive approaches in order to achieve maximum preventive effect. NSF and the education and research communities must show a high level of integrity in the expenditure of public funds and in the conduct of their efforts to maintain public confidence in government-funded research and education efforts. These endeavors, moreover, cannot function effectively if researchers and educators cannot rely on their colleagues to produce and represent their results with integrity. When problems of integrity occur, they must be dealt with in a fair and responsible manner. OIG conducts activities to promote sensitivity to ethics in research and to help NSF reduce such abuses as falsification of data, plagiarism, fabrication of data, and misuse of government funds. The following performance measures and strategies describe the steps we will take to safeguard the integrity of NSF programs and resources.

How We Will Measure Progress

Specific strategies and performance targets (goals) associated with accomplishing this strategic goal are listed on the following page, along with performance measures, as necessary, to ensure that each action is fully implemented. The performance measures reflect how well we are safeguarding the integrity of programs and resources.

Performance targets are divided between those that are quantitative and qualitative. Quantitative targets, on their face, reflect measurable results that are capable of being met \textit{and exceeded} during the twelve month period. Qualitative targets are those that are less concrete. They reflect activities that will enhance or benefit OIG operations, but which do not lend themselves to a predetermined baseline performance level.
STRATEGIES AND ASSOCIATED TARGETS

In order to achieve this goal, we plan to accomplish the following specific strategies and actions:

1. **Detect and address improper, inappropriate, or illegal activities.**

   **Quantitative**
   
   - At least 90 percent of OIG- or IPA-performed external incurred cost audits use data analytics to identify risk areas and develop audit procedures.
   - As appropriate, at least 20 percent of internal performance audits use data analytic to identify risk areas and develop audit procedures.
   - 20 percent of investigations include forensic analysis.
   - 80% of investigations are opened on average within 14 days of receipt of factually sufficient allegation.
   - 80% of all investigations are closed within established timeframes.
   - At least 1 written legal, legislative, or administrative process update transmitted to staff, which discusses topics relevant to OIG operations or activities to assist in mission support.

   **Qualitative**
   
   - Evaluate potential action under the Program Fraud Civil Remedies Act (PFCRA) authorities and make referral to NSF in appropriate cases.
   - Evaluate use of suspension and debarment for all cases as appropriate.

We will use the following measures for assessing progress in implementing this strategy:

- Percent of OIG- or IPA-performed external incurred cost audits issued during that year that used computer-assisted data analytics to identify risk areas and to develop audit procedures.
- Percent of internal performance audits issued during the year that used computer-assisted data analytics to identify risk areas and develop audit procedures.
- Percent of cases considered for processing as PFCRA actions.
- Number of appropriate cases referred to NSF for PFCRA action.
- Percent of cases considered for suspension or debarment.
- Number of legal, legislative, and/or administrative process updates and briefings.

2. **Strengthen OIG proactive oversight and outreach activities.**

   **Quantitative**
   
   - At least 80 percent of discretionary audit products issued during the performance year address top management challenges or NSF’s high-risk areas.
   - Investigations staff present at 80% of New Employee Orientations.
• At least 1 briefing to OIG managers and/or staff on relevant legal, legislative, or administrative requirements to assist managers/staff them in performing their work; fully respond to all questions either at the time of the presentation or in follow-up discussions or correspondence within 5 days.

Qualitative

• Improve availability of whistleblower protection information through outreach and additional website material.
• Report and make recommendations to NSF concerning survey of Responsible Conduct of Research (RCR) training plans at selected universities.

We will use the following measures for assessing progress in implementing this strategy:

• Percent of audit products issued during the performance year that address management challenges or were selected based on the Office of Audit (OA) risk assessment.
• Include and update whistleblower protection information on OIG webpage and other internal and external vehicles for delivering outreach.
• Analysis and recommendations concerning survey of RCR plans are provided to NSF.
• Reference to internal documentation, meeting agendas, and email correspondence.

3. Refine financial investigative capabilities.

Qualitative

• Leverage existing audit and investigative information.
• Ensure timely and effective use of external forensic financial analysis.

We will use the following measures for assessing progress in implementing this strategy:

• Number of investigations in which past audits and A-133 audits were reviewed.
• Number of weeks we receive status reports from forensic analysis contractor.
Goal 3
Utilize OIG Resources Effectively and Efficiently

The effective and efficient utilization of OIG resources requires us to: continue to strengthen our management and planning tools and techniques; fully develop, plan for, and utilize OIG personnel; ensure that managers and staff have tools and resources necessary to accomplish their duties and responsibilities; and promote effective internal and external communications. Our success depends on our ability to pull together as an organizational unit, make effective use of our limited resources, overcome internal divisions, develop an effective infrastructure for management, draw on resources external to our own organization, and focus our efforts on issues important to NSF. We have a diverse and talented workforce whose backgrounds and skills range beyond what one would find in a typical OIG. To effectively capitalize on our internal diversity, we must ensure a common understanding of office priorities, open communications both within our office and with outside organizations, and fully coordinated efforts to accomplish our goals.

How We Will Measure Progress

Specific strategies and performance targets (goals) associated with accomplishing this strategic goal are listed on the following page, along with performance measures, as necessary, to ensure that each action is fully implemented, and that as a consequence, OIG resources are being managed effectively and efficiently.

Performance targets are divided between those that are quantitative and qualitative. Quantitative targets, on their face, reflect measurable results that are capable of being met and exceeded during the twelve month period. Qualitative targets are those that are less concrete. They reflect activities that will enhance or benefit OIG operations, but which do not lend themselves to a predetermined baseline performance level.
STRATEGIES AND ASSOCIATED TARGETS

In order to achieve this goal, we plan to accomplish the following specific strategies and actions:

1. **Strengthen and utilize the professional expertise of all OIG staff.**

   **Quantitative**
   
   - Analyze the 2015 Federal Employee Viewpoint Survey (FEVS) results and develop plan for addressing any issues identified within 3 months.
   - All staff required to meet GAGAS § 3.76 training requirements have met them.
   - Have 50 percent of OA professional staff professionally certified (CPA, CIA, CISA, CFE) as of September 30, 2017.
   - Have 40 percent of OA professional staff with advanced degrees as of September 30, 2017.
   - Conduct I-Group meetings at least quarterly.
   - Conduct all-hands Office of Audit meetings at least quarterly.
   - Subject to budget restraints, complete 75% of approved Individual Development Plan-related training for investigative staff.

   **Qualitative/Other**
   
   - Conduct IT training, as necessary.
   - Provide prompt, effective responses to requests for IT support.
   - Identify and replace outdated computers, servers, printers, copiers, and related equipment as needed.
   - Develop and deploy an in-house digital forensics capability to support the acquisition, identification, and analysis of evidence relating to OIG investigations subject to budget availability.
   - Conduct exit surveys with all departing staff to obtain feedback on any issues and areas for office improvement.

We will use the following measures for assessing progress in implementing this strategy:

- Analysis of FY 2015 FEVS results as they pertain to OIG.
- Delivery of training in the use of IT systems and software deemed appropriate.
- Increase in level of staff satisfaction with IT support, as reflected in the new employee survey.
- Replacement of outdated equipment as funds allow; level of satisfaction with office equipment in survey.
- Full deployment of in-house investigative digital forensics capability or progress toward that end.
- Number of staff required to meet GAGAS § 3.76 training requirements who have met them for the year ending 3/31/17.
- Percent of OA staff with professional certifications (CPA, CIA, CISA, CFE) as of September 30, 2017.
• Percent of staff with advanced degrees (i.e., post baccalaureate degrees) as of September 30, 2017.
• Percent of exiting staff with whom exit survey was conducted.
• Number of all-hands audit staff meetings.
• Number of I-Group meetings held.
• Completion of training focused on government information practices.

2. **Improve communication and collaboration within OIG.**

   **Qualitative**
   
   • Ensure information exchange and referrals between the audit, investigation, and support units.
   • Use office-wide committees for completion of various OIG projects and activities.
   • Provide briefings on significant cases/issues at OI meetings.
   • Review all OIG policies and update as needed.

   We will use the following measures for assessing progress in implementing this strategy:
   
   • Frequency of meetings between the AIGA and AIGI.
   • Number of referrals among operating units of OIG, as appropriate.
   • Number of cross-organizational committees, as needed, and their effectiveness.
   • Number of briefings on significant cases/issues provided at OI meetings.
   • Number of office-wide policies reviewed and updated.

3. **Ensure effective external communications and consultation with our stakeholders.**

   **Quantitative**
   
   • Complete and accurate responses to requests for information within established timeliness guidelines and FOIA/PA provisions 75% of the time.
   • Complete and accurate responses to media and congressional inquiries within 15 business days of receipt or by other agreed upon date 50% of the time in order to advance public transparency and meet congressional stakeholder needs.

   **Qualitative**
   
   • Produce timely external reports on OIG activities and results.
   • Provide testimony and other requested information to congressional committees within a timely manner.
   • Provide response to media inquiries within timeframes agreed upon.
   • Provide briefings to the National Science Board (NSB), Congress, Office of Management and Budget (OMB), NSF, and others regarding OIG plans, priorities, and progress.
   • Prepare timely OIG budget requests.
   • Update NSF leadership regularly on OIG activities and concerns.
- Collaborate with federal and international agencies to advance common audit, investigative, and management goals.
- Provide leadership and active participation in the IG community.
- Conduct active, effective outreach to NSF and the research community, including professional associations of higher learning and scientific research, to the degree possible under tight fiscal restraints.
- Post audit reports, which have been redacted as necessary, to the OIG website within the required timeframe after issuance.
- Promptly process FOIA/PA requests and appeals.
- Provide briefings to new employee orientations, program manager seminars, and NSF Grants Conferences.
- Review OIG website for necessary modifications and enhancements.

We will use the following measures for assessing progress in implementing this strategy:

- Number of Semiannual Reports, OIG Performance Reports, and other reports completed by prescribed target dates.
- Number of testimonies, responses to questions, and other information submissions provided at the request of congressional committees.
- Number of briefings provided to NSB members/committees, Congressional staff or members, OMB staff, NSF staff, and others.
- Completion of budget requests in compliance with established deadlines.
- Number of update meetings with the NSF Director and Deputy Director.
- Number of participations with other federal and international agencies in joint training, collaborative projects, and the development of policies and procedures to advance common audit, investigative, and management goals.
- Number and nature of participation in activities within the IG community, particularly the number of committees and task forces on which OIG staff served.
- Number of outreach activities by OIG staff to NSF and the research community.
- Percentage of audit reports (with any necessary redactions) posted to OIG website within required timeframe after legal review and any necessary redactions in place.
- Percentage of FOIA/PA milestones met.
- Number of briefings at new employee orientations, program manager seminars, and Regional Grants Conferences.
- Convene one conference on Research Misconduct/Responsible Conduct of Research, suspension/debarment, or grant fraud.
- Improvements to OIG website as needed.
- Number of Congressional and media requests that have been responded to within agreed upon time frames.