The Appropriations Act that funds the National Science Foundation provides for a separate appropriation for NSF’s Office of Inspector General (OIG). Accordingly, the FY 2010 Budget Request identifies the resources needed to support OIG, including amounts for personnel compensation and benefits, contract services, training, travel, supplies, materials, and equipment.

The FY 2010 Budget Request for OIG is $14.0 million, which represents an increase of $2.0 million over the FY 2009 current plan of $12.0 million.

### Office of Inspector General Funding

<table>
<thead>
<tr>
<th></th>
<th>FY 2008</th>
<th>FY 2009</th>
<th>FY 2009</th>
<th>FY 2010</th>
<th>Change over FY 2009 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Current Plan</td>
<td>ARRA</td>
<td>Request</td>
<td>Amount</td>
</tr>
<tr>
<td>Personnel Compensation and Benefits</td>
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<td>$10.65</td>
<td>$1.09</td>
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<tr>
<td>Other Operating Expenses(^1)</td>
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<tr>
<td>Total</td>
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<td>$12.00</td>
<td>$2.00</td>
<td>$14.00</td>
<td>$2.00</td>
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</table>

| Full-Time Equivalent Employment | 67 | 64 | - | 67 | 3 | 4.7% |

Totals may not add due to rounding.

\(^1\) Includes the costs of the annual financial statements audit and the outsourcing of contracting services.

### Appropriation Language

For necessary expenses of the Office of Inspector General as authorized by the Inspector General Act of 1978, as amended, $12,000,000, $14,000,000.

### Office of Inspector General FY 2010 Summary Statement

<table>
<thead>
<tr>
<th></th>
<th>Enacted/ Request</th>
<th>Carryover/ Recoveries</th>
<th>Recission</th>
<th>Expired</th>
<th>Total Resources</th>
<th>Obligations Incurred/Est.</th>
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</thead>
<tbody>
<tr>
<td>FY 2008 Appropriation</td>
<td>$11.43</td>
<td>$1.12</td>
<td>-0.46</td>
<td>-0.01</td>
<td>$12.08</td>
<td>$11.83</td>
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<tr>
<td>FY 2009 Current Plan (CP)</td>
<td>12.00</td>
<td>0.25</td>
<td>-</td>
<td>-</td>
<td>12.25</td>
<td>12.25</td>
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<tr>
<td>FY 2009 ARRA</td>
<td>2.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.00</td>
<td>2.00</td>
</tr>
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<td>FY 2010 Request</td>
<td>14.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14.00</td>
<td>14.00</td>
</tr>
</tbody>
</table>

\% Change from FY 2009 CP $1.75

Totals may not add due to rounding.
Explanation of Carryover

Within the Office of Inspector General (OIG) appropriation, a total of $253,612 was carried forward into FY 2009. Funds will be used to procure an electronic work-paper system, audit contracts, and fund personnel compensation costs.

OIG RESPONSIBILITIES

In February 1989, the National Science Board established OIG pursuant to the Inspector General Act Amendments of 1988. The statute confers on OIG the responsibility and authority to:

- Conduct and supervise audits of NSF programs and operations, including organizations that receive NSF funding.

- Conduct investigations concerning NSF programs and operations, including organizations that receive NSF funding and individuals that benefit from NSF programs and operations.

- Evaluate allegations of research misconduct, such as fabrication, falsification, or plagiarism, involving individuals who participate in NSF-funded activities.

- Provide leadership, coordination, and policy recommendations for:
  - Promoting economy, efficiency, and effectiveness in the administration of NSF programs and operations, and
  - Preventing and detecting fraud and abuse in NSF programs and operations.

- Issue semiannual reports to the National Science Board and Congress to keep them informed about problems, recommended corrective actions, and progress being made in improving the management and conduct of NSF programs.

As set forth in the OIG Strategic Plan, the primary functions of the Office are audits, reviews, and investigations. To provide the diverse skills, training, and experience necessary to oversee NSF’s varied programs, the OIG staff includes scientists, attorneys, certified public accountants, investigators, evaluators, and information technology specialists. The focus of an investigation, audit, or other review may be on a single entity or individual, an organization, a project involving multiple disciplines, or a broad program or functional area.

OIG performs audits of grants, contracts, and cooperative agreements funded by the Foundation’s programs. The Office also conducts audits and reviews of both internal agency programs and external organizations that receive NSF funding to ensure that financial, administrative, and programmatic activities are conducted economically, effectively, and in compliance with agency and federal requirements. OIG is also responsible for overseeing the audit of the Foundation’s annual financial statements, which are required for all NSF accounts and activities by the Government Management Reform Act of 1994. The Office contracts with a public accounting firm to conduct the financial statements audit. Since FY 2006, funds to cover the complete cost of the financial audit have been requested in this appropriation. OIG also audits financial, budgetary, and data processing systems used by NSF to develop the financial statements. In addition, the Office performs multi-disciplinary reviews – involving auditors, attorneys, management analysts, investigators, and other professionals as needed – of financial, management, and program operations to identify broader problems and highlight best practices.
OIG investigates possible wrongdoing by organizations and individuals who submit proposals to receive awards from, conduct business with, or work for the Foundation. Allegations of research misconduct are also investigated. OIG assesses the validity and seriousness of all the allegations it receives and recommends proportionate action. When appropriate, the Office refers the results of these investigations to the Department of Justice or other authorities for criminal prosecution, civil litigation, or resolution via settlement agreements and institutional compliance plans. OIG refers other cases to the Foundation for administrative resolution and, when appropriate, recommends modifications to agency policies and procedures to ensure the integrity in NSF’s systems. The Office works closely with institutions on the conduct of their internal investigations and performs outreach activities aimed at preventing and detecting fraud, waste, and abuse and at raising the awareness of funded researchers, institutional administrators, and agency employees about the OIG’s role and NSF’s rules and expectations.

Personnel Compensation and Benefits and General Operating Expenses
(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Compensation and Benefits</td>
<td>$9,252</td>
<td>$9,565</td>
<td>$1,000</td>
<td>$10,650</td>
<td>$1,085 (11.3%)</td>
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<tr>
<td>Travel &amp; Transportation of Persons</td>
<td>235</td>
<td>246</td>
<td>290</td>
<td>44</td>
<td>17.9%</td>
</tr>
<tr>
<td>Advisory &amp; Assistance Services(^1)</td>
<td>2,207</td>
<td>2,058</td>
<td>1,000</td>
<td>2,760</td>
<td>702 (34.1%)</td>
</tr>
<tr>
<td>Communications, Supplies and Equipment, and Other Services</td>
<td>131</td>
<td>131</td>
<td>300</td>
<td>169</td>
<td>129.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$11,825</strong></td>
<td><strong>$12,000</strong></td>
<td><strong>$2,000</strong></td>
<td><strong>$14,000</strong></td>
<td><strong>$2,000</strong> (16.7%)</td>
</tr>
</tbody>
</table>

Totals may not add due to rounding.

\(^1\) Includes the costs of the annual financial statements audit and other outsourced grant audits.

The additional funds requested for FY 2010 will cover increased personnel costs, including three additional FTEs; the rapidly rising costs of audits conducted by CPA firms under contract to OIG; essential technology upgrades to replace aging copiers and personal computers, about half of which are over four years old; and the need for software and training that will provide more effective support for our investigations and audits. In addition we have been asked, along with all other OIGs, to contribute 0.25 percent of our appropriation to fund the new Council of Inspectors General for Integrity and Efficiency. The increase requested for FY 2010 will enable us to significantly improve the efficiency and impact of OIG in performing its oversight role.

The majority of the requested increase is allocated to personnel costs, which consume 78 percent of the OIG budget. The request covers increased costs for staff travel, which is essential for conducting investigations, audits, and meetings with counterparts in this country and abroad to share information and best practices and foster improved coordination of efforts. Finally, the requested funding will allow OIG to keep pace with the increased risks faced by NSF through an increased number of contracted audits. While other agencies may primarily contend with other kinds of liabilities, NSF’s greatest risk by far is its financial exposure in awarding billions of dollars in grants and contracts each year. As the agency’s funding grows, so does this risk – and the concomitant need for increased OIG oversight.

One to two additional FTEs are needed to improve audit coverage of larger, and increasingly complex, interdisciplinary and collaborative NSF awards. The new FTEs would enable us to provide adequate audit coverage of awardees and NSF programs that we have identified as high risk.
The greatly increased demand in the marketplace for auditors due to the Sarbanes-Oxley legislation, along with the further temporary increase expected as a result of the American Recovery and Reinvestment Act of 2009 has impaired OIG’s ability to hire and retain qualified grant auditors. To address this hiring issue, we would like to contract with the Office of Personnel Management on ways to attract and retain staff with knowledge and expertise in these highly specialized areas. The requested funds would allow us to move this effort forward. In addition, OIG expects to convert to electronic work papers in keeping with most other OIG and professional audit organizations, which will require an initial expenditure of about $160,000, plus subsequent expenditures for ongoing training and maintenance costs.

The FY 2010 request would also allow OIG to cover the significantly higher costs for outsourced audits conducted by CPA firms. As indicated above, their average cost has increased by over a third over the past few years, from approximately $100,000 per audit in FY 2004 to approximately $134,000 per audit in FY 2008. To ensure OIG independence and provide more efficient and timely servicing of contracting requirements, we will continue to use the Department of Interior’s acquisition service center. Therefore, for FY 2010 the additional funding requested will also cover the estimated $140,000 cost of outsourcing contract administration services once performed by the NSF contracts office.

Increased resources would enable OIG to focus audits more effectively on the six areas we have identified as posing the greatest risks to NSF: 1) pre-award and post-award monitoring of grants, contracts, and large facility projects, especially those that have experienced large cost overruns; 2) the human capital resources needed to process the more than 40,000 proposals submitted to the agency each year; 3) the merit review process, including such issues as (a) obtaining sufficient reviewers with the appropriate expertise to review proposals that are increasingly multidisciplinary and (b) increasing traditionally underrepresented groups in the reviewer pools; 4) the infrastructure for the United States Antarctic Program, which NSF manages, to ensure the health and safety of researchers and support personnel and to enable world-class research in such an extreme environment; 5) the processes NSF uses to evaluate the accomplishments and ensure accountability of its research programs; and 6) the adequacy of NSF cooperative agreements for overseeing and managing facilities and centers. In addition, OIG will allocate increased resources to closely monitor NSF actions undertaken to implement the American Recovery and Reinvestment Act of 2009. This effort will involve evaluating NSF’s steps to plan, award, oversee and account for the $3 billion of stimulus funds NSF will receive under this legislation. OIG received $2 million in dedicated funding under the Act, most of which will be expended on contracting for audits.

In FY 2007 OIG had the resources to audit four percent of the total $9.6 billion of NSF funds expended by awardees classified as high risk. The requested 2010 funding would enable audits of a larger percentage of risky awardees, provide more effective oversight of NSF programs, and promote the more efficient use of NSF grant funds. This level of funding would also allow for the major ongoing initiative to audit labor-effort costs charged to NSF awards by institutions receiving the most funding from NSF. Labor effort is the single largest cost in NSF awards, and it is frequently cited in audit reports for weak internal controls. OIG will also continue to focus attention on audits of international institutions, which are an increasingly important part of NSF's research portfolio but often are not subject to the terms and conditions of NSF's other awardees. Our efforts will be coordinated with other OIGs and international audit organizations to evaluate the need for developing standardized financial, accounting, and audit requirements for better accountability of funds provided by all sources.

In support of the American Recovery and Reinvestment Act of 2009 and the America COMPETES Act of 2007, OIG will help ensure that each additional dollar NSF invests in basic research is subject to
appropriate oversight and sound management controls. With their emphasis on efficiency and effectiveness, OIG program audits support efforts to increase NSF’s operational capacity at a reasonable cost to the taxpayer. Our audits continue to focus on many of the priorities identified in the legislation. For example, we are working on an audit of NSF centers, which facilitate collaboration on complex scientific projects, and of large-scale facilities and instruments, which enable discovery and development. Following the recommendations of prior OIG audits of large facilities, NSF is reengineering its approach to planning, building, and managing these projects. Our audits have also recommended improvements in the large-facility cooperative agreements to include requirements for establishing research goals and measures of accomplishments. The changes will facilitate mutual understanding between NSF and those facilities of what is expected, and consequently provide for improved accountability. As NSF attempts to leverage its investments by entering into a growing number of international partnerships, OIG has played a leadership role in establishing a dialogue among international organizations responsible for science research funding to discuss strategies for addressing mutual accountability challenges. OIG has also completed a series of incurred cost audits and internal control reviews of the accounting and billing systems of NSF’s Antarctic support contractor. As the current contract expires in 2010, the OIG plans to monitor NSF’s procurement and selection process to ensure 1) compliance with Federal acquisition regulations, and 2) that the successful contractor has cost accounting and billing systems to properly charge costs under the new contract.

The requested budget level will provide the resources that are needed to continue the expansion of OIG's Quality Control Reviews of the CPA firms conducting audits for grantees under the Single Audit Act (OMB Circular A-133). Because NSF relies extensively on these audits for post-award monitoring and financial statement reporting, it is critical that the quality of the audits be carefully assessed and that any deficiencies be corrected. In June 2007 the President’s Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency published their Report on National Single Audit Sampling Project. It found that for entities expending at least $500,000 of federal awards, but less than $50 million, only 48 percent of the A-133 audits were acceptable.

One to two additional FTEs are requested to cope with a growing investigative workload. The criminal, civil, administrative, and research misconduct cases conducted by our investigative staff have become increasingly more complex, requiring more extensive discussions and negotiations with NSF management, awardee administrators, international organizations, and the Department of Justice to bring them to a satisfactory resolution. Increasingly our investigations are requiring coordination with international entities and involve individuals from or located in foreign countries. Our civil and criminal cases frequently produce both financial settlements for institutional fraud and compliance agreements for correcting the underlying systemic problems, thus providing greater protection for future federal funding. Monitoring institutions’ efforts to meet the terms of their five-year compliance plans is vital to preventing fraud from recurring, but it is also very time consuming for our staff. With the increase in the number of compliance programs in recent years, we have experienced a corresponding growth in staff hours committed to monitoring them. The systemic problems that have allowed fraud to occur take time to correct, and ongoing oversight is required to ensure that the flaws in the systems are not further exploited.

With increasing frequency, OIG has been called upon to investigate instances of employee misconduct within the agency. The urgency of these investigations has required the reassignment of staff focused on the core areas of our investigative program: research misconduct and fraud. In 2008, we experienced a 6-fold increase in employee misconduct cases and associated proactive and management implication report activities. To manage this dramatic increase without an increase in staff required us to significantly reduce our efforts to investigate grant fraud. We anticipate a significant decline in investigative recoveries and prosecutions in the coming years as a direct result. An increase in staff will...
help minimize this decline while allowing us to handle the continued flow of employee cases. More importantly, it will provide the additional resources needed to balance the proportionate need to investigate employee misconduct, grant fraud and research misconduct.

OIG will continue to initiate proactive reviews based on previous investigative findings, as well as fraud and research misconduct indicators. In the past, these reviews have identified institutions whose high-risk management practices created significant opportunities for institutional fraud, and have resulted in improved management controls, recoveries of government funds, and new administrative/civil/criminal cases. Increased case loads have required that proactive reviews receive lower priority and be conducted by summer interns rather than full-time investigative staff. Although our reduced efforts continue to successfully uncover important investigative and policy issues, our ability to identify such issues in a timely manner to ensure the integrity of NSF’s systems has been dramatically hampered. The increased FTEs will allow us to pursue a vigorous proactive program and provide reports that consolidate investigative findings and identify recurring operational problems that need the attention of NSF management.

We anticipate that cases handled in FY 2010, like past and current cases, will result in significant recoveries, settlement and compliance agreements, and critical system changes in institutions and NSF programs. Further, we expect concomitant improvements in institutional detection of fraud and greater assurance that federal funds will thereafter be put to proper use. Under our monitoring, the systemic changes will also promote higher ethical conduct in the application for and execution of federal awards. As in our compliance efforts, these cases require significantly more staff time, as well as specialized knowledge and strong forensic, computer and analytical skills.

Our investigative workload is also growing rapidly in other areas. Over the past year, we have seen a notable increase in serious data fabrication and falsification cases and in the incidence of fraud in international collaborations. The latter, in particular, require substantial resources to determine their scope and complexity and to perform more intricate investigations. Overall, in the past ten years we have experienced almost a four-fold increase in the number of matters we have reviewed, a more than 15-fold increase in actions related to cases (including financial recoveries, debarments, and DOJ actions), and a more than 20-fold increase in referrals to DOJ or other entities for investigation, prosecution, or recovery. Recent studies have shown that one-third of all scientists admit to committing questionable research practices, which both threaten the integrity of NSF’s funded efforts and require additional OIG staff to investigate. The additional resources we have requested will allow us to pursue matters that threaten the integrity of NSF’s systems and meet the challenges inherent in the growing number, size, and complexity of NSF awards projected under the America COMPETES Act.

The 2010 Request will also allow OIG to meet its commitment to a strong outreach effort to educate NSF staff and the national and international research communities to help them avoid the kinds of problems that lead to investigations, unfavorable audit findings, or administrative corrective actions. This initiative is designed to make NSF staff, awardee institutions, international collaborators, and other researchers more aware of grant management issues and any preventive or corrective measures that may need to be taken. Auditors, investigators, and other staff regularly participate in outreach activities, and as NSF programs increase in funding, complexity, and number, OIG has seen a commensurate increase in requests for information from universities and research institutions. As in recent years, we will strive to continue to play a leadership role in organizing and participating in international conferences and workshops, which have been well attended by NSF’s counterparts in other countries, including their auditing and investigative components, to discuss common issues, share best practices, and develop policies and procedures permitting parallel investigations and the sharing of information.
We will also continue to work closely with other IG offices on issues of mutual concern. Commitment of staff effort is necessary for a variety of IG community responsibilities. The NSF IG leads the Misconduct in Research Working Group on behalf of the new Council of Inspectors General for Integrity and Efficiency and is a member of several other committees. Our senior management also actively participates in the Audit and Investigations Committees, and with international committees to coordinate matters of mutual interest.

OIG’s increasingly complex audits and investigations require significantly more staff time and contractor support than in the past, as well as specialized knowledge and strong forensic, IT systems, and analytical skills. This request will provide the resources needed to ensure diligent audits and investigations of the growing number of substantive complaints we are receiving and to enable us to respond to emerging situations, such as NSF’s increasing reliance on computer information systems and security controls, changing audit standards, and challenges to cybersecurity at NSF, its funded institutions, and remote locations like Antarctica.