

FY 2016 ANNUAL PERFORMANCE PLAN

NSF's FY 2016 Performance Plan reflects NSF's priorities as identified through its planning and budget process. The table below provides a summary of NSF's performance goals for FY 2016. The remaining pages of this section provide a detailed description of each goal along with the proposed target measures, milestones, or deliverables.

| ID | Goal Short Title | Lead Organization | Goal Statement |
|-----------|---|--------------------------|---|
| 1 | Ensure that Key Program Investments are on Track | BFA | Ensure that key FY 2016 NSF-wide program investments are implemented and on track. |
| 2 | Ensure that Infrastructure Investments are on Track | BFA | Ensure program integrity and responsible stewardship of major research facilities and infrastructure. |
| 3 | Use Evidence to Guide Decisions | OIRM | Use evidence-based reviews to guide management investments. |
| 4 | Make Timely Award Decisions | OIA BFA | Inform applicants whether their proposals have been declined or recommended for funding within 182 days, or six months, of deadline, target, or receipt date, whichever is later. |
| 5 | Foster an Environment of Diversity and Inclusion | ODI | Foster an environment of diversity and inclusion while ensuring compliance with the agency's equal opportunity and civil rights programs. |
| 6 | Evaluate NSF Investments | OIA | Enable consistent evaluation of the impact of NSF investments with a high degree of rigor and independence. |
| 7 | Increase the Percentage of Wholly Virtual Panels | CTO and OIA | Increase the percentage of proposal review panels that are conducted wholly virtually while maintaining the quality of the merit review process. |

Goal 1: Ensure that Key Program Investments are on Track

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| Goal Statement | Ensure that key FY 2016 NSF-wide program investments are implemented and on track. |
| Indicator and Target Measure, Milestone, or Deliverable | <ol style="list-style-type: none"> 1) Monitor the progress of the following NSF-wide investments using a common set of milestones and indicators: NSF INCLUDES, INFEWS, and UtB. 2) Review the results with senior leaders quarterly in data-driven performance reviews. |
| Description | <p>Key investments will be strategically monitored using a set of common metrics. These may include:</p> <ul style="list-style-type: none"> • Contextual indicators, such as the investment’s funding level. • Input indicators, such as date of release of solicitation, number of proposals received, numbers of reviews conducted. • Output indicators, such as number of awards, average and total amounts awarded, and funding rate. • Medium-term output and outcome indicators that gauge whether funded projects are on track. • Activity-specific outcome indicators, e.g., those relating to programmatic long-term goals to change a given field. <p>Progress will be assessed with quarterly review meetings to discuss progress and annual Strategic Reviews.</p> |
| Trend Information | This was a new goal in FY 2014. In FY 2014 NSF monitored the implementation and progress of CIF21, CEMMSS, SaTC, and SEES. For more information on those goals, refer to the FY 2014 Annual Performance Report. |
| Strategic Alignment | <p>Strategic Goal G1: Transform the Frontiers of Science and Engineering, all Objectives.</p> <p>Strategic Goal G2: Stimulate Innovation and Address Societal Needs through Research and Education, all Objectives.</p> |
| Lead Organization/s | Office of Budget, Finance, and Award Management |

Goal 2: Ensure that Infrastructure Investments are on Track

| Goal Statement | Ensure program integrity and responsible stewardship of major research facilities and infrastructure. | | | | | | | | | | | | | | |
|--|---|-------------|-----------------|---------|------|---------|-----|---------|------|---------|-----|---------|-----|---------|------|
| Indicator and Target Measure, Milestone, or Deliverable | Construction Project Monitoring: For all Major Research Equipment and Facilities Construction (MREFC) facilities under construction that are over 10 percent complete, keep negative cost and schedule variance at or below 10 percent. | | | | | | | | | | | | | | |
| Description | NSF monitors the performance of projects funded by the MREFC account by monitoring cost and schedule, a standard measure of performance for construction projects. Projects that are under ten percent complete are not considered eligible for this goal because Earned Value Management (EVM) data is statistically less meaningful in early stages. | | | | | | | | | | | | | | |
| Trend Information | <p style="text-align: center;">Construction Project Monitoring Performance Trends, FY 2009-FY 2014</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Construction Project Monitoring Performance Trends Data</caption> <thead> <tr> <th>Fiscal Year</th> <th>Performance (%)</th> </tr> </thead> <tbody> <tr> <td>FY 2009</td> <td>100%</td> </tr> <tr> <td>FY 2010</td> <td>60%</td> </tr> <tr> <td>FY 2011</td> <td>100%</td> </tr> <tr> <td>FY 2012</td> <td>83%</td> </tr> <tr> <td>FY 2013</td> <td>83%</td> </tr> <tr> <td>FY 2014</td> <td>100%</td> </tr> </tbody> </table> | Fiscal Year | Performance (%) | FY 2009 | 100% | FY 2010 | 60% | FY 2011 | 100% | FY 2012 | 83% | FY 2013 | 83% | FY 2014 | 100% |
| Fiscal Year | Performance (%) | | | | | | | | | | | | | | |
| FY 2009 | 100% | | | | | | | | | | | | | | |
| FY 2010 | 60% | | | | | | | | | | | | | | |
| FY 2011 | 100% | | | | | | | | | | | | | | |
| FY 2012 | 83% | | | | | | | | | | | | | | |
| FY 2013 | 83% | | | | | | | | | | | | | | |
| FY 2014 | 100% | | | | | | | | | | | | | | |
| Strategic Alignment | Strategic Goal G1: Transform the Frontiers of Science and Engineering, Objective O3: Provide world-class research infrastructure to enable major scientific advances. | | | | | | | | | | | | | | |
| Lead Organization/s | Large Facilities Office, Office of Budget, Finance, and Award Management | | | | | | | | | | | | | | |

Goal 3: Use Evidence to Guide Management Decisions

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| Goal Statement | Use evidence-based reviews to guide management investments. |
| Indicator and Target Measure, Milestone, or Deliverable | <p>PortfolioStat measures:</p> <ul style="list-style-type: none"> • NSF’s information technology governance boards will evaluate and prioritize proposed investments for FY 2017. • NSF’s information technology governance boards will use cost and schedule data for ongoing investments to inform investment decisions for FY 2018. <p>HRStat measures:</p> <ul style="list-style-type: none"> • Establish indicators to assess progress of three workforce initiatives designed to meet the objectives of the Opportunities for Action in NSF’s FY 2014 Strategic Review for Strategic Goal 3, Objective 1. • During FY 2016, focus at least two evidence-based reviews on the three identified workforce initiatives. |
| Description | <p>This goal captures NSF’s commitment to two government-wide processes, PortfolioStat and HRStat, which aim to ensure that decisions regarding resource investments are made through formal processes involving cross-agency decision-makers. Data regarding business need, cost, and risk-analysis will be provided. This approach to decision making promotes transparency and accountability through data driven decision-making.</p> <p>As directed in OMB M-12-10, “Implementing PortfolioStat,” NSF will employ this new tool to assess the current maturity of its IT portfolio management process, make decisions on eliminating duplication, augment current Chief Information Officer (CIO)-led capital planning and investment control processes, and move to shared solutions in order to maximize the return on IT investments across the portfolio.</p> <p>NSF will build upon its experience as a HRStat pilot in 2012-2013, incorporate lessons learned from the development of its human capital dashboard, and continue to update and refine its evidence based review process (incorporating it into the Strategic Review process), as it establishes indicators and methods to measure human capital management initiatives aligned with the goals set out in the NSF Strategic Plan.</p> |
| Trend Information | Since FY 2011, the Office of the Chief Human Capital Officer (CHCO) has led three performance goals per year relating to human resources development. For more information about those goals, refer to the Annual Performance Reports for those years. |
| Strategic Alignment | Strategic Goal G3: Excel as a Federal Science Agency, all Objectives. |
| Lead Organization/s | Office of the CIO and Office of the CHCO, Office of Information and Resource Management |

Goal 4: Make Timely Award Decisions

| Goal Statement | 1) Inform applicants whether their proposals have been declined or recommended for funding in a timely manner. | | | | | | | | | | | | | | | | | | | | | |
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| Indicator and Target Measure, Milestone, or Deliverable | 1) Inform 75 percent of applicants whether their proposals have been declined or recommended for funding within 182 days, or six months, of deadline, target, or receipt date, whichever is later; | | | | | | | | | | | | | | | | | | | | | |
| Description | Time-to-decision or “dwell time” is the amount of time that passes between receipt of a proposal and notification to the principal investigator about the funding decision. One of the most significant issues raised in customer satisfaction surveys is the time it takes NSF to process proposals. Too long a time period inhibits the progress of research as it delays the funding process, but too short a time period may inhibit the merit review process. | | | | | | | | | | | | | | | | | | | | | |
| Trend Information | <p>NSF has tracked this measure as a performance goal for over a decade and has consistently met a six month target of 70 percent. In FY 2014 the six month target was increased to 75 percent, and NSF met the increased target.</p> <div style="text-align: center;"> <p>Time to Decision Performance Trends, FY 2009-FY 2014</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Time to Decision Performance Trends Data</caption> <thead> <tr> <th>Fiscal Year</th> <th>Performance (%)</th> <th>Target (%)</th> </tr> </thead> <tbody> <tr> <td>FY 2009*</td> <td>61%</td> <td>-</td> </tr> <tr> <td>FY 2010</td> <td>75%</td> <td>70%</td> </tr> <tr> <td>FY 2011</td> <td>78%</td> <td>70%</td> </tr> <tr> <td>FY 2012</td> <td>78%</td> <td>70%</td> </tr> <tr> <td>FY 2013</td> <td>76%</td> <td>70%</td> </tr> <tr> <td>FY 2014</td> <td>72%</td> <td>75%</td> </tr> </tbody> </table> <p>*In FY 2009, this goal was in effect only for the period October 1 through December 31, 2008 (Quarter 1, FY 2009). The goal was suspended for all actions taking place between January 1, 2009 and September 30, 2009 to allow for a greater number of proposals to be processed with the additional funds from the American Recovery and Reinvestment Act of 2009 (ARRA).</p> </div> | Fiscal Year | Performance (%) | Target (%) | FY 2009* | 61% | - | FY 2010 | 75% | 70% | FY 2011 | 78% | 70% | FY 2012 | 78% | 70% | FY 2013 | 76% | 70% | FY 2014 | 72% | 75% |
| Fiscal Year | Performance (%) | Target (%) | | | | | | | | | | | | | | | | | | | | |
| FY 2009* | 61% | - | | | | | | | | | | | | | | | | | | | | |
| FY 2010 | 75% | 70% | | | | | | | | | | | | | | | | | | | | |
| FY 2011 | 78% | 70% | | | | | | | | | | | | | | | | | | | | |
| FY 2012 | 78% | 70% | | | | | | | | | | | | | | | | | | | | |
| FY 2013 | 76% | 70% | | | | | | | | | | | | | | | | | | | | |
| FY 2014 | 72% | 75% | | | | | | | | | | | | | | | | | | | | |
| Strategic Alignment | Strategic Goal G3: Excel as a Federal Science Agency, Objective O2: Use effective business methods and innovative solutions to achieve excellence in accomplishing the agency’s mission. | | | | | | | | | | | | | | | | | | | | | |
| Lead Organization/s | Office of Integrative Activities, Office of the Director. Office of Budget, Finance, and Award Management. | | | | | | | | | | | | | | | | | | | | | |

Goal 5: Foster an Environment of Diversity and Inclusion

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| Goal Statement | Foster an environment of diversity and inclusion while ensuring compliance with the agency’s equal employment opportunity and civil rights programs. |
| Indicator and Target Measure, Milestone, or Deliverable | <ul style="list-style-type: none"> • Continue to perform as a model EEO agency. • Assist in implementation of two ODI actions within NSF’s D&I Strategic Plan. • Perform two compliance reviews. |
| Description | <p>NSF’s diversity and inclusion goal has several components.</p> <ul style="list-style-type: none"> • For NSF to achieve model EEO agency status in a given year, it must meet and maintain each of the six criteria established by the EEOC. The EEOC refers to these criteria as the “Essential Elements” of a Model Agency, which are: <ol style="list-style-type: none"> 1. Demonstrated commitment from agency leadership; 2. Integration of EEO into the agency's strategic mission; 3. Management and program accountability; 4. Proactive prevention of unlawful discrimination; and 5. Responsiveness and legal compliance. <p>NSF’s activities have been aimed towards attainment of Model EEO status for several years and it will continue its efforts to obtain this goal.</p> • The Office of Diversity and Inclusion (ODI) will work collaboratively with the NSF Chief Human Capital Officer (CHCO) and the Office of Human Resource Management in implementing NSF’s first D&I Strategic Plan focusing on specific areas of engagement and in fostering a diverse and inclusive work environment. ODI will continue to identify processes and mechanisms for effective implementation of NSF’s D&I Strategic Plan. • Title IX of the Education Amendments of 1972 (hereinafter Title IX) prohibits discrimination based on gender in any educational program or activity receiving federal financial assistance. Additionally, ODI’s compliance program will include desk and on-site reviews to ensure recipients are in compliance under Title IX. NSF is also implementing regulations to ensure that educational programs that receive NSF funds are free of gender discrimination and harassment. (45 C.F.R. § 618). NSF’s regulations under Title VI of the Civil Rights Act of 1964 incorporates NSF’s Title IX compliance responsibilities, which require the agency to conduct periodic review of recipient practices to determine if they are in compliance. <p>NSF has adopted a philosophy that involves serving as a resource to grantees while maintaining a balance of identifying and reporting on “career-life” best practices and ensuring full compliance. NSF’s process will involve educating its stakeholders on the roles and responsibilities under Titles IX and VI as well as NSF’s specific compliance process, which includes a strong communication strategy to all stakeholders, inclusive of NSF’s internal staff and grantees.</p> |

Goal 5: Foster an Environment of Diversity and Inclusion (continued)

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| Goal Statement | Foster an environment of diversity and inclusion while ensuring compliance with the agency’s equal employment opportunity and civil rights programs. |
| Description (continued) | For compliance reviews, NSF will use collaborative approaches that are modeled specifically for its programs and adopted from effective proven models for conducting annual desk and site reviews as part of its risk assessment as well as its Business Systems Review processes. Similar to these models, NSF’s compliance process will involve: making neutral, nonrandom selections for review, based on criteria which may include the amount of financial assistance, the location and size of the institution, the demographic composition of the science and math programs granted, the potential impact of a review, and the recentness of a compliance review; engaging and collaborating with recipients; assisting in ensuring basic compliance; and focusing on best practices. NSF’s compliance model will also involve conducting desk reviews to gather preliminary compliance information in which participants will be selected based on neutral criteria referenced earlier. NSF will request information needed to evaluate whether a recipient’s policies, procedures, and practices are consistent with Title IX and Title VI requirements, NSF’s regulations, and other relevant guidelines. |
| Trend Information | NSF has been tracking its progress towards Model EEO Agency status as a performance goal since FY 2011. In FY 2011, NSF exceeded its baseline goal of three elements by attaining four of six elements. In FY 2012 and FY 2013, five of six elements were attained. In FY 2014, four of six elements were achieved. |
| Strategic Alignment | Strategic Goal G3: Excel as a Federal Science Agency, all Objectives. |
| Lead Organization/s | Office of Diversity and Inclusion, Office of the Director |

Goal 6: Evaluate NSF Investments

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| Goal Statement | Enable consistent evaluation of the impact of NSF investments with a high degree of rigor and independence. |
| Indicator and Target Measure, Milestone, or Deliverable | By September 30, 2016, the NSF Evaluation and Assessment Capability (EAC) will have updated its evaluation quality principles and disseminated them to all directorates. These quality principles will be followed by all new evaluation projects across the agency. NSF will have incorporated logic models/theory of change language in the rationale for all new programs (expected outputs and outcomes). |
| Description | <p>The mission of the EAC is to enable NSF to consistently evaluate the impacts of its investments, make more data-driven decisions, and establish a culture of evidence-based planning and policy-making. Before EAC, all evaluation activities were managed within the directorate of the program being evaluated with little centralized coordination. Although the distributed approach allows for the input of local program knowledge, there are significant advantages to building evaluation capacity centrally in order to promote rigor, integrate evaluation into performance management, and ensure that the results of evaluation are consistently used to inform decisions. While directorates and offices will continue to manage their respective program evaluations, EAC will provide foundation-wide leadership and coordination, providing a set of quality principles and evaluation policies applicable NSF-wide that will assure consistency and the best use of evaluation dollars. This includes EAC coordination of NSF cross-cutting programs and initiatives.</p> <p>EAC has made progress exploring the frontier in evaluation of research investments with national experts convened in a series of workshops to inform a framework that establishes levels of evidence and rigor for different types of programs, including basic research programs. The EAC piloted a peer review mechanism for statements of work and evaluation designs against evaluation quality principles. EAC has also clarified roles and responsibilities for an integrated evidence-based system for decision-making, formation of the internal evaluation working group, and establishing mechanisms to design and supervise cross-cutting evaluations.</p> <p>A national leader to head the EAC and additional staff will be in place in FY 2015.</p> |
| Trend Information | This performance goal was new in FY 2015. |
| Strategic Alignment | <p>Strategic Goal 1: Transform the Frontiers of Science and Engineering, all Objectives.</p> <p>Strategic Goal 2: Stimulate Innovation and Address Societal Needs through Research and Education, all Objectives.</p> <p>Strategic Goal 3: Excel as a Federal Science Agency, all Objectives.</p> |
| Lead Organization/s | Office of Integrative Activities, Office of the Director |

Goal 7: Increase the Percentage of Wholly Virtual Panels.

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| Goal Statement | Increase the percentage of proposal review panels that are conducted wholly virtually while maintaining the quality of the merit review process. |
| Indicator and Target Measure, Milestone, or Deliverable | At least 40 percent of merit review panels will be wholly virtual panels. |
| Description | The merit review process is NSF’s most critical business function. Increased proposal submissions without attendant increases in staff have resulted in increased workload for staff and reviewers. Virtual panels can be an effective mechanism to improve efficiency. |
| Trend Information | This is a new goal in FY 2016. Earlier performance goals to improve the efficiency of proposal review encouraged virtual panels as a potential mechanism. |
| Strategic Goal Linkage, FY 2014-FY 2018 Strategic Plan | Strategic Goal: “Excel as a Federal Science Agency” Strategic Objective: “Use effective business methods and innovative solutions to achieve excellence in accomplishing the agency’s mission.” |
| Lead Organization/s | NSF Chief Technology Officer (CTO) Office of Integrative Activities |