FY 2018 ANNUAL PERFORMANCE PLAN

NSF's FY 2018 Annual 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 2018. The remaining pages of this section provide a detailed description of each goal along with the proposed target measures, milestones, or deliverables.

	Performance Goal	Lead Organization	Goal Statement
1	Ensure that Key Program Investments are on Track	BFA	Ensure that key FY 2018 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 Management Decisions	OIRM	Use evidence-based reviews to guide management investments.
4	Make Timely Award Decisions	OIA/OD and BFA	Inform applicants whether their proposals have been declined or recommended for funding in a timely manner.
5	Improve Review Quality	OIA/OD	Improve the quality of written reviews of NSF proposals.
6	Foster a Culture of Inclusion	ODI/OD	Foster a culture of inclusion through change management efforts resulting in change leadership and accountability.

Goal 1: Ensure that Key Program Investments are on Track

Goal Statement	Ensure that key FY 2018 NSF-wide program investments are implemented and on track.
Indicator and Target Measure, Milestone, or Deliverable	1. Monitor the progress of the following NSF-wide investments using a common set of milestones and indicators: NSF INCLUDES, INFEWS, Risk and Resilience, and UtB. 2. Review the results with senior leaders quarterly in data-driven performance reviews.
Description	Each year, NSF highlights a number of cross-agency investments in the NSF-Wide Investments chapter of its Budget Request to Congress. Although the overall impact of these investments will not be realized for many years, tracking near-term indicators of implementation and progress can help the agency make formative changes or course corrections. Key investments will be strategically monitored using a set of common metrics. These may include: • 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. Progress will be assessed quarterly and discussed at quarterly review meetings with leadership.
Trend Information	This has been a goal since FY 2014. The list of monitored programs is subject to change each year based on investment priorities for a particular year.
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) projects 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 10 percent complete are not considered eligible for this goal because Earned Value Management (EVM) data are statistically less meaningful in early stages. The final Q4 EVM results are used to determine whether NSF has met this goal.
Trend Information	**Construction Project Monitoring Performance Trends, FY 2012-2012-2018** Target 100% FY 2012: 83%, FY 2013: 83%, FY 2014: 100%, FY 2015: 83%, FY 2016: 66%
Lead Organization/s	Large Facilities Office, Office of Budget, Finance, and Award Management
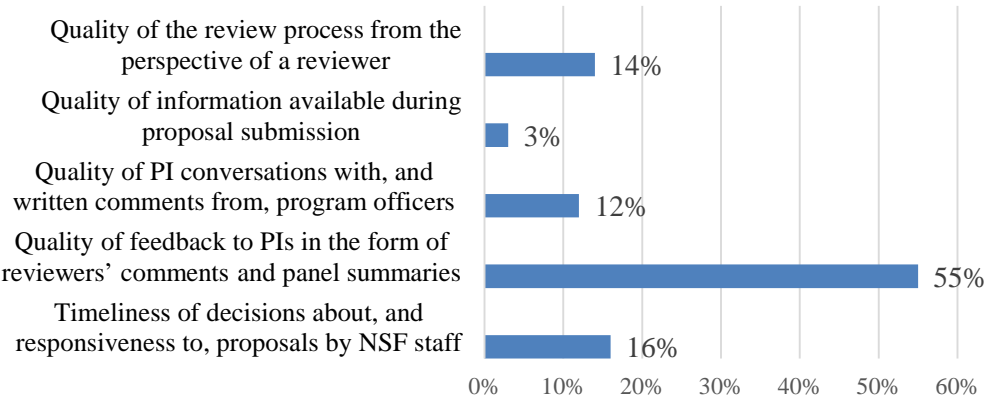
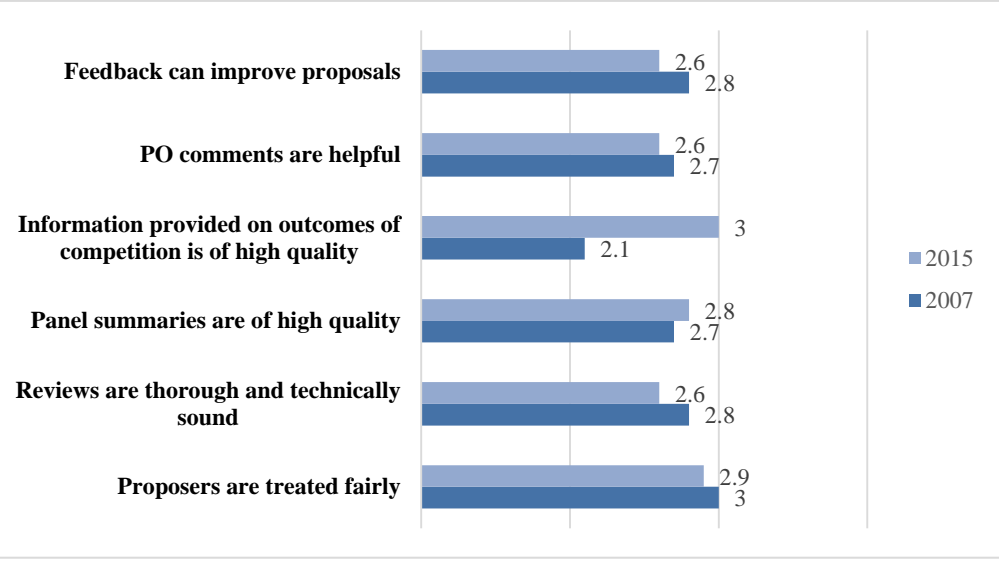**Goal 3: Use Evidence to Guide Management Decisions**

Goal Statement	Use evidence-based reviews to guide management investments.
Indicator and Target Measure, Milestone, or Deliverable	PortfolioStat: 1. NSF's information technology governance boards will evaluate and prioritize proposed investments for FY 2019. 2. NSF's information technology governance boards will maintain a "green status" with investments on the Federal IT Dashboard for cost and schedule attributes (within 10 percent of target) associated with major IT investments. HRStat: NSF will develop metrics and targets to monitor the progress of three initiatives relating to NSF's new Strategic Plan, new OPM or Administration initiatives, and/or NSF's Headquarters relocation.
Description	This goal captures NSF's commitment to two government-wide accountability processes, PortfolioStat and HRStat, which aim to ensure that decisions regarding resource investments are made through formal processes using evidence that involve decision makers from across the agency. Data regarding business need, cost, and risk-analysis will be provided. This data-driven approach to decision making promotes transparency and accountability. As directed in OMB M-12-10, "Implementing PortfolioStat", NSF has employed this tool to assess the maturity of its IT portfolio management process, make decisions on eliminating duplication, augment current capital planning and investment control processes, and move to shared solutions in order to maximize the return on IT investments across the portfolio. NSF will build upon its experience with HRStat, incorporate lessons learned from the development of its human capital dashboard, and continue to update and refine its evidence-based 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.
Trend Information	Monitoring the IT investment portfolio and the implementation of HR Stat has been a performance goal since FY 2014.
Lead Organization/s	Offices of the Chief Information Officer and the Chief Human Capital Officer, Office of Information and Resource Management

Goal 4: Make Timely Award Decisions

Goal Statement	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.
Indicator and Target Measure, Milestone, or Deliverable	75 percent.
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. An important issue 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 weaken the merit review process by forcing premature decisions. The optimal dwell time depends on a number of factors including the complexity of the proposed activity, the need for co-review by more than one panel, the need for site review, infrastructure requirements of the proposed activity, and the potential size of the award. Large, complex proposals require more time under review to ensure that taxpayer dollars are invested wisely.
Trend Information	NSF has tracked six month dwell time as a performance goal for over a decade and has consistently met a target of 70 percent. In FY 2015, the six month target was increased to 75 percent. **Time to Decision Performance Trends, FY 2012-2018** FY 2012: 78% / 70% FY 2013: 76% / 70% FY 2014: 72% / 70% FY 2015: 76% / 75% FY 2016: 77% / 75% FY 2017: 75% FY 2018: Target 75%
Lead Organization/s	Office of Integrative Activities, Office of the Director Office of Budget, Finance, and Award Management

Goal 5: Improve Review Quality

Goal Statement	Improve the quality of written reviews of NSF proposals.
Indicator and Target Measure, Milestone, or Deliverable	By September 30, 2018, 1. 50 NSF programs will have held orientation sessions that include "Tips on how to write better reviews." 2. 5000 reviewers of NSF proposals will have viewed "Tips on how to write better reviews" prior to preparing written reviews.
Description	This goal addresses feedback from a 2015 survey of people submitting proposals to NSF and those who review proposals. Survey respondents identified the quality of reviews as an important factor in improving their proposals and fostering science (see chart below). This goal also follows-through on analysis and input from other NSF planning activities: first, a strategic review in FY 2015 recommended that NSF use what was learned from the survey to inform a new performance goal aimed at improving customer service; second, Committees of Visitors (COVs), program officers, and principal investigators have frequently noted that the quality of individual written reviews were variable. In the survey, proposers were asked "which of the following factors will have the most significant effect in fostering science?" The following chart shows the percentage of responses for each factor from 22,714 respondents.

The centerpiece of this goal is a pilot program, initiated in December 2016, to improve the quality of written reviews of NSF proposals. The pilot program encourages NSF programs to use early reviewer orientation via webinar to provide reviewers with information on how to write more effective reviews, along with instructions on conflicts of interest and other specific information about the program or solicitation. The webinar helps reviewers understand the review criteria and gives them an opportunity to ask questions they may have about the application of those criteria. The intention is to make written reviews more useful to both principal investigators and NSF program staff.

Outputs from the pilot program that NSF will track in FY 2018 include the number of NSF programs that adopt the webinar orientation sessions and the number of reviewers who have viewed the webinar. |

Trend Information	This is a new performance goal in FY 2018. Proposer surveys conducted in 2007 and 2015 informed this pilot. The chart below shows the average proposer perceptions of feedback received on NSF proposals. In FY 2019 NSF anticipates tracking the impact of the pilot program by surveying proposers again to learn whether the perceived quality of reviews increases. Note that the anticipated survey will take upwards of a year to field and analyze following the pilot program. Feedback can improve proposals — 2.6 (2015), 2.8 (2007) PO comments are helpful — 2.6 (2015), 2.7 (2007) Information provided on outcomes of competition is of high quality — 3 (2015), 2.1 (2007) Panel summaries are of high quality — 2.8 (2015), 2.7 (2007) Reviews are thorough and technically sound — 2.6 (2015), 2.8 (2007) Proposers are treated fairly — 2.9 (2015), 3 (2007) Scale: Strongly Disagree · Disagree · Agree · Strongly Agree
Lead Organization/s	Office of Integrative Activities, Office of the Director

Goal 6: Foster a Culture of Inclusion

Goal Statement	Foster a culture of inclusion through change management efforts resulting in change leadership and accountability.
Indicator and Target Measure, Milestone, or Deliverable	1. By September 30, 2018, ODI will conduct the new IQ process with four organizational units. 2. Improve the four NSF organizational units' New IQ Self-Survey Scores by five percent above established baseline.
Description	Fostering inclusive work environments and realizing the full potential of the workforce's diversity requires agencies to employ effective management practices. The Office of Personnel Management (OPM), in partnership with the Department of Veterans Affairs, developed the New Inclusion Quotient (New IQ) in FY 2013 to drive inclusive intelligence in the federal workplace. Inclusive intelligence is the intentional, deliberate, and proactive acts that increase work group intelligence by ensuring people feel they belong and are uniquely valued. The New IQ consists of 20 questions identified through a rigorous factor analysis trial of the Federal Employee Viewpoint Survey (FEVS) questions with the highest correlation to inclusive environments. The questions are grouped into five habits of inclusion, F.O.C.S.E (Fair, Open, Cooperative, Supportive, Empowering). OPM's Office of Diversity and Inclusion (ODI) developed a process to supplement use of the New IQ. The process uses a set of change management tools that equip agencies with instruments and practices necessary to support diversity and inclusion more fully. The 90-day process is designed to help leaders strengthen their workplace teams to their fullest potential by leveraging unique experiences, perspectives, and viewpoints of all members of the team. A self-survey is conducted at the beginning of the ninety-day process to establish a baseline and then again at the end of the process. The expected outcome of the process is that the leaders will improve the employee engagement levels of their employees, resulting in an increase in the overall New IQ scores and corresponding FEVS scores over time. The New IQ Contagious Change Framework begins with training a small number of people in a set of behaviors, with the expectation that when spread throughout the organization these behaviors will result in sustainable change. NSF has realized slippage in the FEVS inclusion-related results over several years and recognizes that having a workforce comprised of a mix of permanent and temporary rotator staff requires specific targeted efforts to ensure that behaviors are learned, practiced, and developed into habits of inclusiveness. In addition, NSF's workforce is challenged on another inclusion front with the administrative and scientific staffs' feelings about uniqueness and belongingness. NSF anticipates that implementing the New IQ process in several of NSF's organizational units will initiate a set of behavior changes that can become contagious habits of inclusion throughout the Foundation.

Description, continued	NSF ODI will implement the New IQ process in an organizational component in six steps: 1) Meet with the leadership team, provide an overview of the New IQ process, and set up their New IQ survey; 2) Meet with leadership team, review respective New IQ scores, identify implementation dates and identify potential change agents; 3) Conduct change agent training with 10 to 20 selected participants; 4) Conduct 4 hour New IQ workshop for the organization's participants; 5) Conduct regular checkups over 6 weeks with workshop participants; and 6) Conduct 90 minute action planning seminar to review participant action plan and make modifications to ensure success.
Trend Information	NSF has had a performance goal relating to diversity and inclusion since FY 2011. Focusing specifically on inclusion represented a new direction for this goal in FY 2016 to reflect the priorities of current leaders at NSF and those of the federal and private sectors in general.
Lead Organization/s	Office of Diversity and Inclusion, Office of the Director