

VIII. TRANSITION FROM FY 2002 TO FY 2003

This section compares goals contained in the FY 2002 Revised Final GPRA Performance Plan with those contained in the FY 2003 GPRA Revised Final Performance Plan. Significant changes are discussed. Minor wording revisions that were made to clarify goals are not included.

ANNUAL PERFORMANCE GOALS FOR NSF STRATEGIC OUTCOMES

FY 2002 Performance Goal: People – Developing “a diverse, internationally competitive and globally engaged workforce of scientists, engineers and well-prepared citizens.”

FY 2002 Performance Indicators:

- Development of well-prepared scientists, engineers or educators whose participation in NSF activities provides them with the capability to explore frontiers and challenges of the future;
- Improved science and mathematics performance for U.S. K-12 students involved in NSF activities;
- Professional development of the SMET instructional workforce involved in NSF activities;
- Contributions to development of a diverse workforce through participation of underrepresented groups (women, underrepresented minorities, persons with disabilities) in NSF activities;
- Participation of NSF-supported scientists and engineers in international studies, collaborations, or partnerships;
- Enhancement of undergraduate curricular, laboratory or instructional infrastructure; and
- Awardee communication with the public in order to provide information about the process and benefits of NSF-supported science and engineering activities.

FY 2003 Performance Goal: People – Developing “a diverse, internationally competitive and globally engaged workforce of scientists, engineers and well-prepared citizens.” (Unchanged)

FY 2003 Performance Indicators:

- Development of well-prepared researchers, educators or students whose participation in NSF activities provides experiences that enable them to explore frontiers or challenges of the future;
- Contributions to development of a diverse workforce through participation of underrepresented groups* in NSF activities;
- Development or implementation of other notable approaches or new paradigms** that promote progress toward the PEOPLE outcome goal.

* For example, women, underrepresented minorities or persons with disabilities

** For example, broad-based, program-wide results that demonstrate success related to improved math and science performance for preK-12 students, or professional development of the STEM instructional workforce, or enhancement of undergraduate curricular/laboratory/instructional infrastructure, or highly synergistic education and research activities, or international collaborations, or communication with the public regarding science and engineering.

Explanation of change: In order to facilitate and focus reporting activities, the People, Ideas, and Tools outcome goals in the FY 2003 plan have fewer indicators than did the FY 2002 outcome goals. The new set of indicators is largely derived from the FY 2002 set.

VIII. – Transition FY 2002 to 2003

FY 2002 Performance Goal: After three years of NSF support, over 80 percent of schools participating in systemic initiative programs will:

- (1) implement a standards-based curriculum in science and mathematics with at least one-third of their teachers;
- (2) provide professional development for at least one-third of their teachers; and
- (3) improve student achievement on a selected battery of math and science tests at one or more of three educational levels (elementary, middle and high school).

FY 2003 Performance Goal: No goal included.

Explanation of Change: For FY 2002 NSF has reapportioned a substantial amount of the funds for the Systemic Initiatives to support the new Presidential Math and Science Partnership (MSP) activity. No new competitions or awards are anticipated under the Systemic programs. A goal related to the MSP has been included in the FY 2003 GPRA Performance Plan.

FY 2002 Performance Goal: IDEAS – Enabling “discovery across the frontier of science and engineering, connected to learning, innovation, and service to society.”

FY 2002 Performance Indicators:

- Discoveries that expand the frontiers of science, engineering, or technology;
- Discoveries that contribute to the fundamental knowledge base;
- Leadership in fostering newly developing or emerging areas;
- Connections between discoveries and their use in service to society;
- Connections between discovery and learning or innovation; and
- Partnerships that enable the flow of ideas among the academic, public or private sectors.

FY 2003 Performance Goal: IDEAS – Enabling “discovery across the frontier of science and engineering, connected to learning, innovation, and service to society.” (Unchanged)

FY 2003 Performance Indicators:

- Discoveries that expand the frontiers of science, engineering, or technology;
- Connections between discoveries and their use in service to society;
- Partnerships that enable the flow of ideas among the academic, public or private sectors;
- Leadership in fostering newly developing or emerging areas.

Explanation of change: In order to facilitate and focus reporting activities, the People, Ideas, and Tools outcome goals in the FY 2003 plan have fewer indicators than did the FY 2002 outcome goals. The new set of indicators is largely derived from the FY 2002 set.

FY 2002 Performance Goal: TOOLS – Providing “broadly accessible, state-of-the-art and shared research and education tools.”

FY 2002 Performance Indicators:

- Provision of facilities, databases or other infrastructure that enable discoveries or enhance productivity by NSF research or education communities;
- Provision of broadly accessible facilities, databases or other infrastructure that are widely shared by NSF research or education communities;
- Partnerships, e.g., with other federal agencies, national laboratories, or other nations to support and enable development of large facilities and infrastructure projects;
- Use of the Internet to make SMET information available to the NSF research or education communities;

- Development, management, or utilization of very large data sets and information-bases; and
- Development of information and policy analyses that contribute to the effective use of science and engineering resources.

FY 2003 Performance Goal: TOOLS – Providing “broadly accessible, state-of-the-art and shared research and education tools.” (Unchanged)

FY 2003 Performance Indicators:

- Development or provision of tools* that enables discovery or enhances productivity of NSF research or education communities;
- Partnerships with local, state or federal agencies, national laboratories, industry or other nations to support and enable development of large facilities or other infrastructure;
- Development or implementation of other notable approaches or new paradigms** that promote progress toward the TOOLS outcome goal.

* For example, includes research and education infrastructure such as large centralized facilities, or integrated systems of leading-edge instruments, or databases, or widely utilized, innovative computational models or algorithms, or information that provides the basis for a shared-use networked facility.

** For example, broad-based, program-wide results that demonstrate success related to management/utilization of large data sets/information bases, or development of information and policy analyses, or use of the Internet to make STEM information available to NSF research or education communities, or exceptional examples of broadly accessible tools shared by NSF research and education communities.

Explanation of change: In order to facilitate and focus reporting activities, the People, Ideas, and Tools outcome goals in the FY 2003 plan have fewer indicators than did the FY 2002 outcome goals. The new set of indicators is largely derived from the FY 2002 set.

ANNUAL PERFORMANCE GOALS FOR NSF MANAGEMENT

FY 2002 Performance Goal: Reviewers will address the elements of both generic review criteria at a level above that of FY 2001.

FY 2002 Performance Indicator: Percent of reviews using both merit review criteria.

FY 2003 Performance Goal: At least 70 percent of reviews with written comments will address aspects of both generic review criteria.

Explanation of change: The goal was modified based on internal deliberations.

FY 2002 Performance Goal: Program Officers will consider elements of both generic review criteria in making decisions to fund or decline proposals.

FY 2002 Performance Indicator: Percent of review analyses (Form 7s) that comment on aspects of both merit review criteria as determined by directorate or advisory committee sampling.

FY 2003 Performance Goal: For at least 80 percent of decisions to fund or decline proposals, program officers will comment on aspects of both generic review criteria.

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Explanation of change: The goal was modified based on internal deliberations.

FY 2002 Performance Goal: Establish a baseline for participation of members of underrepresented groups in NSF proposal review activities.

FY 2003 Performance Goal: No goal included.

Explanation of change: Collection of voluntarily-provided demographic data from reviewers began in FY 2001 and is ongoing. This data is still being assessed. The information obtained will allow NSF to consider the feasibility of developing future performance goals in this area.

FY 2002 Performance Goal: NSF will develop and initiate a risk assessment/risk management plan for awards.

FY 2002 Performance Indicators:

- Development of an appropriate risk assessment model.
- Development of an effort analysis to determine necessary resource allocation (personnel, travel and training).
- Completion of a pilot program testing the risk assessment monitoring tools at several high-risk awardee institutions.

FY 2003 Performance Goal: No goal included.

Explanation of change: As a result of the development and implementation of a risk assessment / risk management plan in FY 2002, improved award monitoring and oversight will be embedded throughout NSF activities. Therefore this goal will be completed in FY 2002 and will be discontinued in FY 2003.

FY 2002 Performance Goals:

- For ninety percent of facilities, keep construction and upgrades within annual expenditure plan, not to exceed 110 percent of estimates.
- Ninety percent of facilities will meet all major annual schedule milestones.
- For all construction and upgrade projects initiated after 1996, when current planning processes were put in place, keep total cost within 110 percent of estimates made at the initiation of construction.

FY 2003 Performance Goal: For ninety percent of construction, acquisition and upgrade projects, keep any negative cost and schedule variances to less than 10 percent of the approved project plan.

Explanation of change: NSF has improved the construction goals by combining cost and schedule performance into a single goal based on the Earned Value technique, a widely accepted project management tool for measuring progress. This change recognizes that cost or schedule data alone can lead to distorted perceptions of performance.

FY 2002 Performance Goal: NSF will continue to advance the role of “e-business” in review, award, and management processes.

FY 2002 Performance Indicator: NSF will double the FY 2001 number of paperless projects that manage the competitive review process in an electronic environment.

FY 2003 Performance Goals:

- NSF will continue to advance "e-business" by receiving through FastLane and processing electronically 90 percent of Principal Investigator award transfers.
- NSF will continue to advance "e-business" by implementing Phase III of the Electronic Jacket application.

FY 2003 Performance Indicator: Implementation of the electronic capability for assigning proposal processing tasks, forwarding proposals to other programs as necessary, and delegating proposal action authority.

Explanation of change: The Foundation is moving towards an electronic environment capable of performing all internal and external functions from proposal submission through final project closeout. The FY 2003 goal retains the emphasis on e-business while continuing progress on new tasks in this area.

FY 2002 Performance Goal: NSF will implement an agency-wide security program in response to the Government Information Security Reform Act.

FY 2002 Performance Indicators:

- Risk assessments and certification to operate will be documented and retained.
- Policies will be developed and disseminated.
- Security management structure will be implemented.
- Security related changes to personnel policies (as necessary) will be documented.

FY 2003 Performance Goal: NSF will maintain and enhance the agency-wide security program to ensure adequate protection of NSF's Information Technology (IT) infrastructure and critical assets.

FY 2003 Performance Indicators:

- 95 percent of major systems will have approved security plans on file.
- 95 percent of major systems will have documented certification and accreditation.

Explanation of change: The Foundation is continuing to focus on assuring that NSF infrastructure and critical assets are protected. The FY 2003 goal is an extension of the efforts initiated in FY 2002 to establish a security program. The goal retains the emphasis on IT security, complies with the Government Information Security Reform Act, recognizes identified management challenges and audit findings, and is supportive of the government-wide emphasis on security.

FY 2002 Performance Goal: NSF will show an increase over FY 2000 in the total number of hires to NSF science and engineering positions from underrepresented groups.

FY 2003 Performance Goal: NSF will show an increase over FY 2000 in the total number of appointments to NSF science and engineering staff and management from underrepresented groups.

Explanation of change: The goal statement has been adjusted based on actual performance data from FY 2002. Recognizing that we have achieved this goal in each of the 3 years we've monitored this effort, the Foundation has decided to expand the previous goal to include Assistant Directors, Division Directors and others in order to ensure the goal is continuously challenging.

VIII. – Transition FY 2002 to 2003

FY 2002 Performance Goal: NSF will establish an internal NSF Academy to promote continuous learning for NSF staff.

FY 2002 Performance Indicator: Availability of new or revised courses that contribute to an organized curriculum for NSF staff.

FY 2003 Performance Goal: NSF will align or develop competency-based curricula, through the NSF Academy, that provide cross-functional, work-based team learning opportunities.

FY 2003 Performance Indicator: Initiate development of new courses or revision of existing courses to address program management, leadership development, and technology and business process training.

Explanation of change: The Foundation is continuing to focus on assuring that continued professional development opportunities are available for NSF staff. The FY 2003 goal reflects this commitment and is an extension of the effort initiated in FY 2002 to establish an Academy. Further development of curricula and deployment of new course offerings will be the primary focus in FY 2003, with emphasis on workforce learning. Curricula addressing those functions most essential to the efficient operation and management of the Foundation will be the highest priority.

FY 2002 Performance Goal: NSF will initiate a strategic business analysis to provide a comprehensive perspective on its future workforce requirements.

FY 2002 Performance Indicators:

- Request for Proposals to perform the strategic business analysis will be released.
- Skill mix / competencies of the NSF workforce will be examined.

FY 2003 Performance Goal: NSF will develop competency-based, occupation classification alternatives that support the agency's strategic business processes and capitalize on its technology enabled business systems.

FY 2003 Performance Indicators:

- Identification of workforce competencies for all current NSF job families.
- Initiate identification of competency-based, classification alternatives.

Explanation of change: The FY 2003 goal reflects and is an extension of the FY 2002 effort to initiate a strategic business analysis. While the FY 2003 goal retains an emphasis on assessing future workforce needs, it also represents a transition towards implementation of the preliminary findings / results of the strategic business analysis. The FY 2003 effort includes initial development of human resource standards that link employee competencies with critical business processes and emerging technology.

FY 2002 Performance Goal: NSF will establish various baselines that will enable management to better assess the quality of worklife and work environment within the Foundation.

FY 2002 Performance Indicator: Development of an employee survey.

FY 2003 Performance Goal: No goal included.

Explanation of change: In FY 2002 NSF staff participated in a work environment survey administered by the Office of Personnel Management. The results of this survey are still undergoing assessment.