IV. SUMMARY TABLE OF FY 2000 PERFORMANCE GOALS AND RESULTS

A. AGENCY RESULTS FOR FY 2000

Overall, NSF was successful in achieving 64% - 18 of 28 – of its performance goals. Results in this second year are consistent with those obtained in FY 1999. For example, the following areas were identified as needing improvement: (1) use of both merit review criteria by reviewers and applicants; (2) customer service goals such as decreasing time to decision on proposals; and (3) increasing participation of under-represented groups. NSF will continue to focus on achieving improved performance in these areas in FY 2001 and beyond.

NSF was more rigorous this year in evaluating goal achievement than last year. Options for grading the qualitative Outcome Goals were limited to either *successful* or *not successful* and justification was required for *successful* ratings.

Characterization of NSF's performance for goals stated in the alternative form in FY 2000 benefited from changes made in presentation, process, and use of information from external committees of experts. Changes resulted, in part, from reviews of NSF's FY 1999 Performance Report made by the Administration, Congress, and the private sector that raised issues of quality of information, appropriate justification of ratings, and that questioned NSF's use of a two-tiered rating schema. To alleviate these concerns, NSF engaged an external firm in FY 2000, PricewaterhouseCoopers LLP, to verify achievement data for most goals.

FY 2000 Aggregated Performance Results		
Number of Goals Achieve		
Outcome Goals	6 out of 8 (75%)	
Management Goals	5 out of 6 (83%)	
Investment Process Goals	7 out of 14 (50%); one goal did not apply	
TOTAL	18 out of 28 (64%)	

Aggregated performance results for the agency are presented in brief summary form for each goal in Table 1. Each goal is defined in the table, and results for the goal are briefly stated. A more complete discussion of results for each goal is presented in Section V.

RESULTS FOR OUTCOME GOALS

Six of the eight Outcome Goals (75%) were achieved in FY 2000. External evaluators indicated that NSF successfully achieved Outcome Goals 1 and 2. Information provided by external evaluators indicated that NSF did not achieve Outcome Goals 3 and 4.a, although they noted that NSF performance had improved. NSF also achieved the quantitative Outcome Goals 4.b, 4.c, 5.a and 5.b.

External evaluators commented that programs are showing improvement over FY 1999 performance in the area of increasing diversity through increased participation of under-represented groups. However, they indicated that participation remains lower than expected. Evaluators commented that increasing participation of under-represented groups is an area needing more attention by NSF. In addition, evaluators noted that some NSF program portfolios should include more "high risk" activities. Common issues emerged that could result in reduced program performance; these issues include increasing workload issues and delays in processing proposals (see Investment Process Goal 7). Further discussion of Outcome Goal results and how NSF is addressing these issues as well as others is provided in Section V.A.

RESULTS FOR MANAGEMENT GOALS

Five of NSF's six Management Goals (83%) were achieved in FY 2000. Performance improvements were identified in the orientation and training of NSF staff using FastLane, NSF's electronic system for proposal submission, proposal review, project reporting, and increasing the use of the electronic Project Reporting System for project reporting by awardees.

One Management Goal was not achieved involving NSF's development of the technological capability to submit proposals electronically. The difficulty encountered in FY 2000 which prevented this goal from being achieved, was the establishment of electronic signature protocols. In FY 2001 NSF will pilot ten full electronic review projects to assess the effectiveness of its electronic signature protocols. Further discussion of the Management Goals is provided in Section V.B.

RESULTS FOR INVESTMENT PROCESS GOALS

Seven of NSF's fifteen Investment Process Goals were achieved in FY 2000; seven were not achieved and one of the facility goals did not apply (because there were no construction projects completed during the year). Areas identified as needing improvement include: use of the new merit review criteria by reviewers and applicants; identifying best practices and training for improving customer service; allowing three months time to prepare proposals; decreasing the time to decision; increasing the percentage of awards to new investigators; maintaining facility upgrades and construction on schedule; and keeping operating time lost due to unscheduled downtime to less than 10% of the total scheduled operating time. Discussion of these goals and how NSF is addressing issues is provided in Section V.C.

Table 1 provides a brief summary of the results for each FY 2000 goal which appeared in the NSF FY 2000 Performance Plan. For more detail and discussion of results and goals, see Section V of this report.

TABLE 1. FY 2000 PERFORMANCE GOALS AND RESULTS

ANNUAL PERFORMANCE GOALS AND RESULTS FOR OUTCOMES

OUTCOMES	PERFORMANCE GOALS FOR OUTCOMES	RESULTS
	NSF is judged successful when	
OUTCOME GOAL 1: Discoveries at and across the frontier of science and engineering	PERFORMANCE GOAL 1: NSF awards lead to important discoveries; new knowledge and techniques, both expected and unexpected, within and across traditional disciplinary boundaries; and high-potential links across these boundaries, as judged by independent external experts.	 Baseline: Experiments using FY 1997 and FY 1998 information indicated successful achievement. FY 1999: Goal achieved. Judged successful by external experts in all reports. FY 2000: Goal achieved. Reports by external experts indicate that in the aggregate NSF is successful in achieving this goal.
OUTCOME GOAL 2: Connections between discoveries and their use in service to society	PERFORMANCE GOAL 2: The results of NSF awards are rapidly and readily available and feed, as appropriate, into education, policy development, or use by other federal agencies or the private sector, as judged by independent external experts.	 Baseline: Experiments using FY 1997 and FY 1998 information indicated successful achievement. FY 1999: Goal achieved. Judged successful in the aggregate by external experts who noted improvements can be made in some programs. FY 2000: Goal achieved. Judged successful in the aggregate by external experts who noted improvements can be made in some programs, as in FY 1999.
OUTCOME GOAL 3: A diverse, globally- oriented workforce of scientists and engineers	PERFORMANCE GOAL 3: Participants in NSF activities experience world-class professional practices in research and education, using modern technologies and incorporating international points of reference; when academia, government, business, and industry recognize their quality; and when the science and engineering workforce shows increased participation of under-represented groups, as judged by independent external experts.	 Baseline: Experiments using FY 1997 and FY 1998 information indicated successful achievement. FY 1999: Goal achieved. Judged successful in most areas by external experts. FY 2000: Judged successful in a limited context– goal not fully achieved in the aggregate. Most programs with specific responsibilities for these areas were judged successful. Improvements still needed in the same areas that were identified in FY 1999.

ANNUAL PERFORMANCE GOALS AND RESULTS FOR OUTCOMES - CONTINUED

OUTCOMES	PERFORMANCE GOALS FOR OUTCOMES	RESULTS
OUTCOME GOAL 4: Improved achievement in mathematics and science skills needed by all Americans	PERFORMANCE GOAL 4.3: NSF awards lead to the development, adoption, adaptation, and implementation of effective models, products, and practices that address the needs of all students; well-trained teachers who implement standards-based approaches in their classrooms; and improved student performance in participating schools and districts, as judged by independent external experts.	 Baseline: Preliminary pilot efforts did not provide sufficient information to yield a valid baseline. FY 1999: Goal achieved. Judged successful in the aggregate by external experts for programs to which goal applies. FY 2000: NSF was judged successful in a limited context in the aggregate, and reports this goal as not fully achieved overall. NSF was successful where programs had clear objectives directed toward this goal.
	 PERFORMANCE GOAL 4.b: Over 80 percent of schools participating in a systemic initiative program will: (1) implement a standards-based curriculum in science and mathematics; (2) further professional development of the instructional workforce; and (3) improve student achievement on a selected battery of tests, after three years of NSF support. 	FY 1999: Goal achieved. FY 2000: Goal achieved.
	PERFORMANCE GOAL 4.C: Through systemic initiatives and related teacher enhancement programs, NSF will provide intensive professional development experiences annually for at least 65,000 precollege teachers.	FY 1999: Goal achieved. FY 2000: Goal achieved.

ANNUAL PERFORMANCE GOALS AND RESULTS FOR OUTCOMES- CONTINUED

ОUTCOME	PERFORMANCE GOALS FOR OUTCOMES	RESULTS
OUTCOME OUTCOME GOAL 5: Timely and relevant information on the national and international science and engineering enterprise.	PERFORMANCE GOAL 5.3: Maintain FY 1999 gains in timeliness for an average of 486 days as the time interval between reference period (the time to which the data refer) and reporting of data. <u>FY 1999-2000</u> Goal 486 days Actual 461 days	Baseline: 540 days in 1995- 1996. FY 1999: Goal achieved. FY 2000: Goal achieved.
	PERFORMANCE GOAL 5.D: Establish a standard set of data quality measures for reporting of Science Resource Studies products. Prepare reports on these measures for all SRS surveys and publish them in electronic formats to inform users of SRS data quality. New in FY 2000, replacing the FY 1999 goal on relevance.	Baseline: New goal in FY 2000. FY 2000: Goal achieved.

ANNUAL PERFORMANCE GOALS AND RESULTS FOR MANAGEMENT

PERFORMANCE AREA	PERFORMANCE GOALS FOR MANAGEMENT	RESULTS
NEW AND EMERGI	NG TECHNOLOGIES	
Electronic proposal submission	MANAGEMENT GOAL 1:NSF will receive at least 60% of full proposal submissions electronically through FastLane. FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 Baseline 4.4% 17% Goal 25% 60% 95% Result 44% 81%	FY 1999: Goal achieved. FY 2000: Goal achieved.
Electronic proposal processing	MANAGEMENT GOAL 2: By the end of FY 2000, NSF will have the technological capability to take competitive proposals submitted electronically through the entire proposal and award/declination process without generating paper within NSF.	New goal in FY 2000. FY 2000: Goal not achieved.

ANNUAL PERFORMANCE GOALS AND RESULTS FOR MANAGEMENT - CONTINUED

PERFORMANCE AREA	PERFORMANCE GOALS FOR MANAGEMENT	RESULTS	
NSF STAFF			
Diversity	 MANAGEMENT GOAL 3: In FY 2000, NSF will show an increase over 1997 in the total number of hires to S&E positions from under-represented groups. FY 1997 Baseline: Of S&E hires in 1997, 16 were female and 15 were from under-represented minority groups. FY 2000 Result: Of 113 S&E hires, 35 were female and 19 were from minority groups. Compared with FY 1997 baseline, this represents a 120% increase in female hires and a 27% increase in minority hires. 	New goal in FY 2000. FY 2000: Goal achieved.	
Capability in use of information technology	MANAGEMENT GOAL 4: By the end of FY 2000, all staff will receive an orientation to FastLane, and at least 80% of program and program support staff will receive practice in using its key modules. Orientation FY 1999 Goal 100% Result 80% Training Goal Goal 95% 80% *	FY 1999: Goal not achieved. FY 2000: Goal achieved.	
	Result43%90%* will not be shown as a goal in FY 2001		
IMPLEMENTATION	OF MANAGEMENT REFORMS		
Year 2000	MANAGEMENT GOAL 5: NSF will complete all activities needed to address the Year 2000 problem for its information systems according to plan, on schedule and within budget. Result: All activities needed to address the Year 2000 problem	FY 1999: Goal achieved; revised for FY 2000. FY 2000: Goal achieved.	
	were completed according to plan, on schedule, and within budget.		
Project Reporting	MANAGEMENT GOAL 6: During FY 2000, at least 85% of all project reports will be submitted through the new electronic Project Reporting System.	FY 1999: Goal achieved; target revised for FY 2000.	
System	FY 1999 FY 2000 Goal 70% 85% Result 59% 92%	FY 2000: Goal achieved.	

ANNUAL PERFORMANCE GOALS AND RESULTS FOR INVESTMENT PROCESS

PERFORMANCE AREA	PERFORMANCE GOALS FOR INVESTMENT PROCESS	RESULTS		
PROPOSAL AND A	PROPOSAL AND AWARD PROCESSES			
Use of Merit Review	INVESTMENT GOAL 1: At least 90 percent of NSF funds will be allocated to projects reviewed by appropriate peers external to NSF and selected through a merit-based competitive process. Baseline Goal Result	FY 1999: Goal achieved. FY 2000: Goal		
Keview	FY 1998 90%* FY 1999 90%* FY 2000 80%** (was 90%*) FY 2001 85%** *Based on old definition. **Based on most recent revisions of definitions by OMB.	achieved.		
Implementation of Merit Review Criteria	INVESTMENT GOAL 2: NSF performance in implementation of the new merit review criteria is <i>successful</i> when reviewers address the elements of both generic review criteria appropriate to the proposal at hand and when program officers take the information provided into account in their decisions on awards, as judged by external independent experts.	FY 1999: Goal achieved. FY 2000: Goal not achieved.		
Cinteria	 FY 1999 Result: Largely successful as judged by experts. Needs improvement. FY 2000 Result: Not fully successful as judged by experts. Needs improvement. 			
	INVESTMENT GOAL 3: Identify possible reasons for customer dissatisfaction with NSF's merit review system and with NSF's complaint system.	New goal in FY 2000.		
Customer service – General	New goal in FY 2000; not continued in FY 2001. FY 2000 Result: An external customer service survey of NSF applicants was conducted in FY 2000.	FY 2000 : Goal achieved.		
Customer service – General	INVESTMENT GOAL 4: Identify best practices and training necessary for NSF staff to conduct merit review and answer questions about the review criteria and process; identify best practices and training necessary for NSF staff to answer questions from the community and to deal with complaints in a forthright manner.	New goal in FY 2000. FY 2000: Goal not achieved.		
	FY 2000 Results: Goal not completed in FY 2000. Plans to finalize implementation in FY 2001.			

ANNUAL PERFORMANCE GOALS FOR INVESTMENT PROCESS - CONTINUED

PERFORMANCE AREA	PERFORMANCE GOALS FOR INVESTMENT PROCESS	RESULTS
Customer service – General	 INVESTMENT GOAL 5: Improve NSF's overall American Customer Satisfaction Index (ACSI) compared to the FY 1999 Index of 57 (on a scale of 0- 100). FY 2000 Results: NSF achieved an ACSI index of 58 in FY 2000. 	New goal in FY 2000. FY 2000: Goal achieved.
Customer service – Time to prepare proposals	INVESTMENT GOAL 6:95% of program announcements and solicitations will be available at least three months prior to proposal deadlines or target dates.FY 1998FY 1999FY 2000FY 2001Baseline66%Goal95%95%Result75%89%	FY 1999: Goal not achieved. FY 2000: Goal not achieved.
Customer service – Time to decision	INVESTMENT GOAL 7:Maintain the FY 1999 goal to process 70% of proposals within six months of receipt, improving upon the FY 1998 baseline. $\underline{FY 1998}$ $\underline{FY 1999}$ $\underline{FY 2000}$ $\underline{FY 2001}$ Baseline59% $\overline{70\%}$ 70% 70% Goal 70% 70% 70% Result 58% 54%	FY 1999: Goal not achieved. FY 2000: Goal not achieved.
Maintaining openness in the system	INVESTMENT GOAL 8:The percentage of competitive research grants going to new investigators will be at least 30%.FY 1998FY 1999FY 2000FY 2001Baseline27%30%30%30%Goal30%30%30%Result27%28%30%	FY 1999: Goal not achieved. FY 2000: Goal not achieved.

ANNUAL PERFORMANCE GOALS FOR INVESTMENT PROCESS—CONTINUED

PERFORMANCE AREA	PERFORMANCE GOALS FOR INVESTMENT PROCESS	RESULTS		
INTEGRATION OF	INTEGRATION OF RESEARCH AND EDUCATION			
In Proposals	 INVESTMENT GOAL 9: NSF will develop a plan and system to request that Principal Investigators (PIs) address the integration of research and education in their proposals, and develop and implement a system to verify that PIs have done so. Result: In FY 2000, NSF implemented an electronic program announcement template clearance process (PAT) that is used by NSF staff to generate announcements and solicitations. Use of the PAT ensures that the integration of research and education is emphasized in all announcements and solicitations for PIs to address in their submissions. 	New goal in FY 2000. FY 2000: Goal achieved.		
In Reviews	 INVESTMENT GOAL 10: NSF will develop and implement a system/mechanism to request and track reviewer comments tied to merit review criterion #2, "what are the broader impacts of the proposed activity?" (Revised goal.) No baseline. Result: In FY 2000, screens in FastLane were redesigned so that reviewers can address each merit-review criterion separately. The performance data will be collected from the FastLane database. This will be fully implemented in FY 2001. 	New goal in FY 2000. FY 2000: Goal achieved.		
DIVERSITY	DIVERSITY			
NSF Applicants	INVESTMENT GOAL 11: NSF will identify mechanisms to increase the number of women and under-represented minorities in the proposal applicant pool, and will identify mechanisms to retain that pool. Result: NSF identified and put into place mechanisms to increase the diversity of NSF applicants.	New goal in FY 2000. FY 2000: Goal achieved.		

Performance Area	PERFORMANCE GOALS FOR INVESTMENT PROCESS	RESULTS		
FACILITIES OVER	FACILITIES OVERSIGHT			
Construction and upgrade	 INVESTMENT GOAL 12: Maintain FY 1999 goal to keep construction and upgrades within annual expenditure plan, not to exceed 110 percent of estimates. FY 1999 Result: Majority of facilities were within 110 % of annual spending estimates. FY 2000 Result: Of the eleven construction and upgrade projects supported by NSF, all were within annual expenditure plans; most were under budget. 	FY 1999: Goal achieved. FY 2000: Goal achieved.		
	INVESTMENT GOAL 13: Maintain FY 1999 goal to keep construction and upgrades within annual schedule, total time required for major components of the project not to exceed 110 percent of estimates.	FY 1999: Goal achieved. FY 2000: Goal not		
	FY 1999 Result: Majority of facilities on schedule.	achieved.		
	FY 2000 Result: Of the eleven construction and upgrade projects supported by NSF, seven (64%) were within the annual schedule goal and four were not.			
	INVESTMENT GOAL 14: For all construction and upgrade projects initiated after FY 1996, keep total cost within 110 percent of estimates made at the initiation of construction.	FY 1999: Goal did not apply in FY 1999.		
	FY 1999 Result: Did not apply in FY 1999.	FY 2000: Goal did not apply in FY 2000.		
	FY 2000 Result: This goal did not apply in FY 2000.			
	INVESTMENT GOAL 15: Maintain FY 1999 goal to keep operating time lost due to unscheduled downtime to less than 10 percent of the total scheduled operating time.	FY 1999: Inconclusive. FY 2000: Goal not achieved.		
Operations	FY 1999 Result: Reporting data base under development.			
	FY 2000 Result: Of the 26 reporting facilities, 22 (85%) met the goal of keeping unscheduled downtime to below 10% of the total scheduled operating time.			