

Senior NSF staff further review recommendations for awards and declines. When a decision has been made, verbatim copies of reviews, excluding the names of the reviewers, and summaries of review panel deliberations, if any, are provided to the proposer.

Review Processes Used at NSF

The involvement of knowledgeable peers from outside the Foundation in the review of proposals is the keystone of NSF's proposal review system. Their judgments of the extent to which proposals address the NSB-established merit review criteria are vital for informing NSF staff and influencing funding recommendations. NSF programs obtain external peer review by three principal methods: (1) "mail-only," (2) "panel-only," and (3) "mail-plus-panel" review. In addition, site visits by NSF staff and external peers are often used to review proposals for large facilities, centers, and systemic reform initiatives. NSF program officers are given discretion in the specific use of review methods, subject to supervisory approval.

In "mail-only" reviews, peers are sent proposals and asked to submit written comments to NSF through FastLane, NSF's Web-based system for electronic proposal submission and review. These mail reviews are then used by the NSF program officer to support a recommendation for award or decline.

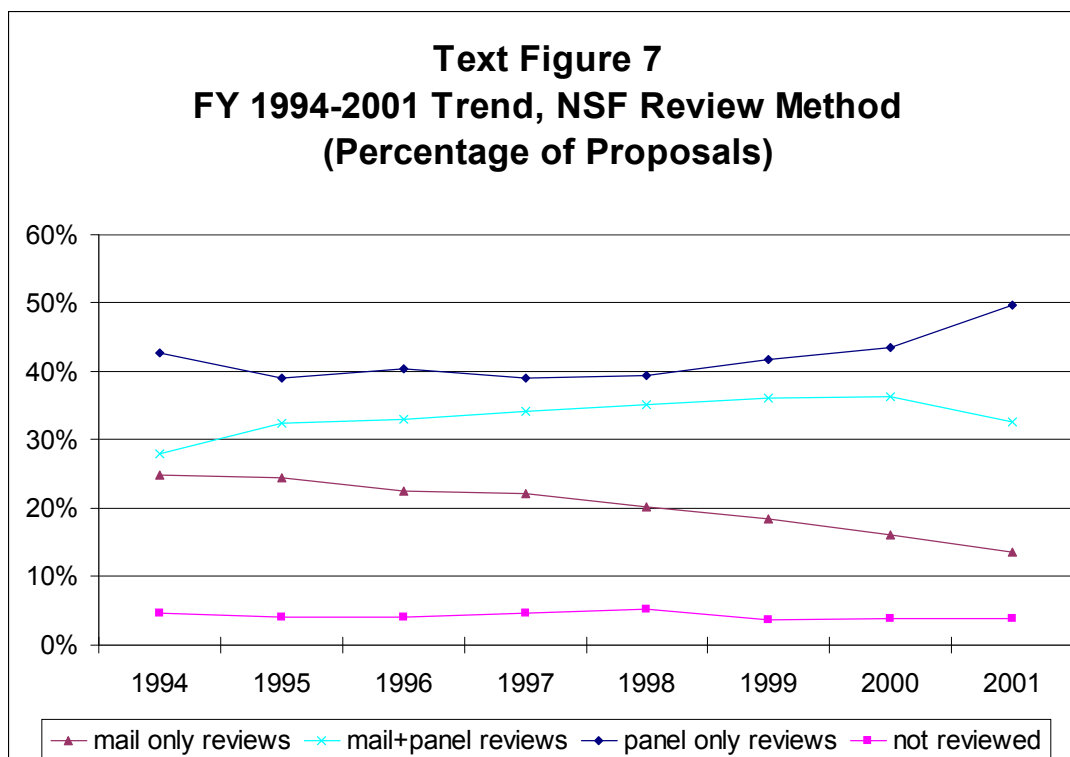
"Panel-only" review refers to the process of soliciting reviews only from those peers who meet in a panel review setting to discuss their reviews and provide advice directly to the program officer. Most programs that use this process provide proposals to panelists and receive their reviews before the panel meeting.

Many proposals submitted to NSF are reviewed using some combination of these two processes ("mail-plus-panel" review). Those programs that employ the mail-plus-panel review process have developed several different configurations, such as:

- A peer is asked to submit a written mail review and also serve as a panelist; and
- A peer is asked to participate only as a panelist, with responsibility only for reviewing and discussing mail reviews written by others and providing verbal and/or written advice to the program officer.

The use of various review methods has changed markedly over time, as shown in **Text Figure 7**, and the corresponding data in **Appendix Table 4**. Since 1994 the percentage of NSF proposals reviewed by panel-only has increased from 43 to 50 percent of all proposals. During the same period, there has been a steady decline in the use of mail-only review from 25 to 14 percent. The use of mail-plus-panel review increased from 28 to 33 percent.

There are a number of reasons for the trend toward panel review. For example, the panel review process permits proposals to be discussed and compared to one another. For this reason, panel review is the norm in evaluating proposals in response to program solicitations and announcements with proposal submission deadlines. The panel review process also has advantages in the evaluation of multidisciplinary proposals, because, unlike mail-only review, viewpoints representing several disciplines can be openly discussed and integrated.



Evaluation of the broader impacts of the proposal is also facilitated by the panel review process. The mail + panel review process is used frequently because it combines the in-depth expertise of mail review with the more comparative analysis of panel review.

Finally, the panel review process requires fewer individual reviewers than the mail-only process. For example a panel of 25 reviewers could possible review 200 proposals, while it may require several hundred mail reviewers to review the same proposals. Also, using panels in the review process tends to reduce proposal processing time (time-to-decision), compared to mail-only reviews. For example, in FY 2001, 70% of all proposals reviewed by panel-only were processed within six months, compared to 58% for mail-plus-panel and 52% for mail-only. Mail review often takes more time because additional reviews must be requested when some of the reviewers in the first set decline to review the proposal.

Directorate-level data on the use of different review processes during FY 2001 are presented in **Appendix Table 5**. For both historical and currently practical reasons, NSF Directorates vary in their use of proposal review methods. Mail-plus-panel review was the predominant review process used in the BIO, GEO, and SBE Directorates while panel-only review was the predominant method in CISE, EHR, ENG and MPS. Mail-only review was the most common mode of review in the Office of Polar Programs (OPP)

Proposal Processing Efficiency – Dwell Time

It is very important for applicants to receive a timely funding decision (dwell time). NSF's FY 2001 GPRA performance goal is, for 70% of proposals, to be able to inform applicants whether their proposals have been declined or recommended for funding within six months of receipt. As indicated in **Text Figure 8**, although NSF did not meet this goal, in FY 2001 62 percent of all

Text Figure 12
Distribution of NSF Program Officers by Characteristics
As of October 1, 2001

	Assistant Program Directors	Associate Program Directors	Program Directors	Total
Total	11	14	352	377
Male	3 27%	8 62%	224 63%	235 62%
Female	8 73%	6 38%	122 35%	136 36%
Not Disclosed	0 0%	0 0%	6 2%	6 2%
Minority	2 18%	3 22%	67 19%	72 19%
White, Non-Hispanic	9 82%	11 78%	274 78%	294 78%
Unknown	0 0%	0 0%	11 3%	11 3%
Permanent	7 64%	8 54%	162 46%	177 47%
VSEE	0 0%	0 0%	35 10%	35 10%
Temporary	1 9%	4 31%	42 12%	47 12%
IPA	3 27%	2 15%	113 32%	118 31%
Source: NSF Division of Human Resource Management Notes: VSEE: Individual employed as a Visiting Scientist, Engineer, or Educator (formerly termed "Rotator"). IPA: Individual employed under the Intergovernmental Personnel Act.				

Depending on their professional experience, program officers are classified as assistant program director, associate program director, or program director. They can be permanent NSF employees or temporary employees. Some temporary program officers are "on loan" as visiting scientists, engineers, and educators (VSEEs) for up to three years from their host institutions. Others are employed through grants to the home institutions under the terms of the Intergovernmental Personnel Act (IPA).

Assuring Objectivity in the Merit Review Process

NSF program officers carefully check all proposals for potential conflict of interest and select expert outside reviewers with no apparent potential conflicts. All reviewers are instructed to declare potential conflicts. All program officers receive conflict-of-interest training annually.

Each program officer's recommendation to award or decline a proposal is subject to a programmatic review by a higher level reviewing official (usually the division director), and an administrative review by a grants officer in the Office of Budget, Finance, and Award

Appendix Table 1

Competitively Reviewed Proposals, Awards and Funding Rates By Directorate, FY 1997- 2001

		Fiscal Year					Five-year	Five-year
		1997	1998	1999	2000	2001	Total	Average
NSF	Proposals	30,237	28,421	28,578	29,507	31,942	148,685	29,737
	Awards	9,935	9,380	9,187	9,849	9,925	48,276	9,655
	Funding Rate	33%	33%	32%	33%	31%	32%	32%
BIO	Proposals	5,211	4,859	4,568	4,866	5,131	24,635	4,927
	Awards	1,418	1,410	1,347	1,428	1,431	7,034	1,407
	Funding Rate	27%	29%	29%	29%	28%	29%	29%
CSE	Proposals	2,019	2,044	2,314	3,022	3,866	13,265	2,653
	Awards	740	715	782	931	923	4,091	818
	Funding Rate	37%	35%	34%	31%	24%	31%	31%
EHR	Proposals	3,368	3,519	2,850	2,725	3,449	15,911	3,182
	Awards	1,193	1,219	819	950	1,157	5,338	1,068
	Funding Rate	35%	35%	29%	35%	34%	34%	34%
ENG	Proposals	6,082	5,546	5,424	6,022	5,983	29,057	5,811
	Awards	1,579	1,391	1,476	1,540	1,426	7,412	1,482
	Funding Rate	26%	25%	27%	26%	24%	26%	26%
GEO	Proposals	3,954	3,332	3,453	3,486	3,580	17,805	3,561
	Awards	1,341	1,242	1,321	1,368	1,417	6,689	1,338
	Funding Rate	34%	37%	38%	39%	40%	38%	38%
MPS	Proposals	5,541	5,272	5,207	5,287	5,692	26,999	5,400
	Awards	1,998	1,842	1,903	2,045	1,996	9,784	1,957
	Funding Rate	36%	35%	37%	39%	35%	36%	36%
SBE	Proposals	3,316	3,127	4,025	3,356	3,510	17,334	3,467
	Awards	1,253	1,298	1,220	1,268	1,300	6,339	1,268
	Funding Rate	38%	42%	30%	38%	37%	37%	37%
OPP	Proposals	579	555	638	675	634	3,081	616
	Awards	258	192	258	251	201	1,160	232
	Funding Rate	45%	35%	40%	37%	32%	38%	38%
Other	Proposals	167	167	99	68	97	598	120
	Awards	155	71	61	68	74	429	86
	Funding Rate	93%	43%	62%	100%	76%	72%	72%

Notes:

"Competitively reviewed" proposals and awards refer to proposal actions for research, education and training which are processed through NSF's external merit review system each year.

These figures do not include 7,145 second-year and later incremental awards during FY 2001 for "continuing grants" which are competitively reviewed in the first year of the award.

Also excluded are 3,197 supplements which are not subject to external merit review, and 249 contracts which are reviewed with special criteria.

"Other" organizational units include Office of Integrative Activities

Source: NSF Enterprise Information System, as of January 9, 2002.

Appendix Table 3

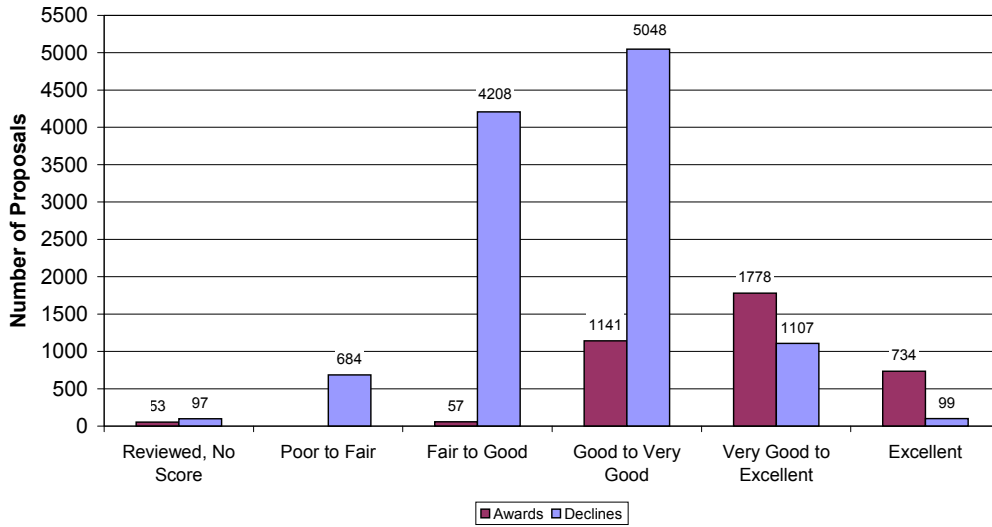
Median and Average Award Amounts by Directorate, Research Grants FY 1997 - 2001

		Fiscal Year				
		1997	1998	1999	2000	2001
NSF	Median	\$ 64,333	\$ 68,383	\$ 72,343	\$ 78,430	\$ 84,636
	Average	\$ 78,855	\$ 86,342	\$ 92,077	\$ 106,389	\$ 113,773
BIO	Median	\$ 80,266	\$ 84,776	\$ 91,537	\$ 100,000	\$ 108,387
	Average	\$ 85,453	\$ 100,098	\$ 113,850	\$ 119,781	\$ 143,636
CSE	Median	\$ 70,104	\$ 73,049	\$ 80,152	\$ 100,000	\$ 96,010
	Average	\$ 88,664	\$ 94,598	\$ 108,638	\$ 156,698	\$ 133,787
ENG	Median	\$ 67,760	\$ 72,012	\$ 75,906	\$ 76,635	\$ 80,000
	Average	\$ 74,413	\$ 83,357	\$ 86,348	\$ 90,212	\$ 99,217
GEO	Median	\$ 64,119	\$ 67,000	\$ 66,491	\$ 73,635	\$ 77,156
	Average	\$ 77,540	\$ 83,768	\$ 84,571	\$ 96,420	\$ 97,652
MPS	Median	\$ 62,365	\$ 69,672	\$ 75,859	\$ 78,304	\$ 86,152
	Average	\$ 87,978	\$ 92,046	\$ 96,775	\$ 109,646	\$ 114,364
SBE	Median	\$ 31,216	\$ 34,163	\$ 37,691	\$ 43,433	\$ 51,251
	Average	\$ 44,935	\$ 50,603	\$ 52,345	\$ 50,778	\$ 66,585
OPP	Median	\$ 68,627	\$ 71,858	\$ 82,402	\$ 75,215	\$ 82,694
	Average	\$ 97,478	\$ 105,021	\$ 116,508	\$ 136,512	\$ 111,747

Note: Median and average are based on competitively reviewed research awards.

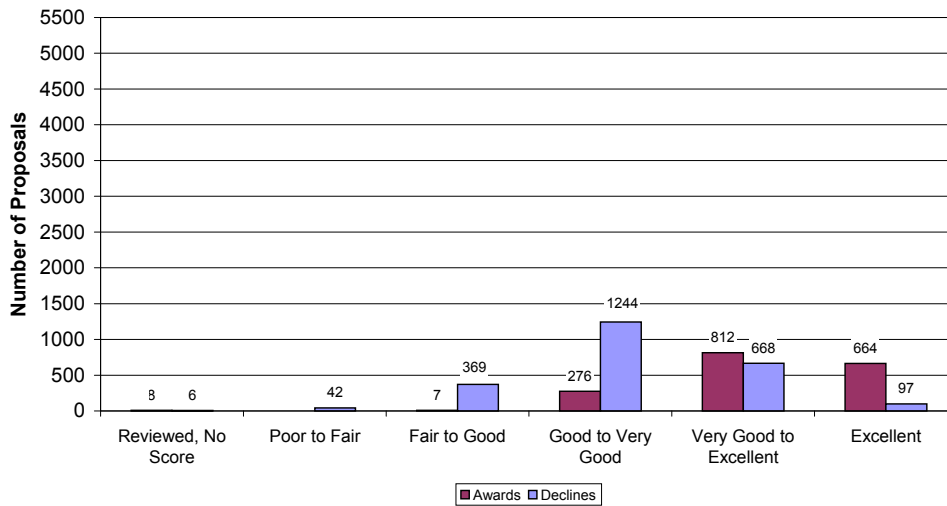
Source: NSF Enterprise Information System, as of January 17, 2002.

**Appendix Table 7
Distribution of Average Reviewer Ratings
Panel Reviewed**



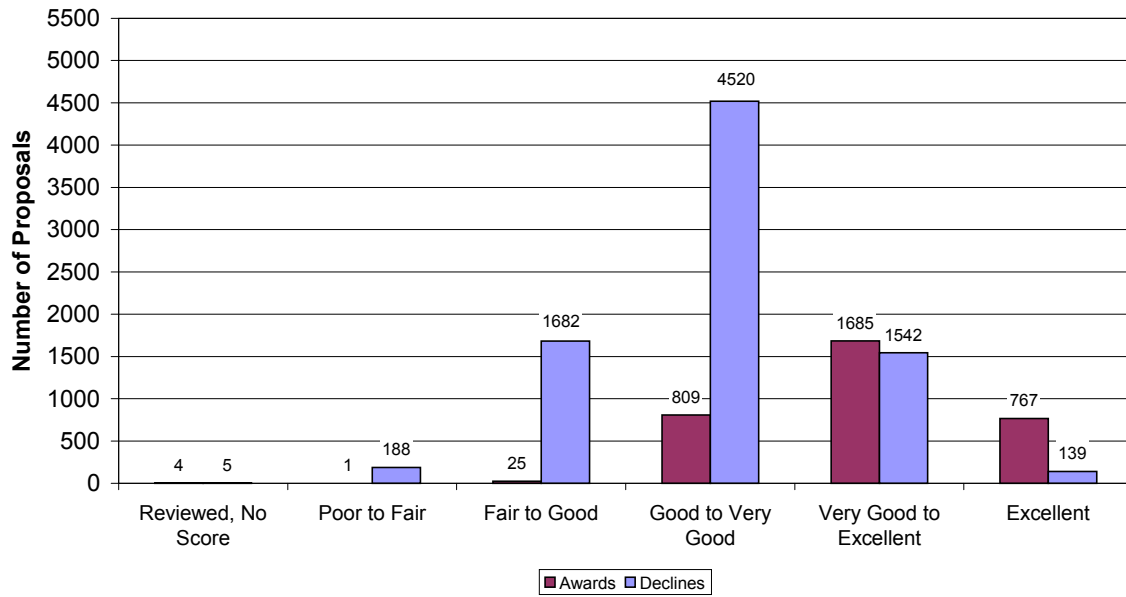
Number of FY 2001 Proposals -- 11,243 Declines, 3,763 Awards

**Appendix Table 8
Distribution of Average Reviewer Ratings
Mail Reviewed**



Number of FY 2001 Proposals -- 2,246 Declines, 1,767 Awards

**Appendix Table 9
Distribution of Average Reviewer Ratings
Mail and Panel Reviewed**



Number of FY 2001 Proposals -- 8,076 Declines, 3,291 Awards

Appendix Table 11
Committee of Visitors Meetings
By Directorate

(COV meetings held during FY 2001 are highlighted in bold font)

DIRECTORATE <i>Division</i> Programs	Fiscal Year of Most Recent COV	Fiscal Year of Next COV Due
BIOLOGICAL SCIENCES		
<i>Biological Infrastructure</i>		
Instrument Related Activities	2000	2002
Research Resources	2000	2003
Training	2000	
Plant Genome	2001	
<i>Environmental Biology</i>	1999	2003
Ecological Studies	1998	2002
Long Term Research	2001	
Systematic and Population Biology	2000	2004
<i>Integrative Biology and Neuroscience</i>	2001	2005
Neuroscience	1999	2003
Developmental Mechanisms	2000	2004
Physiology and Ethnology	1997	2002
<i>Molecular and Cellular Biosciences</i>		2002
Biomolecular Structure and Function	2000	
Biomolecular Processes	2000	
Cell Biology	2001	
Genetics	1999	
COMPUTER AND INFORMATION SCIENCE AND ENGINEERING		
<i>Advanced Computational Infrastructure and Research</i>		
Advanced Computational Research	2001	2004
PACI	1999	2002
<i>Computer-Communications Research</i>		
Communications	2000	2003
Computer Systems Architecture	2000	2003
Design Automation	2000	2003
Hybrid and Embedded Systems (new in '02)		2003
Numeric, Symbolic and Geometric Computation	2000	2003
Operating Systems and Compilers	2000	2003
Signal Processing Systems	2000	2003
Software Engineering and Languages	2000	2003
Theory of Computing	2000	2003
Trusted Computing (new in '02)		2003
<i>Information and Intelligent Systems</i>		
Computation and Social Systems	1999	2002
Human Computer Interaction	1999	2002

Appendix Table 11 (continued)

Knowledge and Cognitive Systems	1999	2002
Robotics and Human Augmentation	1999	2002
Information and Data Management	1999	2002
<i>Advanced Networking Infrastructure and Research</i>		
Networking Research	2000	2003
Special Projects in Networking Research	2000	2003
Advanced Networking Infrastructure	2000	2003
<i>Information Technology Research (ITR) (new in '00)</i>		
		2003
Experimental and Integrative Activities		
-Instrumentation Infrastructure Cluster	2001	
Research Infrastructure	2001	2004
Research Resources (new in '02)		2004
-Multidisciplinary Research Cluster		
Biological Information Technology and Systems (new in '02)		2004
Quantum and Biologically Inspired Computing (new in '02)		2004
Digital Government	2001	2004
Next Generation Software	2001	2004
-Education Workforce Cluster		
Information Technology Workforce (new in '02)		2004
Minority Institutions Infrastructure	2001	2004
CISE Educational Innovation	2001	2004
**CISE Postdoctoral Research Associates	2001	
-EIA Special Projects Cluster		
Special Projects (new in '02)		2004
**NSF-CONACyT Collaborative Research	2001	
**NSF-CNPq Collaborative Research	2001	
**EIA monitored, managed/reviewed by Division in Partnership with Engineering		

DIRECTORATE	Fiscal Year of Most Recent COV	Fiscal Year of Next COV Due
<i>Division</i>		
<i>Programs</i>		
EDUCATION AND HUMAN RESOURCES		
<i>Educational Systemic Reform</i>		
Statewide Systemic Initiatives	2001	2004
Urban Systemic Initiatives	2001	2004
Rural Systemic Initiatives	2001	2004
<i>Office of Innovation Partnerships</i>		
Innovation Partnership Activities (new in '01)		2004
EPSCoR	2000	2003
<i>Elementary, Secondary and Informal Education</i>		
Informal Science Education	2001	2004
Teacher Enhancement	2000	2003
Instructional Materials Development	1997	2002
Centers for Learning and Teaching (new in '01)		2004
<i>Undergraduate Education</i>		
Teacher Preparation	2000	2003
Advanced Technological Education	2000	2003
NSF Computer, Science, Engineering and Mathematics		2002
Scholarships (new in '01)		

Appendix Table 11 (continued)

Distinguished Teaching Scholars (new in '02)		2004
Scholarship for Service (new in '01)		2004
National SMETE Digital Library (new in '01)		2002
Course, Curriculum, and Laboratory Improvement	2000	2003
Undergraduate Assessment (new in '02)		2004
<i>Graduate Education</i>		
Graduate Research Fellowships	1999	2003
NATO Postdoctorate Fellowships	2001	2005
IGERT (new in '97)		2002
GK-12 Fellows (new in '99)		2002
<i>Human Resource Development</i>		
The Louis Stokes Alliances for Minority Participation	2001	2004
Centers for Research Excellence In Science and Technology (CREST)	2001	2004
Programs for Gender Equity (PGE)	2000	2003
Programs for Persons with Disabilities (PPD)	2000	2003
Alliances for Graduate Education and the Professoriate (AGEP)	2001	2004
Tribal Colleges Program (TCP) (new in '01)		2004
Historically Black Colleges and Universities (HBCU)	2001	2004
<i>Research, Evaluation & Communications</i>		
REPP/ROLE (new in '96)		2002
Evaluation	2000	2003
Education Research Initiative (ERI) (new in '01)		2002
<i>Other</i>		
H-IB VISA K-12		2004
Math and Science Partnership (MSP) (new in '02)		2005

DIRECTORATE <i>Division</i> Programs	Fiscal Year of Most Recent COV	Fiscal Year of Next COV Due
ENGINEERING		
<i>Bioengineering and Environmental Systems</i>		
Biochemical Engineering	1999	2002
Biotechnology	1999	2002
Biomedical Engineering	1999	2002
Research to Aid the Disabled	1999	2002
Environmental Engineering	1999	2002
Environmental Technology	1999	2002
<i>Civil and Mechanical Systems</i>		
Dynamic System Modeling, Sensing and Control	2001	2004
Geotechnical and GeoHazard Systems	2001	2004
Infrastructure and Information Systems	2001	2004
Solid Mechanics and Materials Engineering	2001	2004
Structural Systems and Engineering	2001	2004
Network for Earthquake Engineering Simulation	2001	2004
<i>Chemical and Transport Systems</i>		
Chemical Reaction Processes	2000	2003
Interfacial, Transport and Separation Processes	2000	2003
Fluid and Particle Processes	2000	2003
Thermal Systems	2000	2003

Appendix Table 11 (continued)

<i>Design, Manufacture and Industrial Innovation</i>		
-Engineering Decision Systems Programs (new in '02)		2003
Engineering Design	2000	2003
Manufacturing Enterprise Systems (new in '02)		2003
Service Enterprise Systems (new in '02)		2003
Operations Research	2000	2003
-Manufacturing Processes and Equipment Systems	2000	2003
Materials Processing and Manufacturing	2000	2003
Manufacturing Machines and Equipment	2000	2003
Nanomanufacturing (new in '02)		2003
-Industrial Innovation Programs Cluster		
Small Business Innovation Research (SBIR)	2001	2004
Innovation and Organizational Change	2000	
Grant Opportunities for Academic Liaison with Industry (GOALI)	2000	2003
Small Business Technology Transfer	2001	2004
<i>Electrical and Communications Systems</i>		
Electronics, Photonics and Device Technologies	2000	2002
Control, Networks, and Computational Intelligence	2000	2002
Integrative Systems (new in '02)		2002
<i>Engineering, Education and Centers</i>	2001	2004
Engineering Education	2001	2004
Engineering Research Centers	2001	2004
Earthquake Engineering Research Centers	2001	2004
Human Resource Development	2001	2004
State/Industry/University Cooperative Research Centers	2001	2004
Industry/Univ. Cooperative Research Centers	2001	2004
DIRECTORATE	Fiscal Year of Most Recent COV	Fiscal Year of Next COV Due
<i>Division</i>		
Programs		
GEOSCIENCES		
<i>Atmospheric Sciences</i>		
-Lower Atmospheric Research Cluster		
Atmospheric Chemistry	2001	2004
Climate Dynamics	2001	2004
Mesoscale Dynamic Meteorology	2001	2004
Large-scale Dynamic Meteorology	2001	2004
Physical Meteorology	2001	2004
Paleoclimate	2001	2004
-Upper Atmospheric Research Cluster		
Magnetospheric Physics	1999	2002
Aeronomy	1999	2002
Upper Atmospheric Research Facilities	1999	2002
Solar Terrestrial Research	1999	2002
-Centers and Facilities Cluster		
Lower Atmospheric Observing Facilities	2000	2003
UNIDATA	2000	2003
NCAR/UCAR	2000	2003

Appendix Table 11 (continued)

<i>Earth Sciences</i>		
Instrumentation and Facilities	1997	2004
- Research Support Cluster	1998	
Tectonics	1998	2002
Geology and Paleontology	1998	2002
Hydrological Sciences	1998	2002
Petrology and Geochemistry	1998	2002
Geophysics	1998	2002
Continental Dynamics	1998	2002
<i>Ocean Sciences</i>		
- Integrative Programs Cluster	1997	2002
Oceanographic Technical Services	1994	2002
Ship Operations	1994	2002
Oceanographic Instrumentation	1994	2002
Ship Acquisitions and Upgrades (new in '02)		2002
Shipboard Scientific Support Equipment (new in '02)		2002
Oceanographic Tech and Interdisciplinary Coordination	1998	2002
- Marine Geosciences Cluster		
Marine Geology and Geophysics	1998	2003
Ocean Drilling	1994	2003
-Ocean Cluster		
Chemical Oceanography	1998	2003
Physical Oceanography	1998	2003
Biological Oceanography	1998	2003

DIRECTORATE	Fiscal Year of Most Recent COV	Fiscal Year of Next COV Due
<i>Division</i>		
<i>Programs</i>		
MATHEMATICAL AND PHYSICAL SCIENCES		
<i>Astronomical Sciences</i>	1999	2002
Planetary Astronomy	1999	2002
Stellar Astronomy and Astrophysics	1999	2002
Galactic Astronomy	1999	2002
Education, Human Resources and Special Programs	1999	2002
Advanced Technologies and Instrumentation	1999	2002
Electromagnetic Spectrum Management	1999	2002
Extragalactic Astronomy and Cosmology	1999	2002
-Facilities Cluster		
Gemini 8-Meter Telescopes	1999	2002
National Radio Astronomy Observatory (NRAO)	1999	2002
National Optical Astronomy Observatories (NOAO)	1999	2002
National Astronomy and Ionosphere Center (NAIC)	1999	2002
<i>Chemistry</i>	2001	2004
Office of Special Projects	2001	2004
Chemistry Research Instrumentation and Facilities (CRIF)	2001	2004
Organic Chemical Dynamics	2001	2004
Organic Synthesis	2001	2004
Chemistry of Materials	2001	2004
Theoretical and Computational Chemistry	2001	2004
Experimental Physical Chemistry	2001	2004
Inorganic, Bioinorganic and Organometallic Chemistry	2001	2004

Appendix Table 11 (continued)

Analytical and Surface Chemistry	2001	2004
<i>Materials Research</i>	1999	2002
-Base Science Cluster		
Condensed Matter Physics	1999	2002
Solid-State Chemistry	1999	2002
Polymers	1999	2002
-Advanced Materials and Processing Cluster		
Metals	1999	2002
Ceramics	1999	2002
Electronic Materials	1999	2002
-Materials Research and Technology Enabling Cluster		
Materials Theory	1999	2002
Instrumentation for Materials Research	1999	2002
National Facilities	1999	2002
Materials Research Science and Engineering Centers	1999	2002
Mathematical Sciences	2001	2004
Applied Mathematics	2001	2004
Topology and Foundations	2001	2004
Computational Mathematics	2001	2004
Infrastructure	2001	2004
Geometric Analysis	2001	2004
Analysis	2001	2004
Algebra, Number Theory, and Combinatorics	2001	2004
Statistics and Probability	2001	2004
<i>Physics</i>	2000	
Atomic, Molecular, Optical and Plasma Physics	2000	2003
Elementary Particle Physics	2000	2003
Theoretical Physics	2000	2003
Particle and Nuclear Astrophysics (new in '00)		2003
Nuclear Physics	2000	2003
Education and Interdisciplinary Research (new in '00)		2003
Gravitational Physics	2000	2003

DIRECTORATE <i>Division</i> Programs	Fiscal Year of Most Recent COV	Fiscal Year of Next COV Due
SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES		
<i>Office of International Science and Engineering (INT)</i>	1999	2002
<i>Science Resource Statistics (SRS) (new in '99)</i>		2004
-NSF-wide Programs Cluster		
CAREER	2001	
ADVANCE (new in '01)		
<i>Behavioral and Cognitive Sciences (BCS)</i>		2004
Archeology and Archaeometry	1999	2004
Child Learning and Development	1997	2004
Cultural Anthropology	1999	2004
Linguistics	1999	2004
Human Cognition and Perception	1999	2004
Social Psychology	1999	2004
Physical Anthropology	1999	2004

Appendix Table 11 (continued)

Geography and Regional Sciences	1999	2004
<i>Social and Economic Sciences (SES)</i>		2003
Decision, Risk, and Management Sciences	2000	2003
Political Science	2000	2003
Law and Social Science	2000	2003
Innovation and Organizational Change	2000	2003
Methodology, Measurement and Statistics	2000	2003
Science and Technology Studies	2000	2003
Societal Dimensions of Engineering, Science, and Technology	2000	2003
Economics	2000	2003
Sociology	2000	2003
DIRECORATE	Fiscal Year of Most Recent COV	Fiscal Year of Next COV Due
<i>Division</i>		
<i>Programs</i>		
OFFICE OF POLAR PROGRAMS		
<i>Polar Research Support</i>	2001	2004
<i>Antarctic Sciences</i>		2003
Antarctic Aeronomy and Astrophysics	2000	2003
Antarctic Biology and Medicine	2000	2003
Antarctic Geology and Geophysics	2000	2003
Antarctic Glaciology	2000	2003
Antarctic Ocean and Climate Systems	2000	2003
<i>Arctic Sciences</i>		2003
Arctic Research Opportunities	2000	2003
Arctic Research and Policy	2000	2003
Arctic System Sciences	2000	2003
Arctic Natural Sciences	2000	2003
Arctic Social Sciences	2000	2003
DIRECTORATE	Fiscal Year of Most Recent COV	Fiscal Year of Next COV Due
<i>Division</i>		
<i>Programs</i>		
OFFICE OF INTEGRATIVE ACTIVITIES		
Major Research Instrumentation (MRI)	2000*	
Science and Technology Centers (STC)	1996*	2007
*External evaluations		

Appendix Table 12

GPRA Performance Relating to Merit Review

Performance Area	FY 2001 Annual Performance Goal	Results for National Science Foundation												
NSF Business Practices														
Electronic Proposal Submission	<p><u>Performance Goal IV-1:</u> Ninety-five percent of full proposals will be received electronically through FastLane.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">FY 1998 Baseline</td> <td style="text-align: right;">17%</td> </tr> <tr> <td>FY 1999 Result</td> <td style="text-align: right;">44%</td> </tr> <tr> <td>FY 2000 Goal</td> <td style="text-align: right;">60%</td> </tr> <tr> <td>FY 2000 Result</td> <td style="text-align: right;">81%</td> </tr> <tr> <td>FY 2001 Goal</td> <td style="text-align: right;">95%</td> </tr> <tr> <td>FY 2001 Result</td> <td style="text-align: right;">99%</td> </tr> </table>	FY 1998 Baseline	17%	FY 1999 Result	44%	FY 2000 Goal	60%	FY 2000 Result	81%	FY 2001 Goal	95%	FY 2001 Result	99%	<p style="text-align: center;"><i>FY 1999: NSF successful</i></p> <p style="text-align: center;"><i>FY 2000: NSF successful</i></p> <p style="text-align: center;"><i>FY 2001: NSF is successful for goal IV-1.</i></p>
FY 1998 Baseline	17%													
FY 1999 Result	44%													
FY 2000 Goal	60%													
FY 2000 Result	81%													
FY 2001 Goal	95%													
FY 2001 Result	99%													
Proposal and Award Processes														
Use of Merit Review	<p><u>Performance Goal V-1:</u> At least 85 percent of basic and applied research funds will be allocated to projects which undergo merit review. *</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">FY 2000 Goal</td> <td style="text-align: right;">80%</td> </tr> <tr> <td>FY 2000 Result</td> <td style="text-align: right;">87%</td> </tr> <tr> <td>FY 2001 Goal</td> <td style="text-align: right;">85%</td> </tr> <tr> <td>FY 2001 Result</td> <td style="text-align: right;">88%</td> </tr> </table> <p style="text-align: center;"><i>*During FY 2000 OMB redefined what constitutes a merit-reviewed project and established a new target level of 70-90%.</i></p>	FY 2000 Goal	80%	FY 2000 Result	87%	FY 2001 Goal	85%	FY 2001 Result	88%	<p>Goal revised in FY 2000</p> <p>FY 1999: NSF successful for related goal</p> <p>FY 2000: NSF successful</p> <p>FY 2001: NSF is successful for goal V-1.</p>				
FY 2000 Goal	80%													
FY 2000 Result	87%													
FY 2001 Goal	85%													
FY 2001 Result	88%													
Implementation of Merit Review Criteria – Reviewers	<p><u>Performance Goal V-2:</u> NSF performance in implementation of the merit review criteria is successful when reviewers address the elements of both generic review criteria.</p> <p><u>FY 2001 Result:</u> Reviewers did not consistently address the broader impacts criterion in FY 1998 – FY 2000. In FY 2001 separate screens were added in FastLane to enable reviewers to address each merit-review criterion separately and NSF established an internal task force to examine strategies to improve both proposer and reviewer attention to the broader impacts criterion. A number of reports by external experts note that reviewers are making significant progress in utilization of both merit review criteria.</p> <p>In FY 2002, NSF will continue to develop a set of recommendations that focus on strategies that stress the importance of using both criteria. It will also collect and make available examples of broader impacts and develop a plan to disseminate them.</p>	<p>Goal revised in FY 2001.</p> <p>FY 2001: NSF is not successful for goal V-2.</p>												

Appendix Table 12

Annual Performance Goals for NSF'S Investment Process (continued)

Performance Area	FY 2001 Annual Performance Goal	Results for National Science Foundation												
Customer Service: Time to Prepare Proposals	<p><u>Performance Goal V-4:</u> 95 percent of program announcements will be available to relevant individuals and organizations at least three months prior to the proposal deadline or target date.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">FY 1998 Baseline</td> <td style="text-align: right;">66%</td> </tr> <tr> <td>FY 1999 Result</td> <td style="text-align: right;">75%</td> </tr> <tr> <td>FY 2000 Goal</td> <td style="text-align: right;">95%</td> </tr> <tr> <td>FY 2000 Result</td> <td style="text-align: right;">89%</td> </tr> <tr> <td>FY 2001 Goal</td> <td style="text-align: right;">95%</td> </tr> <tr> <td>FY 2001 Result</td> <td style="text-align: right;">100%</td> </tr> </table>	FY 1998 Baseline	66%	FY 1999 Result	75%	FY 2000 Goal	95%	FY 2000 Result	89%	FY 2001 Goal	95%	FY 2001 Result	100%	<p>FY 1999: NSF not successful</p> <p>FY 2000: NSF not successful</p> <p>FY 2001: NSF is successful for goal V-4.</p>
FY 1998 Baseline	66%													
FY 1999 Result	75%													
FY 2000 Goal	95%													
FY 2000 Result	89%													
FY 2001 Goal	95%													
FY 2001 Result	100%													
Customer Service: Time to Decision	<p><u>Performance Goal V-5:</u> For 70 percent of proposals, be able to tell applicants whether their proposals have been declined or recommended for funding within six months of receipt.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">FY 1998 Baseline</td> <td style="text-align: right;">59%</td> </tr> <tr> <td>FY 1999 Result</td> <td style="text-align: right;">58%</td> </tr> <tr> <td>FY 2000 Goal</td> <td style="text-align: right;">70%</td> </tr> <tr> <td>FY 2000 Result</td> <td style="text-align: right;">54%</td> </tr> <tr> <td>FY 2001 Goal</td> <td style="text-align: right;">70%</td> </tr> <tr> <td>FY 2001 Result</td> <td style="text-align: right;">62%</td> </tr> </table> <p><u>FY 2001 Result:</u> In FY 2001, 62% of proposals were processed within 6 months of receipt.</p> <p>In FY 2002, NSF will continue to focus on improving the efficiency of proposal processing, including the dissemination of best practices to program staff.</p>	FY 1998 Baseline	59%	FY 1999 Result	58%	FY 2000 Goal	70%	FY 2000 Result	54%	FY 2001 Goal	70%	FY 2001 Result	62%	<p>FY 1999: NSF not successful</p> <p>FY 2000: NSF not successful</p> <p>FY 2001: NSF is not successful for goal V-5.</p>
FY 1998 Baseline	59%													
FY 1999 Result	58%													
FY 2000 Goal	70%													
FY 2000 Result	54%													
FY 2001 Goal	70%													
FY 2001 Result	62%													
Award Size	<p><u>Performance Goal V-6a:</u> NSF will increase the average annualized award size for research projects to \$110,000.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">FY 1998 Baseline</td> <td style="text-align: right;">\$90,000</td> </tr> <tr> <td>FY 1999 Result</td> <td style="text-align: right;">\$94,000</td> </tr> <tr> <td>FY 2000 Result</td> <td style="text-align: right;">\$105,800</td> </tr> <tr> <td>FY 2001 Goal</td> <td style="text-align: right;">\$110,000</td> </tr> <tr> <td>FY 2001 Result</td> <td style="text-align: right;">\$113,601</td> </tr> </table>	FY 1998 Baseline	\$90,000	FY 1999 Result	\$94,000	FY 2000 Result	\$105,800	FY 2001 Goal	\$110,000	FY 2001 Result	\$113,601	<p>New goal in FY 2001.</p> <p>FY 2001: NSF is successful for goal V-6a.</p>		
FY 1998 Baseline	\$90,000													
FY 1999 Result	\$94,000													
FY 2000 Result	\$105,800													
FY 2001 Goal	\$110,000													
FY 2001 Result	\$113,601													

Appendix Table 12

Annual Performance Goals for NSF'S Investment Process (continued)

Performance Area	FY 2001 Annual Performance Goal	<i>Results for National Science Foundation</i>																
Award Duration	<p><u>Performance Goal V-6b:</u> NSF will increase the average duration of awards for research projects to at least three years.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>FY 1998 Baseline</td> <td>2.7 years</td> </tr> <tr> <td>FY 1999 Goal</td> <td>2.8 years</td> </tr> <tr> <td>FY 1999 Result</td> <td>2.8 years</td> </tr> <tr> <td>FY 2000 Result</td> <td>2.8 years</td> </tr> <tr> <td>FY 2001 Goal</td> <td>3.0 years</td> </tr> <tr> <td>FY 2001 Result</td> <td>2.9 years</td> </tr> </table> <p><u>FY 2001 Result:</u> Resource limitations impacted NSF's ability to achieve both the award size and award duration goals. NSF focused its efforts on increasing average annualized award size.</p> <p>In FY 2002, NSF will continue to focus on increasing award size and duration in order to improve the efficiency of the research process.</p>	FY 1998 Baseline	2.7 years	FY 1999 Goal	2.8 years	FY 1999 Result	2.8 years	FY 2000 Result	2.8 years	FY 2001 Goal	3.0 years	FY 2001 Result	2.9 years	<p>FY 1999: NSF successful</p> <p>FY 2000: Not applicable</p> <p>FY 2001: NSF is not successful for goal V-6b.</p>				
FY 1998 Baseline	2.7 years																	
FY 1999 Goal	2.8 years																	
FY 1999 Result	2.8 years																	
FY 2000 Result	2.8 years																	
FY 2001 Goal	3.0 years																	
FY 2001 Result	2.9 years																	
Maintaining Openness in the System	<p><u>Performance Goal V-7:</u> NSF will award 30 percent of its research grants to new investigators.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>FY 1997 Baseline</td> <td>27%</td> </tr> <tr> <td>FY 1998</td> <td>27%</td> </tr> <tr> <td>FY 1999 Goal</td> <td>30%</td> </tr> <tr> <td>FY 1999 Result</td> <td>27%</td> </tr> <tr> <td>FY 2000 Goal</td> <td>30%</td> </tr> <tr> <td>FY 2000 Result</td> <td>28%</td> </tr> <tr> <td>FY 2001 Goal</td> <td>30%</td> </tr> <tr> <td>FY 2001 Result</td> <td>28%</td> </tr> </table> <p>In FY 2002, NSF will continue its outreach to new investigators to promote awareness of research funding and to encourage new investigators to submit proposals.</p>	FY 1997 Baseline	27%	FY 1998	27%	FY 1999 Goal	30%	FY 1999 Result	27%	FY 2000 Goal	30%	FY 2000 Result	28%	FY 2001 Goal	30%	FY 2001 Result	28%	<p>FY 1999: NSF not successful</p> <p>FY 2000: NSF not successful</p> <p>FY 2001: NSF is not successful for goal V-7.</p>
FY 1997 Baseline	27%																	
FY 1998	27%																	
FY 1999 Goal	30%																	
FY 1999 Result	27%																	
FY 2000 Goal	30%																	
FY 2000 Result	28%																	
FY 2001 Goal	30%																	
FY 2001 Result	28%																	
Broadening Participation																		
Reviewer Pool	<p><u>Performance Goal V-8:</u> NSF will begin to request voluntary demographic data electronically from all reviewers to determine participation levels of members of underrepresented groups in the NSF reviewer pool.</p> <p><u>FY 2001 Result:</u> The reviewer system in FastLane was revised to gather voluntary demographic data.</p>	<p>New goal in FY 2001.</p> <p>FY 2001: NSF is successful for goal V- 8.</p>																

Appendix Table 13

Small Grants for Exploratory Research (SGER) Funding Trends by Directorate, FY 1999 - 2001

		Fiscal Year		
		1999	2000	2001
NSF	Proposals	278	319	300
	Awards	224	274	255
	Total \$	\$12,293,477	\$15,725,176	\$15,362,826
	% of Obligations	0.3%	0.4%	0.4%
	Average \$	\$54,882	\$57,391	\$60,246
BIO	Proposals	49	61	59
	Awards	37	46	40
	Total \$	\$1,984,457	\$2,553,923	\$2,747,298
	% of Obligations	0.5%	0.6%	0.5%
	Average \$	\$55,124	\$55,520	\$68,682
CISE	Proposals	24	28	25
	Awards	22	27	21
	Total \$	\$1,739,513	\$1,634,881	\$1,571,733
	% of Obligations	0.5%	0.4%	0.3%
	Average \$	\$79,069	\$60,551	\$74,844
EHR	Proposals	15	27	13
	Awards	14	27	13
	Total \$	\$971,346	\$2,326,298	\$1,021,456
	% of Obligations	0.1%	0.3%	0.1%
	Average \$	\$69,382	\$86,159	\$78,574
ENG	Proposals	88	82	84
	Awards	74	73	79
	Total \$	\$4,371,965	\$4,757,413	\$5,121,146
	% of Obligations	1.1%	1.2%	1.1%
	Average \$	\$59,081	\$65,170	\$64,825
GEO	Proposals	44	51	49
	Awards	40	45	48
	Total \$	\$1,464,750	\$1,929,147	\$2,235,480
	% of Obligations	0.4%	0.4%	0.4%
	Average \$	\$36,619	\$42,870	\$46,573
MPS	Proposals	33	22	25
	Awards	16	12	12
	Total \$	\$908,436	\$767,216	\$802,671
	% of Obligations	0.1%	0.1%	0.1%
	Average \$	\$56,777	\$63,935	\$66,889
SBE	Proposals	17	31	28
	Awards	13	28	27
	Total \$	\$534,126	\$878,781	\$1,195,763
	% of Obligations	0.3%	0.5%	0.7%
	Average \$	\$41,087	\$31,385	\$44,288

Terms & Acronyms

<u>Acronym</u>	<u>Definition</u>
A&M	Administration and Management
AC	Advisory Committee
BFA	Office of Budget, Finance and Award Management
BIO	Directorate for Biological Sciences
CAREER	Faculty Early Career Development Program
CISE	Directorate for Computer and Information Science and Engineering
COV	Committee of Visitors
EHR	Directorate for Education and Human Resources
EIS	Enterprise Information System
ENG	Directorate for Engineering
EPSCoR	Experimental Program to Stimulate Competitive Research
FFRDC	Federally Funded Research and Development Center
FTE	Full-Time Equivalent
FY	Fiscal Year
GPRA	Government Performance and Results Act
IA	Integrative Activities
IPA	Intergovernmental Personnel Act (appointee)
IPERS	Integrated Personnel System
MPS	Directorate for Mathematical and Physical Sciences
NSF	National Science Foundation
ODS	Online Document System
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPP	Office of Polar Programs
PARS	Proposal, PI and Reviewer System
PI	Principal Investigator
R&D	Research and Development
R&RA	Research and Related Activities (account)
S&E	Science and Engineering
S&E	Salaries and Expenses (account)
SBE	Directorate for Social, Behavioral and Economic Sciences
SGER	Small Grant for Exploratory Research
VSEE	Visiting Scientists, Engineers and Educators