

# **TECHNICAL INFORMATION**

## **FY 2005 Appropriation Language**

### **National Science Foundation**

#### **RESEARCH AND RELATED ACTIVITIES**

For necessary expenses in carrying out the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-1875), and the Act to establish a National Medal of Science (42 U.S.C. 1880-1881); services as authorized by 5 U.S.C. 3109; maintenance and operation of aircraft and purchase of flight services for research support; and acquisition of aircraft; \$4,452,310,000, of which not to exceed \$350,000,000 shall remain available until expended for Polar research and operations support, and for reimbursement to other Federal agencies for operational and science support and logistical and other related activities for the United States Antarctic program; the balance to remain available until September 30, 2006; *Provided*, That receipts for scientific support services and materials furnished by the National Research Centers and other National Science Foundation supported research facilities may be credited to this appropriation.

#### **EDUCATION AND HUMAN RESOURCES**

For necessary expenses in carrying out science and engineering education and human resources programs and activities pursuant to the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-1875), including services as authorized by 5 U.S.C. 3109, and rental of conference rooms in the District of Columbia, \$771,360,000, to remain available until September 30, 2006.

#### **MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION**

For necessary expenses for the acquisition, construction, commissioning, and upgrading of major research equipment, facilities, and other such capital assets pursuant to the National Science Foundation Act of 1950, as amended, including authorized travel, \$213,270,000, to remain available until expended.

#### **SALARIES AND EXPENSES**

For salaries and expenses necessary in carrying out the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-1875); services authorized by 5 U.S.C. 3109; hire of passenger motor vehicles; not to exceed \$9,000 for official reception and representation expenses; uniforms or allowances therefor, as authorized by 5 U.S.C. 5901-5902; rental of conference rooms in the District of Columbia; and reimbursement of the General Services Administration for security guard services; \$294,000,000: *Provided*, That contracts may be entered into under "Salaries and Expenses" in fiscal year 2005 for maintenance and operation of facilities, and for other services, to be provided during the next fiscal year.

#### **OFFICE OF INSPECTOR GENERAL**

For necessary expenses of the Office of Inspector General as authorized by the Inspector General Act of 1978, as amended \$10,110,000, to remain available until September 30, 2006.

#### **OFFICE OF THE NATIONAL SCIENCE BOARD**

For necessary expenses (including payment of salaries, authorized travel, hire of passenger motor vehicles, the rental of conference rooms in the District of Columbia, and the employment of experts and consultants under section 3109 of title 5, United States Code) involved in carrying out section 4 of the

National Science Foundation Act of 1950 and Public Law 86-209, \$3,950,000: Provided, That not more than \$9,000 shall be available for official reception and representation expenses.

## SUMMARY OF FY 2005 BUDGET BY APPROPRIATION AND ACTIVITY

(DOLLARS IN THOUSANDS)

	FY 2003 APPROPRIATION	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE	
				FY 2005 Req/FY 2004 Estimate AMOUNT	PERCENT
<b>RESEARCH AND RELATED ACTIVITIES</b>					
Biological Sciences	\$570,490	\$586,890	\$599,930	\$13,040	2.2%
Computer and Information Science and Engineering	589,291	604,650	618,050	13,400	2.2%
Engineering	541,702	565,130	575,900	10,770	1.9%
Geosciences	691,836	713,100	728,500	15,400	2.2%
Mathematical and Physical Sciences	1,040,697	1,091,510	1,115,500	23,990	2.2%
Social, Behavioral and Economic Sciences	198,599	203,790	224,710	20,920	10.3%
Office of International Science and Engineering <sup>1</sup>	39,073	28,120	34,040	5,920	21.1%
U.S. Polar Research Programs	255,407	274,080	281,660	7,580	2.8%
U.S. Antarctic Logistical Support Activities	68,552	68,070	68,070	0	0.0%
Integrative Activities	97,859	144,140	239,990	95,850	66.5%
<b>Subtotal R&amp;RA</b>	<b>\$4,054,433</b>	<b>\$4,251,360</b>	<b>\$4,452,310</b>	<b>\$206,870</b>	<b>4.9%</b>
Unobligated Balance Available Start of Year	-3,015				
Unobligated Balance Available End of Year	28,422				
Recoveries of Prior Year Obligations	-12,593				
Adjustments to Prior Year Accounts	5				
Unobligated Balance Lapsing	2,036				
Reduction Pursuant to P.L. 108-7	26,540				
<b>Subtotal R&amp;RA</b>	<b>\$4,095,828</b>	<b>\$4,251,360</b>	<b>\$4,452,310</b>	<b>\$206,870</b>	<b>4.9%</b>
Transferred from other funds	(12,828)				
<b>Appropriation Total</b>	<b>\$4,083,000</b>	<b>\$4,251,360</b>	<b>\$4,452,310</b>	<b>\$206,870</b>	<b>4.9%</b>
<b>EDUCATION AND HUMAN RESOURCES</b>					
Math and Science Partnerships	\$144,070	\$139,170	\$0	-\$139,170	-100.0%
EPSCoR	89,210	94,440	84,000	-10,440	-11.1%
Elementary, Secondary and Informal Education	223,300	212,260	172,750	-39,510	-18.6%
Undergraduate Education	172,550	155,500	158,850	3,350	2.2%
Graduate Education	139,500	155,950	173,880	17,930	11.5%
Human Resource Development	99,480	115,850	107,940	-7,910	-6.8%
Research, Evaluation and Communication	66,770	65,810	73,940	8,130	12.4%
<b>Subtotal EHR</b>	<b>\$934,879</b>	<b>\$938,980</b>	<b>\$771,360</b>	<b>-\$167,620</b>	<b>-17.9%</b>
H-1B Nonimmigrant Petitioner Receipts	46,571	0	0	0	0.0%
<b>Subtotal EHR</b>	<b>\$981,450</b>	<b>\$938,980</b>	<b>\$771,360</b>	<b>-167,620</b>	<b>-17.9%</b>
Unobligated Balance Available Start of Year	-29,198				
Unobligated Balance Available End of Year	5,001				
Recoveries of Prior Year Obligations	-8,550				
Adjustments to Prior Year Accounts	-10				
Unobligated Balance Lapsing	1,049				
H-1B Nonimmigrant Petitioner Receipts	-46,571	0	0	0	0.0%
Reduction Pursuant to P.L. 108-7	5,909				
<b>Appropriation Total</b>	<b>\$909,080</b>	<b>\$938,980</b>	<b>\$771,360</b>	<b>-\$167,620</b>	<b>-17.9%</b>

## SUMMARY OF FY 2005 BUDGET BY APPROPRIATION AND ACTIVITY

(DOLLARS IN THOUSANDS)

	FY 2003 APPROPRIATION	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE	
				FY 2005 Req/FY 2004 Estimate AMOUNT	PERCENT
<b>MAJOR RESEARCH EQUIPMENT &amp; FACILITIES CONSTRUCTION</b>					
	\$179,029	\$154,970	\$213,270	\$58,300	37.6%
Unobligated Balance Available Start of Year	-96,551				
Unobligated Balance Available End of Year	66,108				
Recoveries of Prior Year Obligations	-48				
Adjustments to Prior Year Accounts	0				
Reduction Pursuant to P.L. 108-7	972				
<b>Appropriation Total</b>	<b>\$149,510</b>	<b>\$154,970</b>	<b>\$213,270</b>	<b>\$58,300</b>	<b>37.6%</b>
<b>SALARIES AND EXPENSES<sup>1</sup></b>					
	\$189,423	\$218,700	\$294,000	\$75,300	34.4%
Unobligated Balance Available Start of Year	0				
Unobligated Balance Available End of Year	0				
Adjustments to Prior Year Accounts	0				
Unobligated Balance Lapsing	7				
Reduction Pursuant to P.L. 108-7	1,237				
<b>Subtotal, S&amp;E</b>	<b>\$190,667</b>	<b>\$218,700</b>	<b>\$294,000</b>	<b>\$75,300</b>	<b>34.4%</b>
Transferred from other funds	-315				
<b>Appropriation Total</b>	<b>\$190,352</b>	<b>\$218,700</b>	<b>\$294,000</b>	<b>\$75,300</b>	<b>34.4%</b>
<b>NATIONAL SCIENCE BOARD</b>					
	\$2,876	\$3,880	\$3,950	\$70	1.8%
Unobligated Balanced Available Start of Year	0				
Unobligated Balanced Available End of Year	0				
Recoveries of Prior Year Obligations	0				
Adjustments to Prior Year Accounts	0				
Unobligated Balance Lapsing	601				
Reduction Pursuant to P.L. 108-7	23				
<b>Appropriation Total</b>	<b>\$3,500</b>	<b>\$3,880</b>	<b>\$3,950</b>	<b>\$70</b>	<b>1.8%</b>
<b>OFFICE OF INSPECTOR GENERAL</b>					
	\$8,697	\$9,940	\$10,110	\$170	1.7%
Unobligated Balanced Available Start of Year	-137				
Unobligated Balanced Available End of Year	646				
Recoveries of Prior Year Obligations	-27				
Adjustments to Prior Year Accounts	0				
Unobligated Balance Lapsing	11				
Reduction Pursuant to P.L. 108-7	60				
<b>Appropriation Total</b>	<b>\$9,250</b>	<b>\$9,940</b>	<b>\$10,110</b>	<b>\$170</b>	<b>1.7%</b>
<b>TOTAL, NATIONAL SCIENCE FOUNDATION</b>	<b>\$5,344,693</b>	<b>\$5,577,830</b>	<b>\$5,745,000</b>	<b>\$173,090</b>	<b>3.1%</b>

Totals may not add due to rounding.

<sup>1</sup> FY 2003 includes an Appropriations Transfer from the Department of State in the amount of \$13.14 million for an award to the U.S. Civilian Research and Development Foundation.

## LEVEL OF FUNDING BY PROGRAM

(Dollars in Thousands)

PROGRAM	FY 2003 ACTUAL	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE	
				FY 2005 Req/FY 2004 Estimate AMOUNT	PERCENT
<b><u>BIOLOGICAL SCIENCES</u></b>					
<i>MOLECULAR AND CELLULAR BIOSCIENCES</i>					
Molecular & Cellular Biosciences Research	\$121,891	\$121,770	\$124,980	\$3,210	2.6%
<b>Total</b>	121,891	121,770	124,980	3,210	2.6%
<i>INTEGRATIVE BIOLOGY AND NEUROSCIENCE</i>					
Integrative Biology & Neuroscience Research	107,470	107,410	110,630	3,220	3.0%
<b>Total</b>	107,470	107,410	110,630	3,220	3.0%
<i>ENVIRONMENTAL BIOLOGY</i>					
Environmental Biology Research	108,276	108,260	111,480	3,220	3.0%
<b>Total</b>	108,276	108,260	111,480	3,220	3.0%
<i>BIOLOGICAL INFRASTRUCTURE</i>					
Research Resources	42,410	48,630	51,380	2,750	5.7%
Human Resources	32,620	31,590	34,090	2,500	7.9%
<b>Total</b>	75,030	80,220	85,470	5,250	6.5%
<i>EMERGING FRONTIERS</i>					
Emerging Frontiers	73,373	79,760	77,900	-1,860	-2.3%
<b>Total</b>	73,373	79,760	77,900	-1,860	-2.3%
<i>PLANT GENOME RESEARCH</i>					
Plant Genome Research	84,450	89,470	89,470	0	0.0%
<b>Total</b>	84,450	89,470	89,470	0	0.0%
<b>Total, BIO</b>	\$570,490	\$586,890	\$599,930	\$13,040	2.2%

## LEVEL OF FUNDING BY PROGRAM

(Dollars in Thousands)					
PROGRAM	FY 2003 ACTUAL	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE	
				FY 2005 Req/FY 2004 Estimate AMOUNT	PERCENT
<b><u>COMPUTER AND INFORMATION SCIENCE AND ENGINEERING</u></b>					
<i>COMPUTER &amp; NETWORK SYSTEMS</i>					
Computer & Network Systems	\$117,150	\$114,930	\$132,390	\$17,460	15.2%
<b>Total</b>	117,150	114,930	132,390	17,460	15.2%
<i>COMPUTING &amp; COMMUNICATION FOUNDATIONS</i>					
Computing & Communication Foundations	81,150	78,930	91,410	12,480	15.8%
<b>Total</b>	81,150	78,930	91,410	12,480	15.8%
<i>INFORMATION &amp; INTELLIGENT SYSTEMS</i>					
Information & Intelligent Systems	82,150	80,050	92,540	12,490	15.6%
<b>Total</b>	82,150	80,050	92,540	12,490	15.6%
<i>SHARED CYBERINFRASTRUCTURE</i>					
Shared Cyberinfrastructure	95,071	112,630	123,600	10,970	9.7%
<b>Total</b>	95,071	112,630	123,600	10,970	9.7%
<i>INFORMATION TECHNOLOGY RESEARCH (ITR)</i>					
Information Technology Research (ITR)	213,770	218,110	178,110	-40,000	-18.3%
<b>Total</b>	213,770	218,110	178,110	-40,000	-18.3%
<b>Total, CISE</b>	\$589,291	\$604,650	\$618,050	\$13,400	2.2%

## LEVEL OF FUNDING BY PROGRAM

(Dollars in Thousands)					
PROGRAM	FY 2003 ACTUAL	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE FY 2005 Req/FY 2004 Estimate AMOUNT	PERCENT
<b><u>ENGINEERING</u></b>					
<i>BIOENGINEERING AND ENVIRONMENTAL SYSTEMS</i>					
Bioengineering and Environmental Systems	\$49,452	\$51,020	\$49,770	-\$1,250	-2.5%
<b>Total</b>	49,452	51,020	49,770	-1,250	-2.5%
<i>CHEMICAL AND TRANSPORT SYSTEMS</i>					
Chemical and Transport Systems	68,331	68,920	67,210	-1,710	-2.5%
<b>Total</b>	68,331	68,920	67,210	-1,710	-2.5%
<i>CIVIL AND MECHANICAL SYSTEMS</i>					
Civil and Mechanical Systems	63,229	67,170	85,510	18,340	27.3%
<b>Total</b>	63,229	67,170	85,510	18,340	27.3%
<i>DESIGN, MANUFACTURE, AND INDUSTRIAL INNOVATION</i>					
Design, Manufacture, and Industrial Innovation	64,000	65,810	65,880	70	0.1%
Small Business-Industrial Innovation	90,923	103,590	104,090	500	0.5%
<b>Total</b>	154,923	169,400	169,970	570	0.3%
<i>ELECTRICAL AND COMMUNICATIONS SYSTEMS</i>					
Electrical and Communications Systems	73,046	74,580	72,730	-1,850	-2.5%
<b>Total</b>	73,046	74,580	72,730	-1,850	-2.5%
<i>ENGINEERING EDUCATION AND CENTERS</i>					
Engineering Education and Centers	132,722	134,040	130,710	-3,330	-2.5%
<b>Total</b>	132,722	134,040	130,710	-3,330	-2.5%
<b>Total, ENG</b>	\$541,702	\$565,130	\$575,900	\$10,770	1.9%



# LEVEL OF FUNDING BY PROGRAM

(Dollars in Thousands)

PROGRAM	FY 2003 ACTUAL	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE	
				FY 2005 Req/FY 2004 Estimate AMOUNT	PERCENT
<b><u>GEOSCIENCES</u></b>					
<i>ATMOSPHERIC SCIENCES</i>					
Atmospheric Sciences Research Support	\$147,943	\$156,780	\$160,130	\$3,350	2.1%
National Center for Atmospheric Research	83,348	82,000	83,500	1,500	1.8%
<b>Total</b>	231,291	238,780	243,630	4,850	2.0%
<i>EARTH SCIENCES</i>					
Earth Sciences Project Support	115,378	119,580	122,610	3,030	2.5%
Instrumentation and Facilities	31,937	32,000	33,000	1,000	3.1%
<b>Total</b>	147,315	151,580	155,610	4,030	2.7%
<i>OCEAN SCIENCES</i>					
Ocean Section	117,980	120,450	120,450	0	0.0%
Integrative Programs Section	110,260	118,080	120,240	2,160	1.8%
Marine Geosciences Section	84,980	84,210	88,570	4,360	5.2%
<b>Total</b>	313,230	322,740	329,260	6,520	2.0%
<b>Total, GEO</b>	\$691,836	\$713,100	\$728,500	\$15,400	2.2%

## LEVEL OF FUNDING BY PROGRAM

(Dollars in Thousands)

PROGRAM	FY 2003 ACTUAL	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE	
				FY 2005 Req/FY 2004 Estimate AMOUNT	PERCENT
<b><u>MATHEMATICAL AND PHYSICAL SCIENCES</u></b>					
<i>ASTRONOMICAL SCIENCES</i>					
Astronomical Sciences	\$187,074	\$196,550	\$204,350	\$7,800	4.0%
<b>Total</b>	187,074	196,550	204,350	7,800	4.0%
<i>CHEMISTRY</i>					
Chemistry	181,609	185,220	188,910	3,690	2.0%
<b>Total</b>	181,609	185,220	188,910	3,690	2.0%
<i>MATERIALS RESEARCH</i>					
Materials Research	241,386	250,890	253,180	2,290	0.9%
<b>Total</b>	241,386	250,890	253,180	2,290	0.9%
<i>MATHEMATICAL SCIENCES</i>					
Mathematical Sciences	178,785	200,410	202,250	1,840	0.9%
<b>Total</b>	178,785	200,410	202,250	1,840	0.9%
<i>PHYSICS</i>					
Physics	224,502	227,670	235,760	8,090	3.6%
<b>Total</b>	224,502	227,670	235,760	8,090	3.6%
<i>MULTIDISCIPLINARY ACTIVITIES</i>					
Research Project Support	27,341	30,770	31,050	280	0.9%
<b>Total</b>	27,341	30,770	31,050	280	0.9%
<b>Total, MPS</b>	\$1,040,697	\$1,091,510	\$1,115,500	\$23,990	2.2%

## LEVEL OF FUNDING BY PROGRAM

(Dollars in Thousands)					
PROGRAM	FY 2003 ACTUAL	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE	
				FY 2005 Req/ AMOUNT	FY 2004 Estimate PERCENT
<b><u>SOCIAL, BEHAVIORAL AND ECONOMIC SCIENCES</u></b>					
<i>SOCIAL AND ECONOMIC SCIENCES</i>					
Social and Economic Sciences	\$71,007	\$81,020	\$88,520	\$7,500	9.3%
<b>Total</b>	71,007	81,020	88,520	7,500	9.3%
<i>BEHAVIORAL AND COGNITIVE SCIENCES</i>					
Behavioral and Cognitive Sciences	62,315	68,500	76,000	7,500	10.9%
<b>Total</b>	62,315	68,500	76,000	7,500	10.9%
<i>SCIENCE RESOURCES STATISTICS</i>					
Science Resource Statistics	25,305	26,150	26,150	0	0.0%
<b>Total</b>	25,305	26,150	26,150	0	0.0%
<i>OFFICE OF INTERNATIONAL SCIENCE AND ENGINEERING<sup>1</sup></i>					
Office of International Science and Engineering	39,973	28,120	34,040	5,920	21.1%
<b>Total</b>	39,973	28,120	34,040	5,920	21.1%
<b>Total, SBE</b>	\$198,599	\$203,790	\$224,710	\$20,920	10.3%
<b><u>UNITED STATES POLAR RESEARCH PROGRAMS</u></b>					
	\$255,407	\$274,080	\$281,660	\$7,580	2.8%
<b><u>UNITED STATES ANTARCTIC LOGISTICAL SUPPORT ACTIVITIES</u></b>					
	\$68,552	\$68,070	\$68,070	\$0	0.0%
<b><u>INTEGRATIVE ACTIVITIES</u></b>					
	\$97,859	\$144,140	\$239,990	\$95,850	66.5%
<b>Total, RESEARCH AND RELATED ACTIVITIES</b>	\$4,054,433	\$4,251,360	\$4,452,310	\$200,950	4.7%

<sup>1</sup> FY 2003 Actual includes a transfer of \$12.83 million from the Department of State for an award to the U.S. Civilian Research and Development Foundation.

## LEVEL OF FUNDING BY PROGRAM

(Dollars in Thousands)

PROGRAM	FY 2003 ACTUAL	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE	
				FY 2005 Req/FY 2004 Estimate AMOUNT	PERCENT
<b><u>EDUCATION AND HUMAN RESOURCES</u></b>					
<i>MATH &amp; SCIENCE PARTNERSHIP</i>					
Math & Science Partnership	144,070	139,170	0	-\$139,170	-100.0%
<b>Total</b>	144,070	139,170	0	-139,170	-100.0%
<i>EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCoR)</i>					
Experimental Program to Stimulate Competitive Research (EPSCoR)	89,210	94,440	84,000	-10,440	-11.1%
<b>Total</b>	89,210	94,440	84,000	-10,440	-11.1%
<i>ELEMENTARY, SECONDARY AND INFORMAL SCIENCE EDUCATION<sup>1</sup></i>					
Instructional and Assessment Materials Development	28,780	28,820	29,450	630	2.2%
Teacher & Student Development	134,080	121,310	93,300	-28,010	-23.1%
Informal Science Education	60,440	62,130	50,000	-12,130	-19.5%
<b>Total</b>	223,300	212,260	172,750	-39,510	-18.6%
<i>UNDERGRADUATE EDUCATION</i>					
Curriculum, Laboratory and Instructional Development	99,700	93,200	88,140	-5,060	-5.4%
Workforce Development	72,850	62,300	70,710	8,410	13.5%
<b>Total</b>	172,550	155,500	158,850	3,350	2.2%
<i>GRADUATE EDUCATION</i>					
Graduate Student Support	139,500	155,950	173,880	17,930	11.5%
<b>Total</b>	139,500	155,950	173,880	17,930	11.5%
<i>HUMAN RESOURCE DEVELOPMENT</i>					
Undergraduate/ Graduate Student Support	60,760	68,370	64,490	-3,880	-5.7%
Research & Education Infrastructure	22,740	32,330	28,300	-4,030	-12.5%
Opportunities for Women and Persons with Disabilities	15,980	15,150	15,150	0	0.0%
<b>Total</b>	99,480	115,850	107,940	-7,910	-6.8%
<i>RESEARCH, EVALUATION AND COMMUNICATION</i>					
Research	54,270	54,240	62,370	8,130	15.0%
Evaluation	12,500	11,570	11,570	0	0.0%
<b>Total</b>	66,770	65,810	73,940	8,130	12.4%
<b>Total, EHR</b>	\$934,879	\$938,980	\$771,360	-\$167,620	-17.9%

<sup>1</sup>FY 2003 Actual and FY 2004 Estimate have been restated for the purposes of the FY 2005 Budget Request to reflect all funds for the Teacher Professional Continuum (TPC) in the ESIE Subactivity, including those previously shown in DUE (FY 2003, \$6.71 million; FY 2004 Estimate, \$6.48 million).

## LEVEL OF FUNDING BY PROGRAM

(Dollars in Thousands)					
PROGRAM	FY 2003 ACTUAL	FY 2004 ESTIMATE	FY 2005 REQUEST	CHANGE	
				FY 2005 Req/FY 2004 Estimate AMOUNT	PERCENT
<b>MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION</b>	\$179,029	\$154,970	\$213,270	\$58,300	37.6%
Total, MREFC	\$179,029	\$154,970	\$213,270	\$58,300	37.6%
<b>SALARIES AND EXPENSES</b>	\$189,423	\$218,700	\$294,000	\$75,300	34.4%
Total, S&E <sup>1</sup>	\$189,423	\$218,700	\$294,000	\$75,300	34.4%
<b>NATIONAL SCIENCE BOARD</b>	\$2,876	\$3,880	\$3,950	\$70	1.8%
Total, NSB	\$2,876	\$3,880	\$3,950	\$70	1.8%
<b>OFFICE OF INSPECTOR GENERAL</b>	\$8,697	\$9,940	\$10,110	\$170	1.7%
Total, OIG	\$8,697	\$9,940	\$10,110	\$170	1.7%
<b>TOTAL, NATIONAL SCIENCE FOUNDATION</b>	\$5,369,338	\$5,577,830	\$5,745,000	\$167,170	3.0%

Totals may not add due to rounding.

<sup>1</sup> FY 2003 includes an Appropriations Transfer from the Department of State in the amount of \$13.14 million for an award to the U.S. Civilian Research and Development Foundation. (\$12.83 million in SBE and \$315,436 in S&E)

## OBJECT CLASSIFICATION

### NSF Consolidated Budget by Object Classification (Includes All Appropriation Headings) <sup>1</sup>

Object Class Code	Standard Title	FY 2003 Actual	FY 2004 Estimate	FY 2005 Request
11.1	Full-time permanent	100	104	109
11.3	Other than fulltime permanent	7	7	7
11.5	Other personnel compensation	4	4	5
11.8	Special personal service payment	1	1	1
	Total personnel compensation	112	116	122
12.1	Civilian personnel benefits	25	32	33
21.0	Travel and transportation of persons	15	18	22
23.1	Rental payments to GSA	17	18	19
23.3	Communications, utilities, and miscellaneous charges	2	3	3
25.1	Advisory and assistance services	58	60	77
25.2	Other services	7	12	15
25.3	Purchases of goods and services from Government accounts	18	18	18
25.4	Operation and maintenance of facilities	180	180	180
25.5	Research and development contracts <sup>2</sup>	26	26	26
2.56	Medical Care	0	0	1
25.7	Operation and maintenance of facilities	9	10	43
26.0	Supplies and materials	3	3	3
31.0	Equipment	13	24	34
41.0	Grants, subsidies, and contributions	4,931	5,247	5,149
	Total, Direct obligations <sup>3</sup>	\$5,416	\$5,767	\$5,745

Totals may not add due to rounding.

<sup>1</sup>Excludes obligations for the Donations Account.

<sup>2</sup>The funding pattern for research and development contracts varies in accordance with annual appropriations for construction of the South Pole Station within the Major Research Equipment and Facilities Construction (MREFC) account.

<sup>3</sup>Excludes carryover and includes H-1B Nonimmigrant Petitioner obligations.

## REIMBURSABLE ACTIVITY

Reimbursements for the Research and Related Activities Appropriation and the Education and Human Resources Appropriation are realized from other federal agencies that have entered into interagency agreements with the Foundation. NSF enters into agreements (including Memoranda of Understanding) with other U.S. government agencies, as authorized by the NSF Act, 42 U.S.C. 1870 (c) and the Economy Act: 31 U.S.C. 1535, under which NSF assumes some responsibility for activities supported by these agencies. These activities can include jointly funded projects and programs, support of research operations and logistics, and access to NSF supported research facilities.

### REIMBURSABLE AWARDS BY AGENCY

(Dollars in Millions)

DEPARTMENT/AGENCY	FY 2003
DEFENSE	
<i>AIR FORCE</i>	3.7
<i>ARMY</i>	5.5
<i>Other DOD (DARPA, NSA &amp; Intelligence Agency)</i>	14.6
<i>NAVY</i>	2.0
SUBTOTAL, DOD	\$25.8
ARMY CORP OF ENGINEERS	0.7
CIA	18.5
COMMERCE	6.0
EDUCATION	1.1
ENERGY	8.7
EPA	0.8
HEALTH & HUMAN SERVICES	22.6
HOMELAND SECURITY	0.8
HUD	0.9
NASA	15.2
TRANSPORTATION	0.7
STATE	0.5
OTHER (less than \$500,000)	1.6
<b>TOTAL REIMBURSEMENTS</b>	<b>\$103.9</b>

Totals may not add due to rounding.

Since the 1980s, the number of interagency agreements NSF handles has increased dramatically. This increase is indicative of the growth in the breadth and complexity of the Foundation's programmatic activity. Consistent with applicable legislation and GAO decisions, agreements include reimbursement for costs that are incurred in the management and administration of these awards.

In FY 2003 the largest portion of NSF's reimbursable activity came from joint activities with the Department of Defense, (24.8 percent) the Department of Health and Human Services (21.8 percent) and the Central Intelligence Agency (17.8 percent). Reimbursable activities with the Department of Defense were primarily for support of the Air Force's Advanced Electro-Optical System (AEOS) and Army's 4 Dimensional Weather System (4DWX). Reimbursable activities with the Department of Health and Human Services are for non-medical biological research such as the human frontiers science program and the protein data bank.

## PERSONNEL SUMMARY

	FY 2003 Actual	FY 2004 Estimate	FY 2005 Request	Change Amount	Change Percent
Full-Time Equivalent Employment (FTE)	1,246	1,300	1,325	25	1.9%
Average GS Grade	10.75	10.67	10.80	0.13	1.2%
Average Salary	\$84,797	\$84,597	\$87,158	\$2,561	3.0%

## DETAIL OF PERMANENT APPOINTMENTS

	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate
Executive Level II	1	1	1
Executive Level III	1	1	1
Subtotal	2	2	2
ES-5	87	88	92
AD	289	282	300
GS/GM-15	72	82	84
GS/GM-14	85	92	94
GS/GM-13	115	102	104
GS-12	93	106	108
GS-11	49	55	55
GS-10	12	15	15
GS-9	78	77	77
GS-8	69	65	65
GS-7	132	127	127
GS-6	25	35	35
GS-5	4	24	24
GS-4	1	4	4
Subtotal	735	784	792
Total Permanent Appointments	1,113	1,156	1,186
FTE	1,246	1,300	1,325



## EXPLANATION OF CARRYOVER FOR FY 2004

The National Science Foundation's total unobligated balance of \$100.18 million from the FY 2003 Appropriation consists of amounts displayed below.

- Within the Research and Related Activities (RRA) appropriation \$28.42 million was carried forward into FY 2004. Integrative Activities carried over \$1.78 million for the Science and Technology Centers awards, and \$17.68 million for the Science of Learning Centers (SLC). The Directorate for Social, Behavioral, and Economics Sciences (SBE) will manage the SLC awards. Under the SBE activity, \$8.43 million was brought forward for funding of the Human and Social Dynamics awards. The remaining amounts are from several awards in various programs that were not ready for obligation in FY 2003.
- Within the Education and Human Resources (EHR) appropriation \$5.00 million was carried forward into FY 2004 for funding of the Centers of Research Excellence in Science and Technology (CREST) awards.
- Within the Major Research Equipment and Facilities Construction (MREFC) appropriation \$66.11 million was carried forward into FY 2004. This includes \$53.38 million for the Office of Polar Programs (OPP) activity (i.e., \$49.55 million for the South Pole Station Modernization, \$115,000 for Polar Support Aircraft upgrades, and \$44,216 for the South Pole Safety project, and \$3.67 million for IceCube), and \$12.54 million for the Geosciences (GEO) activity for the High-performance Instrumented Airborne Platform for Environmental Research (HIAPER).
- Within the Office of Inspector General appropriation a total of \$645,872 was carried forward into FY 2004 to cover priority audits that are contracted out, fund contracts for financial analysis and other technical support for OIG investigations, provide OIG's share of the development costs of new space for the office, fund the final phase of a contract to upgrade OIG's knowledge management system, and protect the appropriation against unanticipated variations between obligations and expenditures.

### Distribution of FY 2003 Carryover into FY 2004 (Dollars in Millions)

	FY 2004 Estimate	FY 2004 Carryover from FY 2003	Adjusted Total FY 2004 Estimate
Research and Related Activities	4,251.36	28.42	4,279.78
Education and Human Resources <sup>1</sup>	938.98	5.00	943.98
Major Research Equipment and Facilities Construction	154.97	66.11	221.08
Salaries and Expenses	218.70	-	218.70
National Science Board	3.88	-	3.88
Office of Inspector General	9.94	0.65	10.59
Total	5,577.83	100.18	5,678.01

Totals may not add due to rounding.

<sup>1</sup>Carryover excludes \$83.90 million of H-1B Nonimmigrant Petitioner Fees.

**NATIONAL SCIENCE FOUNDATION  
FY 2005 CONGRESSIONAL REQUEST  
FULL BUDGETARY COSTING**

The tables below show two methods for allocating the full budgetary cost of the NSF FY 2005 Request. The first shows the full budgetary costs allocated to each of NSF's operating directorates. The second shows these costs allocated to three of NSF's strategic outcome goals: People, Ideas, and Tools. Organizational Excellence, NSF's fourth strategic goal encompasses the indirect costs to be allocated under full budgetary costing. These allocations represent initial steps, using readily available information, in NSF's plans to achieve the integration of budget, cost, and performance, consistent with the President's Management Agenda.

**What is Full Budgetary Cost?** OMB Circular A-11 defines "full-cost" as the sum of all budget resources used by an agency to achieve program outputs and outcomes. These include both *direct* program costs and *indirect* costs, which generally include administrative costs and other activities that are not directly attributable to a single program or activity. For two of NSF's appropriations, Research and Related Activities (R&RA) and Education and Human Resources (EHR), all funds are directly attributable to directorates and outcome goals. For NSF's other four appropriations, Major Research Equipment and Facilities Construction (MREFC), Salaries and Expenses (S&E), National Science Board (NSB), and the Office of Inspector General (OIG), the funds are distributed using the methodologies described below.

**Allocation by Directorate**

The current budget structure contains program activities within R&RA and EHR that equate to directorates. Therefore, R&RA and EHR funding is already aligned by directorate. MREFC funds projects that are managed by a particular NSF directorate. Therefore, each MREFC project can be directly associated with a particular directorate. In addition, each managing directorate is responsible for the initial planning, design and follow-on operations and maintenance costs that are funded R&RA. The MREFC program funds were assigned to the managing directorate responsible for oversight of a particular project. (Table 1)

All budget items funded through the S&E, NSB, and OIG appropriations accounts are defined as Organizational Excellence (OE) and are allocated to directorates. More than half of the S&E account can be precisely associated with an individual directorate. These S&E Direct budget items consist of distributed funding for travel, training, equipment, supplies, incentive awards and premium pay. Also, space rental and personnel compensation and benefits (PC&B) of employees in a particular directorate are attributed to that directorate in the financial accounting system.

Once S&E Direct budget items that are directly associated with a particular directorate have been assigned, then budget items associated with the Office of Information and Resource Management (IRM), Office of Budget, Finance and Awards Management (BFA), the staff offices in the Office of the Director (OD), NSB, and OIG are allocated. These S&E Indirect budget items are allocated to a particular directorate based on the proportion of the total FY 2005 Directorate Request. The FY 2005 NSB and OIG budgetary costs are assigned using the same methodology as the S&E Indirect costs total. (Table 1)

**Allocations by Strategic Outcome Goal**

The full budgetary costing by People, Ideas, and Tools (PIT) was derived by using the same methodology as stated above, except the Direct S&E budget items, Indirect S&E budget items, and total NSB and OIG funding were assigned using the PIT percentages for the applicable directorate. (Table 2)

**FY 2005 FULL BUDGETARY COSTING**

**Table 1: Allocation of Major Research Equipment and Facilities Construction (MREFC),  
Salaries and Expenses (S&E), National Science Board (NSB), and the Office of Inspector General (OIG)  
(Dollars in Thousands)**

	BIO	CISE	ENG	GEO	MPS	SBE	OPP	IA	R&RA Total	EHR	TOTAL
<b>FY 2005 CONGRESSIONAL REQUEST</b>	<b>599,930</b>	<b>618,050</b>	<b>575,900</b>	<b>728,500</b>	<b>1,115,500</b>	<b>224,710</b>	<b>349,730</b>	<b>239,990</b>	<b>4,452,310</b>	<b>771,360</b>	<b>5,223,670</b>
<b>MREFC</b>											
Large Hadron Collider (LHC)									-	-	-
NEES			-						-	-	-
Terascale Computing Syst (TCS)									-	-	-
HIAPER				-					-	-	-
South Pole Station							-		-	-	-
Earth Scope				47,350					47,350	-	47,350
NEON	12,000								12,000	-	12,000
IceCube							33,400		33,400	-	33,400
ALMA					49,670				49,670	-	49,670
Ocean Drilling				40,850					40,850	-	40,850
RSVP					30,000				30,000	-	30,000
<b>MREFC Subtotals</b>	<b>12,000</b>	<b>-</b>	<b>-</b>	<b>88,200</b>	<b>79,670</b>	<b>-</b>	<b>33,400</b>	<b>-</b>	<b>213,270</b>	<b>-</b>	<b>213,270</b>
<b>Total Directorate FY 2005 Request including MREFC</b>	<b>611,930</b>	<b>618,050</b>	<b>575,900</b>	<b>816,700</b>	<b>1,195,170</b>	<b>224,710</b>	<b>383,130</b>	<b>239,990</b>	<b>4,665,580</b>	<b>771,360</b>	<b>5,436,940</b>
<b>Direct S&amp;E</b>											
Space Rental Direct	1,406	998	1,563	1,207	1,404	1,531	520	-	8,629	1,857	10,485
PC&B Direct	11,812	8,920	15,223	13,711	17,044	18,862	6,341	-	91,913	16,964	108,878
Distributed S&E Direct	903	685	1,097	738	1,134	785	496	-	5,838	911	6,750
<b>Direct S&amp;E Subtotals</b>	<b>14,121</b>	<b>10,603</b>	<b>17,883</b>	<b>15,656</b>	<b>19,582</b>	<b>21,178</b>	<b>7,357</b>	<b>-</b>	<b>106,380</b>	<b>19,732</b>	<b>126,113</b>
Indirect S&E Cost Allocation	20,210	20,820	19,401	24,541	37,578	7,570	11,781	-	141,901	25,985	167,887
<b>S&amp;E Direct &amp; Indirect Subtotals</b>	<b>34,331</b>	<b>31,423</b>	<b>37,284</b>	<b>40,197</b>	<b>57,160</b>	<b>28,748</b>	<b>19,138</b>	<b>-</b>	<b>248,281</b>	<b>45,717</b>	<b>294,000</b>
<b>NSB Allocation</b>	<b>475</b>	<b>490</b>	<b>456</b>	<b>577</b>	<b>884</b>	<b>178</b>	<b>277</b>		<b>3,337</b>	<b>611</b>	<b>3,950</b>
<b>OIG Allocation</b>	<b>1,217</b>	<b>1,254</b>	<b>1,168</b>	<b>1,478</b>	<b>2,263</b>	<b>456</b>	<b>709</b>	<b>-</b>	<b>8,545</b>	<b>1,565</b>	<b>10,110</b>
<b>NSF TOTAL</b>	<b>647,953</b>	<b>651,217</b>	<b>614,808</b>	<b>858,952</b>	<b>1,255,477</b>	<b>254,092</b>	<b>403,254</b>	<b>239,990</b>	<b>4,925,743</b>	<b>819,253</b>	<b>5,745,000</b>

**FY 2005 FULL BUDGETARY COSTING**

**Table 2: Allocation by People, Ideas, and Tools  
(Dollars in Thousands)**

<b>Total Directorate FY 2005</b>	BIO	CISE	ENG	GEO	MPS	SBE	OPP	IA	R&RA	EHR	TOTAL
People	63,765	67,791	95,184	35,592	139,366	20,249	5,944	90,000	517,891	622,327	1,140,219
Ideas	458,173	422,951	482,118	437,026	745,277	183,405	92,223	55,990	2,877,163	174,110	3,051,275
Tools	126,015	160,475	37,506	386,334	370,834	50,438	305,087	94,000	1,530,689	22,816	1,553,506
<b>FULL BUDGETARY COST</b>	<b>647,953</b>	<b>651,217</b>	<b>614,808</b>	<b>858,952</b>	<b>1,255,477</b>	<b>254,092</b>	<b>403,254</b>	<b>239,990</b>	<b>4,925,743</b>	<b>819,253</b>	<b>5,745,000</b>

Subtotals may not add due to rounding.