# **SUMMARY TABLES/CHARTS**

# National Science Foundation By Strategic Goal and Account FY 2005 Congressional Request

			FY 2005 Request						
	FY 2003	FY 2004						Change over Estim	
NSF Accounts	Actual	Estimate	People	Ideas	Tools	OrgExc	FY 2005 Request	\$	%
FY 2003 Actual	\$5,369.34		\$1,117.00	\$2,689.00	\$1,312.70	\$250.63			
FY 2004 Estimate	, i i i i i i i i i i i i i i i i i i i	\$5,577.83	\$1,133.77	\$2,788.99	\$1,367.89	\$287.18			
BIO	570.49	586.89	59.68	428.82	106.71	4.72	599.93	13.04	2.2%
CISE	589.29	604.65	63.51	396.24	150.34	7.96	618.05	13.40	2.2%
ENG (less SBIR/STTR)	450.78	461.54	87.96	341.44	34.66	7.75	471.81	10.27	2.2%
SBIR/STTR	90.92	103.59	0.00	104.09	0.00	0.00	104.09	0.50	0.5%
GEO	691.84	713.10	33.39	409.99	279.69	5.43	728.50	15.40	2.2%
MPS	1,040.70	1,091.51	131.49	703.16	274.71	6.14	1,115.50	23.99	2.2%
SBE	158.63	175.67	10.44	133.27	43.44	3.52	190.67	15.00	8.5%
OISE	39.97	28.12	7.00	24.69	0.00	2.35	34.04	5.92	21.1%
OPP	323.96	342.15	5.56	86.27	254.15	3.75	349.73	7.58	2.2%
IA	97.86	144.14	90.00	55.99	94.00	0.00	239.99	95.85	66.5%
Research & Related Activities	\$4,054.43	\$4,251.36	\$489.03	\$2,683.96	\$1,237.70	\$41.62	\$4,452.31	\$200.95	4.7%
Education & Human Resources	\$934.88	\$938.98	\$575.79	\$161.09	\$21.11	\$13.37	\$771.36	-\$167.62	-17.9%
Major Research Equipment & Facilities Construction	\$179.03	\$154.97	\$0.00	\$0.00	\$213.27	\$0.00	\$213.27	\$58.30	37.6%
Salaries & Expenses	\$189.42	\$218.70	\$0.00	\$0.00	\$0.00	\$294.00	\$294.00	\$75.30	34.4%
National Science Board	\$2.88	\$3.88	\$0.00	\$0.00	\$0.00	\$3.95	\$3.95	\$0.07	1.8%
Office of Inspector General	\$8.70	\$9.94	\$0.00	\$0.00	\$0.00	\$10.11	\$10.11	\$0.17	1.7%
Total, National Science Foundation	\$5,369.34	\$5,577.83	\$1,064.82	\$2,845.05	\$1,472.08	\$363.05	\$5,745.00	\$167.17	3.0%
H-1B Visa	\$65.68	\$0.00					\$0.00		
Total NSF, Including H-1B Visa	\$5,435.02	\$5,577.83	\$1,064.82	\$2,845.05	\$1,472.08	\$363.05	\$5,745.00	\$167.17	3.0%
Percent Increase over Prior Year, excluding H-1B Visa			-6.1%	2.0%	7.6%	26.4%			

Totals may not add due to rounding.

# National Science Foundation By Strategic Outcome Goal and Investment Category FY 2005 Congressional Request

				Change over FY 2004 Estimate		
Strategic Outcome Goals and Investment Category	FY 2003 Actual	FY 2004 Estimate	FY 2005 Request	Amount		
Individuals	471.53	477.39	498.85	21.46	4.5%	
Institutions	182.54	180.15	172.35	-7.80	-4.3%	
Collaborations	462.93	476.23	393.62	-82.61	-17.3%	
PEOPLE	1,117.00	1,133.77	1,064.82	-68.95	-6.1%	
Fundamental Science & Engineering	2,095.56	2,124.25	2,150.44	26.19	1.2%	
Centers Programs	364.23	413.02	457.26	44.24	10.7%	
Capability Enhancement	229.21	251.72	237.35	-14.37	-5.7%	
IDEAS	2,689.00	2,788.99	2,845.05	56.06	2.0%	
Facilities	538.17	580.21	685.57	105.36	18.2%	
Infrastructure & Instrumentation	336.66	341.52	344.93	3.41	1.0%	
Polar Tools, Facilities & Logistics	252.96	250.24	254.15	3.91	1.6%	
Federally-Funded R&D Centers	184.92	195.92	187.43	-8.49	-4.3%	
TOOLS	1,312.70	1,367.89	1,472.08	104.19	7.6%	
ORGANIZATIONAL EXCELLENCE	250.63	287.18	363.05	75.87	26.4%	
TOTAL, NSF	\$5,369.34	\$5,577.83	\$5,745.00	\$167.17	3.00%	

### **Strategic Outcome Goals as a Percent of NSF Budget**

Strategic Outcome Goals and Investment Category	FY 2003 Actual		112005	
People	20.8%	20.3%	18.5%	-1.8%
Ideas	50.1%	50.0%	49.5%	-0.5%
Tools	24.4%	24.5%	25.6%	1.1%
Organizational Excellence	4.7%	5.1%	6.3%	1.2%
Total, NSF	100%	100%	100%	0.0%

	FY 2003	FY 2004	FY 2005	Chan	ige
	Actual	Estimate	Request	Amount	Percent
Facilities <sup>1,2,3</sup>	\$538.166	\$580.21	\$685.57	\$105.36	18.2%
Academic Research Fleet	\$65.200	<b>\$300.21</b> 76.50	83.20	<b>\$105.50</b> 6.70	8.8%
Advanced Modular Incoherent Scatter Radar	\$14.000	11.00	12.30	1.30	11.8%
Cornell Electron Storage Ring	\$19.490	18.00	19.70	1.70	9.4%
Gemini	\$13.480	14.12	14.93	0.81	5.7%
Incorporated Research Institutions for Seismology	\$13.200	13.00	13.00	0.00	0.0%
Laser Interferometer Gravitational Wave Observatory	\$33.000	33.00	33.00	0.00	0.0%
Major Research Equipment & Facilities Construction <sup>1</sup>	\$184.816	189.88	278.22	88.34	46.5%
Nanofabrication (NNUN/NNIN)	\$6.050	12.45	13.86	1.41	11.3%
National High Magnetic Field Laboratory <sup>2</sup>	\$25.100	24.61	25.61	1.00	4.1%
National Superconducting Cyclotron Laboratory	\$15.650	15.65	16.65	1.00	6.4%
Ocean Drilling Program/Integrated Ocean Drilling Pgm	\$30.000	37.50	35.60	-1.90	-5.1%
Partnerships for Advanced Computational Infrastructure	\$73.240	87.00	90.00	3.00	3.4%
Other Facilities <sup>3</sup>	\$44.940	47.50	49.50	2.00	4.2%
Infrastructure & Instrumentation	\$336.659	341.52	344.93	3.41	1.0%
Advanced Networking Infrastructure	\$46.620	23.06	22.90	-0.16	-0.7%
Major Research Instrumentation	\$83.449	109.35	90.00	-19.35	-17.7%
National STEM Digital Library	\$27.630	24.40	27.02	2.62	10.7%
Research Resources	\$153.660	160.79	181.09	20.30	12.6%
Science Resource Statistics	\$25.300	23.92	23.92	0.00	0.0%
Polar Tools, Facilities and Logistics <sup>4</sup>	\$252.956	250.24	254.15	3.91	1.6%
Antarctic Facilities and Operations	\$141.430	149.48	153.96	4.48	3.0%
Antarctic Logistics	\$68.550	68.07	68.07	0.00	0.0%
Arctic Logistics	\$30.290	31.40	32.12	0.72	2.3%
South Pole Station <sup>1</sup>	\$12.686	1.29	0.00	-1.29	-100.0%
Federally-Funded R&D Centers	\$184.920	195.92	187.43	-8.49	-4.3%
National Astronomy & Ionosphere Center	\$12.730	12.34	12.50	0.16	1.3%
National Center for Atmospheric Research	\$80.270	83.27	84.52	1.25	1.5%
National Optical Astronomy Observatories	\$42.620	41.35	39.00	-2.35	-5.7%
National Radio Astronomy Observatories	\$45.330	54.98	47.41	-7.57	-13.8%
Science and Technology Policy Institute	\$3.970	3.98	4.00	0.02	0.5%
Total, Tools Support	\$1,312.701	\$1,367.89	\$1,472.08	\$104.19	7.6%

# NSF Tools FY 2005 Congressional Request

Totals may not add due to rounding.

<sup>1</sup>All MREFC projects are included in Facilities, except South Pole Station. Funding levels for MREFC projects in this table include initial support for operations and maintenance funded through R&RA (and EHR) as well as construction, acquisition and commissioning costs funded through MREFC.

<sup>2</sup>Support for the National High Field Mass Spectrometry Facility will be integrated into the National High Magnetic Field Laboratory in FY 2004, and has been included in the FY 2003 Actual..

<sup>3</sup>Other Facilities includes support for the Network for Computational Nanotechnology, and other physics, materials research, ocean sciences, atmospheric sciences, and earth sciences facilities.

<sup>4</sup>Polar Tools, Facilities and Logistics includes South Pole Station, an MREFC project, with funding as described above.

### National Science Foundation Selected Cross-Cutting Programs FY 2005 Congressional Request

Selected Cross-Cuttin	a <b>D</b> rogroms				Change ove Estin	
Selected Cross-Cuttin	ig riograms	FY 2003	FY 2004	FY 2005		_
		Actual	Estimate	Request	Amount	Percent
ADVANCE/Professional Opportunities for	Research & Related Activities	16.73	19.16	20.27	1.11	5.8%
Women in Research and Education - POWRE	Education & Human Resources	0.45	0.00	0.00	0.00	N/A
Wohlen in Research and Education TOWRE	Total, NSF	\$17.18	\$19.16	\$20.27	\$1.11	5.8%
Course, Curriculum & Lab Improvement -	Research & Related Activities	6.10	4.58	4.44	-0.14	-3.1%
CCLI	Education & Human Resources	48.10	40.41	46.53	6.12	15.1%
CCEI	Total, NSF	\$54.20	\$44.99	\$50.97	\$5.98	13.3%
	Research & Related Activities	9.95	9.63	9.63	0.00	0.0%
Interagency Education Research Initiative - IERI	Education & Human Resources	14.90	14.91	14.91	0.00	0.0%
IEKI	Total, NSF	\$24.85	\$24.54	\$24.54	\$0.00	0.0%
	Research & Related Activities	133.87	130.68	130.68	0.00	0.0%
Faculty Early Career Development - CAREEF	Education & Human Resources	0.00	0.00	0.00	0.00	N/A
5 5 1	Total, NSF	\$133.87	\$130.68	\$130.68	\$0.00	0.0%
	Research & Related Activities	5.26	8.06	8.56	0.50	6.2%
Graduate Research Fellowships - GRF	Education & Human Resources	79.76	89.21	94.74	5.53	6.2%
1	Total, NSF	\$85.02	\$97.27	\$103.30	\$6.03	6.2%
	Research & Related Activities	6.06	7.64	8.24	0.60	7.9%
Graduate Teaching Fellowships in K-12	Education & Human Resources	36.34	42.21	47.46	5.25	12.4%
Education - GK-12	Total, NSF	\$42.40	\$49.85	\$55.70	\$5.85	11.7%
	Research & Related Activities	34.46	42.47	50.06	7.59	17.9%
Integrative Graduate Education and Research	Education & Human Resources	23.39	24.53	31.68	7.15	29.1%
Training - IGERT						29.1% 22.0%
	Total, NSF Research & Related Activities	\$57.85 18.06	\$67.00 20.52	\$81.74 22.82	\$14.74 2.30	11.2%
Long Town Dessarch Sites LTED						
Long-Term Research Sites - LTER	Education & Human Resources	0.00	0.00	0.00	0.00	N/A
	Total, NSF	\$18.06	\$20.52	\$22.82	\$2.30	11.2%
	Research & Related Activities	7.26	7.27	7.27	0.00	0.0%
Model Institutions for Excellence-MIE	Education & Human Resources	2.49	2.51	2.51	0.00	0.0%
	Total, NSF	\$9.75	\$9.78	\$9.78	\$0.00	0.0%
	Research & Related Activities	17.84	17.46	18.31	0.85	4.9%
Postodoctoral Programs	Education & Human Resources	0.00	0.00	0.00	0.00	N/A
	Total, NSF	\$17.84	\$17.46	\$18.31	\$0.85	4.9%
	Research & Related Activities	54.08	51.79	52.06	0.27	0.5%
Research Experience for Undergraduates - RE	Education & Human Resources	0.00	0.99	0.99	0.00	N/A
	Total, NSF	\$54.08	\$52.78	\$53.05	\$0.27	0.5%
	Research & Related Activities	0.83	1.29	1.29	0.00	0.0%
Research Opportunity Awards - ROA	Education & Human Resources	0.00	0.00	0.00	0.00	N/A
	Total, NSF	\$0.83	\$1.29	\$1.29	\$0.00	0.0%
	Research & Related Activities	33.43	31.19	31.09	-0.10	-0.3%
Research in Undergraduate Institutions - RUI	Education & Human Resources	0.00	0.00	0.00	0.00	N/A
	Total, NSF	\$33.43	\$31.19	\$31.09	-\$0.10	-0.3%
	Research & Related Activities	44.07	42.52	72.39	29.87	70.2%
Science and Technology Centers - STCs	Education & Human Resources	0.00	0.00	0.00	0.00	N/A
	Total, NSF	44.07	42.52	72.39	\$29.87	70.2%

\*Totals may not add due to rounding.



# NSF Funding Profile

Approximately half of the awards that are supported in a particular fiscal year are competitively reviewed in that year through NSF's merit review process. The other awards are continuations of projects that were competitively reviewed in a prior year. As shown in the <u>Number of Competitive Awards</u>, the <u>Funding Rate</u> is the number of competitive awards made during a year as a percentage of total proposals competitively reviewed. It indicates the probability of receiving an award when submitting proposals to NSF.

<u>Research Grants</u> are those limited to research projects and excludes other categories of awards that fund infrastructure-type activities such as equipment and conference awards, which do not require multi-year support.

The <u>Annualized Award Size</u> displays the annual level of research grants provided to awardees by dividing the total dollars of each award by the number of years over which it extends. Both the average and the median annualized award size for competitively reviewed awards are shown.

<u>Average Duration</u> is the average length of the award in years for research grants.

The Quantitative Data Tables, provided under a separate tab, are based on all proposals and awards, including competitive awards, contracts, cooperative agreements, supplements and amendments to existing grants and contracts.

NSF FU	NSF FUNDING PROFILE								
	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate						
Statistics for Competitive Awards									
Number	10,650	10,560	10,480						
Funding Rate	28%	27%	27%						
Statistics for Research Grants									
Number of Research Grants	6,140	6,217	6,145						
Funding Rate	24%	24%	23%						
Median Annualized Award Size	\$100,000	\$102,570	\$104,150						
Average Annualized Award Size	\$135,000	\$139,000	\$142,000						
Average Duration (yrs.)	2.9	3.0	3.0						

	U.S. Global Change Research Programs Includes U.S. Global Change Research Program Climate Change Research Initiative			Networking and Information Technology Research & Development			National Nanotechnology Initiative			
	FY 2003 Actual	FY 2004 Estimate	FY 2005 Request	FY 2003 Actual	FY 2004 Estimate	FY 2005 Request	FY 2003 Actual	FY 2004 Estimate	FY 2005 Request	
BIO CISE	15.10	15.10	15.10	31.60 566.78	50.00 588.86	57.00 594.28	2.98 11.14	5.31 15.79	5.85 19.40	
ENG	1.00	1.00 157.49	1.00 157.49	11.17 13.21	11.17 14.56	12.73	94.35 7.53	108.88 7.94	133.81 7.94	
GEO MPS	147.43 5.45	5.45	5.45	59.23	55.45	15.56 56.20	103.92	111.48	132.14	
SBE OISE	20.45	20.35	20.48	12.70	12.70	13.34	1.11	1.56	1.50 0.26	
OPP IA	13.78	13.78	10.50	1.33	1.33	1.50	0.00	0.00	0.00	
R&RA	203.21	213.17	210.02	696.02	734.07	750.61	221.03	250.96	300.90	
EHR MREFC				2.48 44.83	9.53 9.94	10.01 0.00	0.22	2.55	4.16	
NSF TOTAL	\$203.21	\$213.17	\$210.02	\$743.33	\$753.54	\$760.62	\$221.25	\$253.51	\$305.06	

## NSF NSTC CROSSCUTS FY 2005 Budget Request to Congress

Note: The Climate Change Science Programs incorporate the U.S. Global Change Research Program and the Climate Change Research Initiative per Section 84-Character Classification (Schedule C) in OMB Circular No. A-11 (2003)

### NSF People Programs by Level of Education FY 2005 Congressional Request

				(Dollars i	n Millions)							
	Old	l Structure - F	Y 2003 Actu	al	Old Structure - FY 2004 Estimate			Old S	Old Structure - FY 2005 Request			
New Structure	K-12 Support	Undergrad Support	Grad & Prof Support	Other People Support	K-12 Support	Undergrad Support	Grad & Prof Support	Other People Support	K-12 Support	Undergrad Support	Grad & Prof Support	Other People Support
Individuals Support	\$77.57	\$72.70	\$319.46	\$4.94	\$73.40	\$55.06	\$348.92	\$4.00	\$73.40	\$51.88	\$373.84	\$4.60
CAREER			133.87				130.68				130.68	
Distinguished Teaching Scholars		1.88				1.80				2.00		
GRF			85.02				97.27				103.30	
IGERT			57.85				67.00				81.74	
Noyce Scholarships		6.93				7.95				4.00		
Postdocs			17.84				17.46				18.31	
PAEMST	4.15				4.30				4.30			
REU Supplements		23.59				21.20				21.47		
Scholarships for Service/Cybercorps		30.14				16.08				16.18		
Teacher Prof Continuum (STEM TP & TE)	66.65				62.16				62.16			
VIGRE			19.00				25.78				27.78	
Other Individuals Support	6.77	10.16	5.88	4.94	6.94	8.03	10.73	4.00	6.94	8.23	12.03	4.60
Institutions Support	\$29.86	\$133.90	\$21.13	\$0.00	\$28.82	\$130.56	\$22.83	\$0.20	\$29.45	\$117.60	\$27.93	\$0.30
ADVANCE/POWRE			17.18				19.16				20.27	
ATE		42.33				45.23				38.16		
Course, Curriculum & Lab Improvement		54.20				44.99				50.97		
Engineering Education Reform		16.08				15.49				13.47		
Instructional Materials Assessment	27.36				28.82				29.45			
STEM Talent Expansion (Tech Talent)		21.29				24.85				15.00		
Other Institutions Support	2.50		3.95				3.67	0.20			7.66	0.30
Collaborations Support	\$213.44	\$104.73	\$55.13	\$96.24	\$198.81	\$117.94	\$67.02	\$101.58	\$111.67	\$124.10	\$72.41	\$91.01
Centers for Learning & Teaching	26.58				28.84				28.84			
Evaluation				12.50				11.57				11.57
GK-12			42.40				49.85				55.70	
HBCU-UP		18.71				23.86				19.98		
Informal Science Education				60.23				62.13				50.00
Louis Stokes AMP		31.81				34.30				34.30		
Math & Science Partnership	144.07				139.17				80.00			
MGE-AGEP			11.48				14.91				14.91	
MIE		9.75				9.78				9.78		
PFI				4.97				9.94				10.00
PAESMEM				0.57				0.29				0.29
PGE				10.50				9.90				9.90
PPD/RiDE				4.97				5.25				5.25
REU Sites		30.49				31.58				31.58		
RSI	12.58				6.04				0.00			
SSI	0.00				0.00				0.00			
Tribal Colleges		9.85				9.92				9.92		
USP	27.73				21.97				0.00			
Other Collaborations Support	2.48	4.12	1.25	2.50	2.79	8.50	2.26	2.50	2.83	18.54	1.80	4.00
Subtotals, People	\$320.87	\$311.33	\$395.72	\$101.18	\$301.03	\$303.56	\$438.77	\$105.78	\$214.52	\$293.58	\$474.18	\$95.91
Total EHR A&M Offset	-4.88	-3.39	-2.41	-1.41	-5.87	-4.22	-3.47	-1.81	-2.79	-4.55	-4.28	-1.75
SUBTOTALS, PEOPLE	\$315.98	\$307.94	\$393.31	\$99.77	\$295.16	\$299.34	\$435.30	\$103.97	\$211.73	\$289.03	\$469.90	\$94.16
TOTALS, PEOPLE				\$1,117.00				\$1,133.77				\$1,064.82

				Major Research				
	Research &	Education &	Academic	Equipment &		Office of	National	
	Related	Human	Research	Facilities	Salaries &	Inspector	Science	
Fiscal Year	Activities	Resources	Infrastructure	Construction	Expenses	General	Board	NSF
51	0.0	0.0	0.0		0.1	0.0		0.2
52	1.4	1.5	0.0		0.5	0.0		3.5
53	2.1	1.4	0.0		0.9	0.0		4.4
54	4.5	1.9	0.0		1.5	0.0		8.0
55	8.9	2.1	0.0		1.5	0.0		12.5
56	10.8	3.5	0.0		1.7	0.0		16.0
57	22.0	14.3	0.0		2.4	0.0		38.6
58	27.4	19.2	0.0		2.9	0.0		49.5
59	66.3	61.3	0.0		5.3	0.0		132.9
60	88.4	63.7	0.0		6.5	0.0		158.6
61	104.0	63.4	0.0		7.6	0.0		175.0
62	173.3	78.6	0.0		9.0	0.0		260.8
63	218.9	91.0	0.0		10.9	0.0		320.8
64	239.9	102.6	0.0		12.1	0.0		354.6
65	282.4	120.4	0.0		13.1	0.0		416.0
66 67	328.6 327.7	124.3 123.4	0.0 0.0		13.1 14.0	0.0 0.0		466.0 465.1
68	327.7	123.4	0.0		14.0	0.0		403.1 500.3
69	292.9	123.1	0.0		15.4	0.0		432.5
70	316.4	125.1	0.0		10.5	0.0		432.5
70	369.4	105.0	0.0		21.8	0.0		496.1
72	482.4	93.7	0.0		24.6	0.0		600.7
72	519.4	62.2	0.0		28.6	0.0		610.3
74	533.3	80.7	0.0		31.7	0.0		645.7
75	581.2	74.0	0.0		37.9	0.0		693.1
76	619.7	62.5	0.0		42.2	0.0		724.4
77	672.0	74.3	0.0		45.5	0.0		791.8
78	734.7	73.9	0.0		48.7	0.0		857.3
79	791.8	80.4	0.0		54.8	0.0		926.9
80	836.8	80.1	0.0		58.2	0.0		975.1
81	900.4	75.7	0.0		59.2	0.0		1,035.3
82	909.8	26.2	0.0		63.2	0.0		999.1
83	1,013.0	23.0	0.0		65.7	0.0		1,101.7
84	1,177.7	63.0	0.0		66.3	0.0		1,306.9
85	1,344.6	90.6	0.0		72.0	0.0		1,507.1
86	1,329.6	91.7	0.0		71.8	0.0		1,493.2
87	1,440.0	109.9	0.0		77.8	0.0		1,627.6
88	1,481.3	156.8	0.0		84.5	0.0		1,722.6
89	1,600.5	194.1	0.0		91.3	0.0		1,885.9
90	1,696.6	230.4	0.4		96.4	2.3		2,026.1
91	1,868.5	331.9	39.0 22.4		101.2	2.9		2,343.5
92 93	1,940.5	459.4 505.1	33.4 49.8	34.1	110.0 110.8	3.9 3.7		2,547.1 2,749.7
93	2,046.3 2,168.4	505.1 569.0	49.8 105.4	34.1 17.0	110.8	3.7 3.9		2,749.7 2,987.2
94	2,168.4 2,281.5	611.9	105.4	17.0	123.5	3.9 4.5		2,987.2 3,270.3
95	2,281.3	601.2	70.9	70.0	129.0	4.0		3,270.3
97	2,327.8	619.1	30.0	76.1	132.3	5.3		3,298.8
98	2,433.9	633.2	0.0	78.2	134.5	4.8		3,425.7
99	2,821.6	662.5	0.0	56.7	144.1	5.4		3,690.3
00	2,979.9	683.6	0.0	105.0	149.3	5.6		3,923.4
01	3,372.3	795.4	0.0	119.2	166.3	6.6		4,459.9
02	3,616.0	866.1	0.0	115.4	169.9	6.7		4,774.1
2003	4,054.4	934.9	0.0	179.0	189.4	8.7	2.9	5,369.3
2004 Estimate	4,251.4	939.0	0.0	155.0	218.7	9.9	3.9	5,577.8
2005 Request	4,452.3	771.4	0.0	213.3	294.0	10.1	4.0	5,745.0

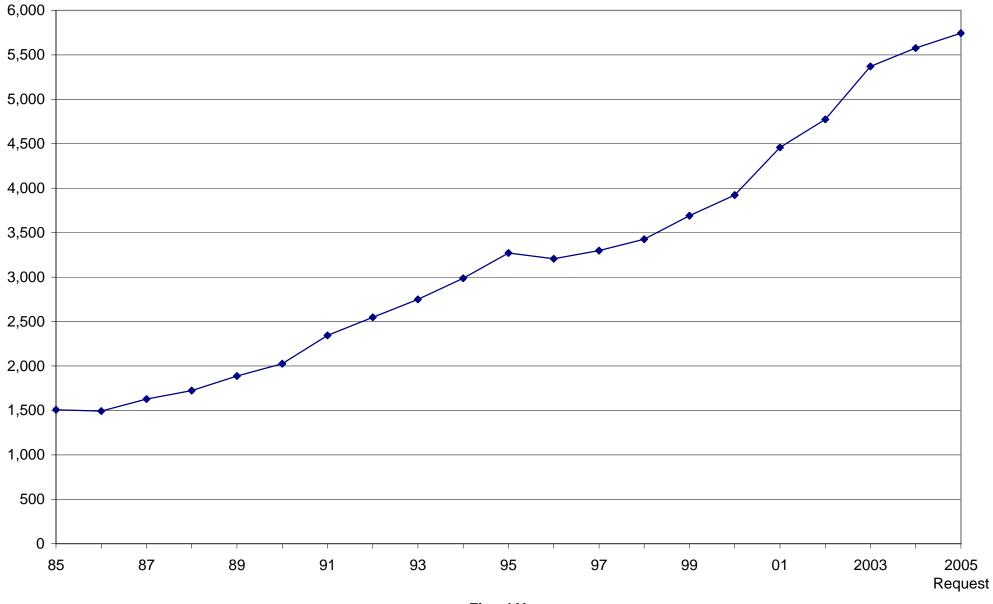
NSF By Account	
(Actual Dollars in Millions - Current Dollars)	

				Major Research				
	Research &	Education &	Academic	Equipment &		Office of	National	
	Related	Human	Research	Facilities	Salaries &	Inspector	Science	
Fiscal Year	Activities	Resources	Infrastructure	Construction	Expenses	General	Board	NSF
51	0.2	0.0	0.0	0.0	0.8	0.0	0.0	0.9
52	8.3	9.1	0.0	0.0	3.1	0.0	0.0	20.5
53	12.4	8.2	0.0	0.0	5.1	0.0	0.0	25.7
54		10.8	0.0	0.0	8.9	0.0	0.0	45.6
55	50.4	11.8	0.0	0.0	8.8	0.0	0.0	71.0
56		19.5	0.0	0.0	9.3	0.0	0.0	88.6
57	117.3	76.3	0.0	0.0	12.5	0.0	0.0	206.2
58		99.5	0.0	0.0	15.2	0.0	0.0	256.5
59	338.4	312.7	0.0	0.0	26.8	0.0	0.0	677.9
60		321.3	0.0	0.0	32.8	0.0	0.0	799.4
61	516.7	315.3	0.0	0.0	37.6	0.0	0.0	869.6
62 63	851.4 1,062.4	386.2 441.6	0.0 0.0	0.0 0.0	44.1 52.7	0.0 0.0	0.0 0.0	1,281.7 1,556.7
64		492.0	0.0	0.0	57.8	0.0	0.0	1,550.7
65	1,130.8	492.0 567.7	0.0	0.0	61.9	0.0	0.0	1,700.0
66	-	573.8	0.0	0.0	60.4	0.0	0.0	2,151.3
67	1,465.4	551.7	0.0	0.0	62.8	0.0	0.0	2,079.9
68	1,512.4	581.8	0.0	0.0	66.4	0.0	0.0	2,160.6
69	1,209.7	508.4	0.0	0.0	68.1	0.0	0.0	1,786.2
70		495.0	0.0	0.0	77.1	0.0	0.0	1,811.1
71	1,377.6	391.6	0.0	0.0	81.2	0.0	0.0	1,850.5
72	1,718.2	333.8	0.0	0.0	87.5	0.0	0.0	2,139.5
73	1,771.8	212.3	0.0	0.0	97.6	0.0	0.0	2,081.7
74	1,696.7	256.8	0.0	0.0	100.7	0.0	0.0	2,054.2
75	1,675.0	213.3	0.0	0.0	109.1	0.0	0.0	1,997.5
76	1,665.7	167.9	0.0	0.0	113.5	0.0	0.0	1,947.2
77	1,680.3	185.7	0.0	0.0	113.9	0.0	0.0	1,979.9
78	1,721.3	173.1	0.0	0.0	114.1	0.0	0.0	2,008.4
79	1,716.7	174.3	0.0	0.0	118.7	0.0	0.0	2,009.7
80		159.6	0.0	0.0	116.1	0.0	0.0	1,943.8
81	1,634.7	137.4	0.0	0.0	107.5	0.0	0.0	1,879.6
82	1,546.0	44.5	0.0	0.0	107.4	0.0	0.0	1,697.8
83	1,648.6	37.4	0.0	0.0	106.9	0.0	0.0	1,793.0
84	1,848.4	98.8	0.0	0.0	104.0	0.0	0.0	2,051.3
85	2,044.0	137.7	0.0	0.0	109.4	0.0	0.0	2,291.0
86		136.2	0.0	0.0	106.7	0.0	0.0	2,218.3
87	2,084.8 2,079.3	159.1 220.1	0.0 0.0	0.0 0.0	112.6 118.6	$\begin{array}{c} 0.0 \\ 0.0 \end{array}$	0.0 0.0	2,356.5 2,417.9
89	2,079.3	262.2	0.0	0.0	123.3	0.0	0.0	2,417.9
90		300.2	0.5	0.0	125.5	3.0	0.0	2,639.5
91	2,210.2	416.8	49.0	0.0	125.5	3.6	0.0	2,037.5
92	2,376.8	562.7	40.9	0.0	134.7	4.7	0.0	3,119.8
93		604.9	59.6	40.8	132.7	4.4	0.0	3,293.3
94	-	667.2	123.6	20.0	144.8	4.6	0.0	3,502.4
95		702.6	134.9	144.7	148.1	5.1	0.0	3,755.2
96		677.3	79.9	78.9	149.3	4.5	0.0	3,612.4
97	2,695.2	685.6	33.2	84.3	148.7	5.9	0.0	3,652.9
98	2,814.6	692.7	0.0	85.6	149.8	5.2	0.0	3,747.9
99	3,047.0	715.4	0.0	61.2	155.6	5.8	0.0	3,985.1
00		723.6	0.0	111.1	158.0	5.9	0.0	4,152.9
01	3,488.0	822.7	0.0	123.3	172.0	6.8	0.0	4,612.8
02	3,675.0	880.2	0.0	117.2	172.7	6.8	0.0	4,852.0
2003	4,054.4	934.9	0.0	179.0	189.4	8.7	2.9	5,369.3
2004 Estimate		926.8	0.0	153.0	215.9	9.8	3.8	5,505.5
2005 Request	4,340.4	752.0	0.0	207.9	286.6	9.9	3.9	5,600.6

# NSF By Account (FY Actuals - FY 2003 Constant Dollars in Millions)

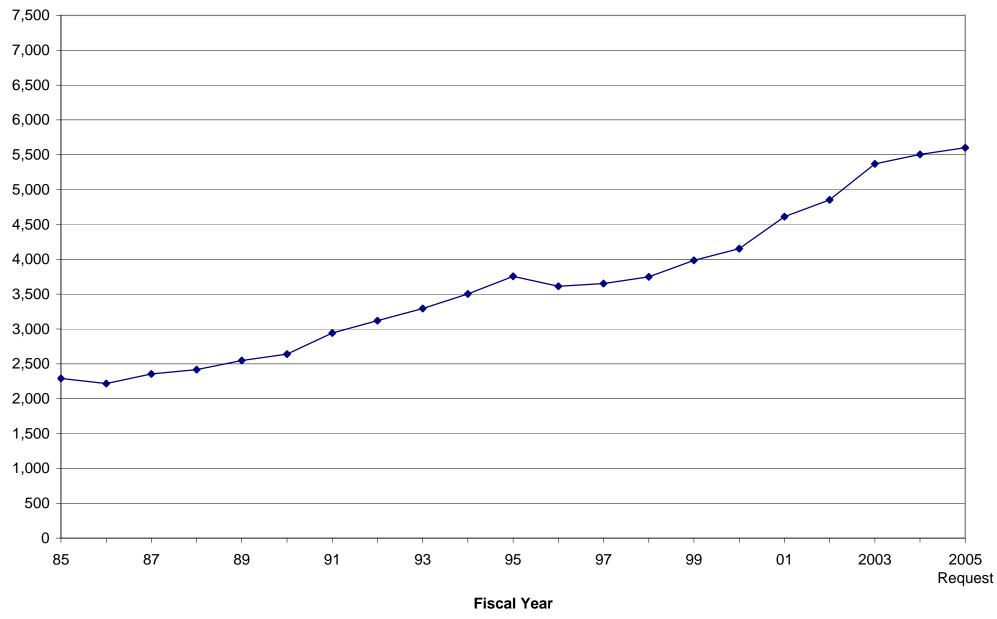
# **NSF Twenty Year Budget History**

In Millions of Current Dollars



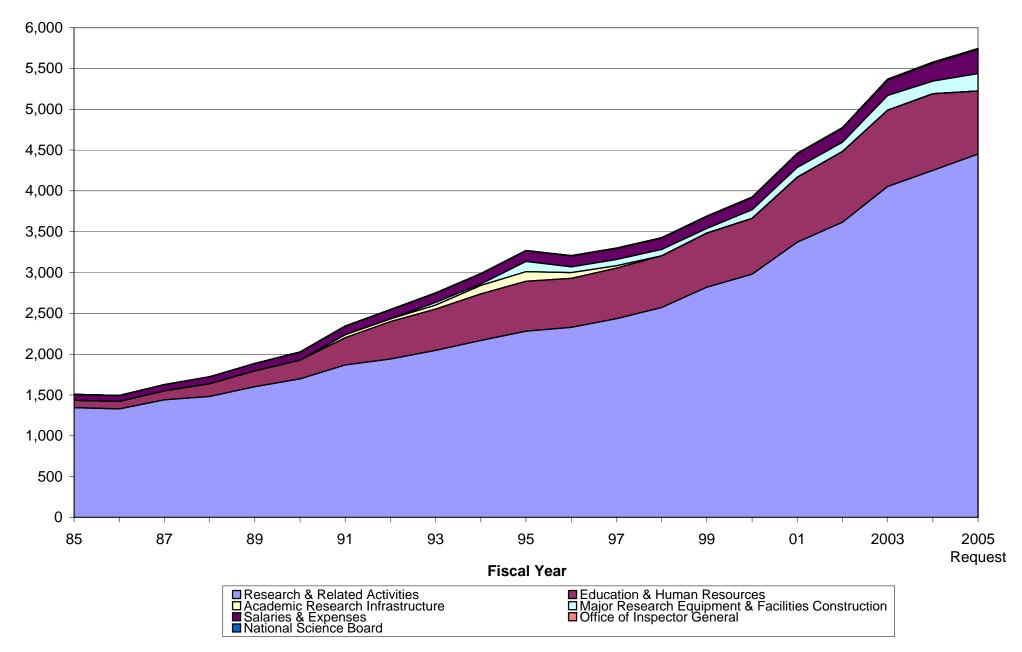
# **NSF Twenty Year Budget History**

In Millions of Constant FY 2003 Dollars



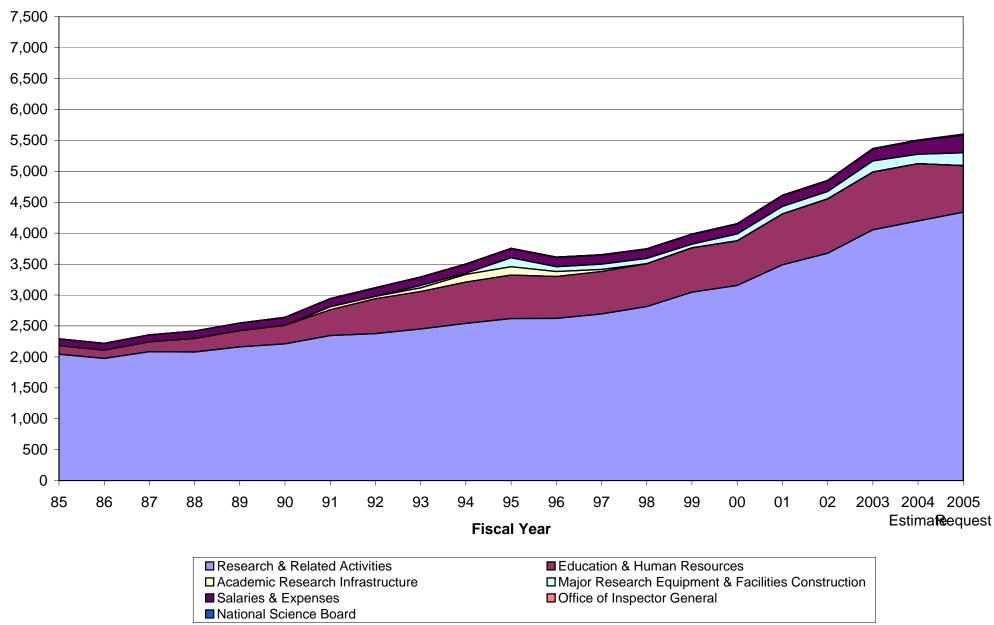
# **NSF Twenty Year Budget by Account**

In Millions of Current Dollars



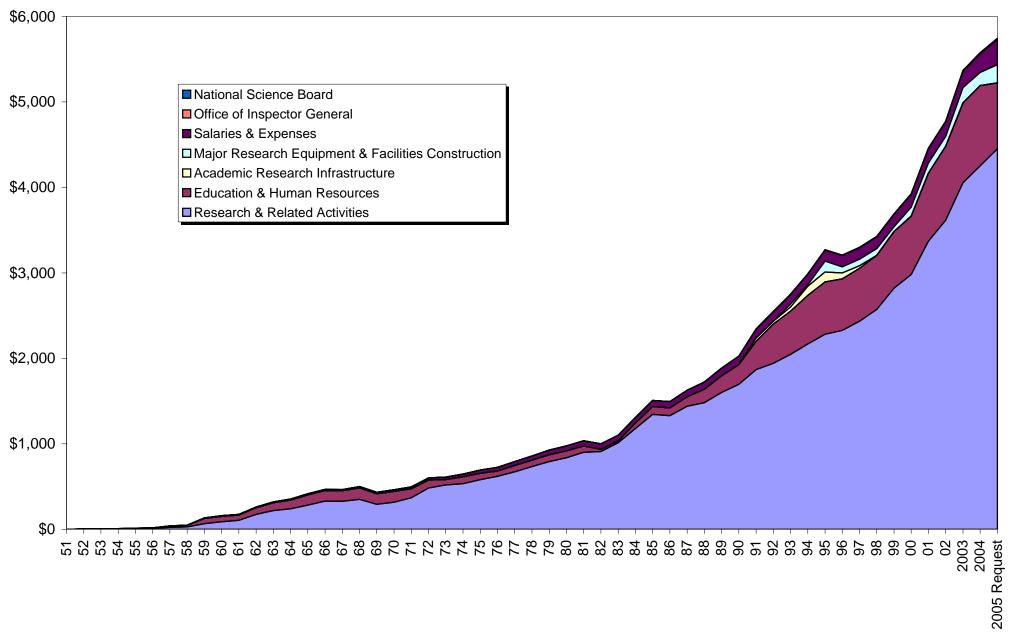
# **NSF Twenty Year Budget by Account**

In Millions of Constant FY 2003 Dollars



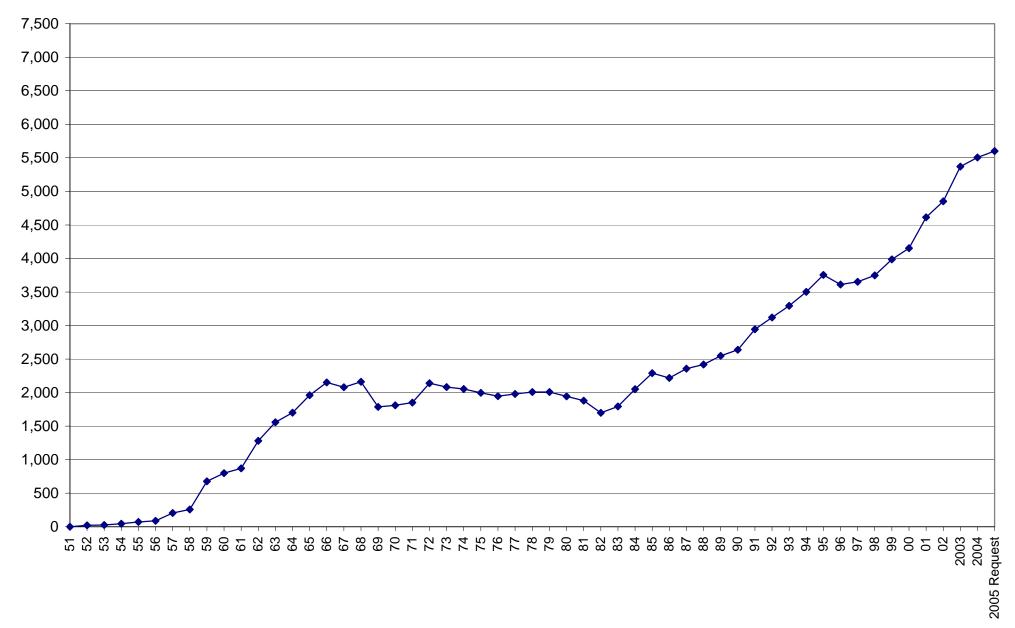
# **NSF Complete Budget History by Account**

In Millions of Current Dollars



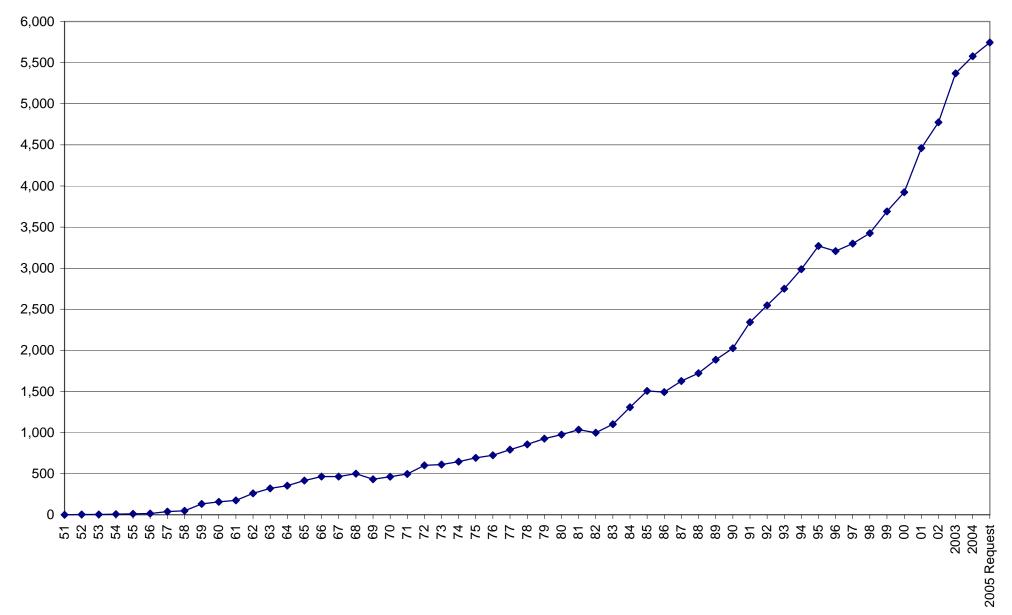
# **NSF Complete Budget History**

In Millions of Constant FY 2003 Dollars



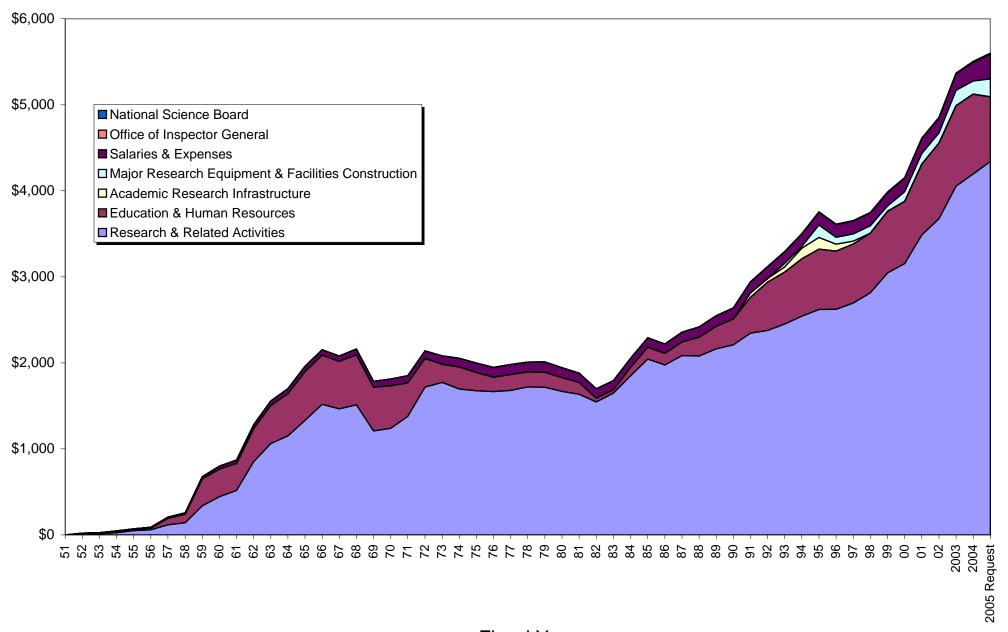
# **NSF Complete Budget History**

In Millions of Current Dollars



# **NSF Complete Budget History by Account**

In Millions of Constant FY 2003 Dollars



### (Estimated Dollars in Millions)

### (Estimated Dollars in Millions)

(Estimated Dolla	ars in Millions	,	
Final Voor		Dollar	Percent
Fiscal Year	NSF 0.15	Increase	Increase
51	0.15	2 22	22040/
52	3.47	3.32	2201%
53	4.43	0.95	27%
54	7.96	3.53	80%
55	12.49	4.53	57%
56	15.99	3.51	28%
57	38.63	22.64	142%
58	49.51	10.88	28%
59	132.88	83.37	168%
60	158.60	25.72	19%
61	174.99	16.39	10%
62	260.82	85.84	49%
63	320.75	59.93	23%
64	354.58	33.83	11%
65	415.97	61.38	17%
66	466.02	50.06	12%
67	465.10	-0.92	0%
68	500.29	35.18	8%
69	432.50	-67.79	-14%
70	462.49	29.99	7%
71	496.14	33.64	7%
72	600.72	104.59	21%
73	610.27	9.54	2%
74	645.65	35.39	6%
75	693.13	47.47	7%
76	724.42	31.30	5%
77	791.77	67.35	9%
78	857.25	65.48	8%
79	926.93	69.68	8%
80	975.13	48.20	5%
81	1035.27	60.14	6%
82	999.14	-36.14	-3%
83	1101.69	102.56	10%
84	1306.92	205.22	19%
85	1507.07	200.15	15%
86	1493.17	-13.90	-1%
87	1627.62	134.45	9%
88	1722.57	94.95	6%
89	1885.88	163.31	9%
90	2026.06	140.18	7%
91	2343.49	317.43	16%
92	2547.13	203.64	9%
93	2749.73	203.64	3 % 8%
94	2987.21	237.49	9%
94 95	3270.27	283.06	9%
95 96	3206.33	-63.95	-2%
96 97			-2% 3%
97 98	3298.82 3425 73	92.49 126.91	3% 4%
	3425.73	126.91 264.55	
99	3690.28	264.55	8% 6%
2000	3923.36	233.08	6%
2001	4459.87	536.51	14%
2002	4774.06	314.19	7%
2003 Request	5369.34	595.28	12%
2004 Request	5577.83	208.49	4%

		Dollar	Percent
Fiscal Year	NSF	Increase	Increase
51	0.93	10 50	<b>.</b>
52	20.52	19.59	2112%
53	25.67	5.15	25%
54	45.62	19.95	78%
55	70.97	25.35	56%
56	88.57	17.59	25%
57	206.21	117.64	133%
58	256.53	50.32	24%
59	677.86	421.33	164%
60	799.41	121.55	18%
61	869.59	70.18	9%
62	1281.71	412.12	47%
63	1556.69	274.99	21%
64	1700.61	143.92	9%
65	1961.24	260.63	15%
66	2151.27	190.03	10%
67	2079.90	-71.37	-3%
68	2160.57	80.67	4%
69 70	1786.19	-374.37	-17%
70	1811.14	24.94	1%
71	1850.45	39.32	2%
72	2139.51	289.06	16%
73	2081.75	-57.77	-3%
74	2054.18	-27.57	-1%
75	1997.48	-56.70	-3%
76	1947.18	-50.30	-3%
77	1979.89	32.71	2%
78	2008.41	28.52	1%
79	2009.75	1.33	0%
80	1943.84	-65.91	-3%
81	1879.65	-64.19	-3%
82	1697.84	-181.81	-10%
83	1792.96	95.12	6%
84	2051.26	258.30	14%
85	2291.01	239.75	12%
86	2218.27	-72.74	-3%
87	2356.50	138.23	6%
88	2330.30	61.40	3%
	2548.12	130.23	
89			5%
90	2639.48	91.36	4%
91	2942.57	303.08	11%
92	3119.80	177.24	6%
93	3293.26	173.46	6%
94	3502.40	209.14	6%
95	3755.25	252.85	7%
96	3612.45	-142.80	-4%
97	3652.89	40.45	1%
98	3747.94	95.05	3%
99	3985.07	237.13	6%
2000	4152.88	167.81	4%
2001	4612.83	459.95	11%
2002	4851.99	239.15	5%
2003 Request	5369.34	517.35	11%
2004 Request	5505.53	136.19	3%
	0000.00	100.13	570

### 182 THE BUDGET FOR FISCAL YEAR 2003, HISTORICAL TABLES Table 10.1—GROSS DOMESTIC PRODUCT AND DEFLATORS USED IN THE HISTORICAL TABLES: 1940–2007 (Fiscal Year 1996 = 1.000)

	I	r						
	000							
Voor	GDP Deflator	FY1997=1	FY1998=1	EV1000 1	FY 2000=1	FY 2001=1	FY 2002=1	EV 2002 1
Year 1951	0.1816	0.1781	0.1756	0.1734	0.1723	0.1684	0.1654	0.1628
1952	0.1887	0.1851	0.1825	0.1802	0.1720	0.1751	0.1721	0.1693
1953	0.1923	0.1886		0.1836		0.1783	0.1752	
1954	0.1946	0.1909		0.1858	0.1846	0.1804	0.1772	
1955	0.1962	0.1924		0.1873	0.1862	0.1819	0.1788	
1956	0.2014	0.1975	0.1948	0.1923	0.1911	0.1867	0.1835	0.1805
1957	0.2089	0.2049	0.2021	0.1994	0.1983	0.1938	0.1904	0.1873
1958	0.2152	0.2111	0.2081	0.2055	0.2043	0.1996	0.1962	0.1930
1959	0.2187	0.2145		0.2088	0.2075	0.2028	0.1992	
1960	0.2212	0.2170		0.2112	0.2100	0.2052	0.2016	
1961	0.2243	0.2200		0.2141	0.2130	0.2081	0.2045	0.2012
1962	0.2268	0.2225	0.2194	0.2165	0.2154	0.2105	0.2068	0.2035
1963	0.2298	0.2254		0.2194	0.2181	0.2131	0.2094	
1964	0.2325	0.2281	0.2249	0.2220	0.2207	0.2157	0.2119	
1965	0.2366	0.2321	0.2288	0.2259	0.2245	0.2194	0.2156	
1966	0.2417	0.2371	0.2338	0.2308	0.2293	0.2241	0.2202	
1967 1968	0.2494 0.2584	0.2446 0.2535		0.2381 0.2467	0.2367	0.2313 0.2395	0.2273 0.2353	
1968	0.2584 0.2701	0.2535		0.2467 0.2579	0.2451 0.2563	0.2395	0.2353	0.2316
1969 1970	0.2701	0.2649	0.2612	0.2579	0.2563	0.2504	0.2461	0.2421
1970	0.2849	0.2795	0.2750	0.2720	0.2703	0.2041	0.2395	0.2554
1972	0.3132	0.3072	0.3029	0.2007	0.2030	0.2773	0.2854	0.2808
1973	0.3271	0.3208		0.3123		0.2004	0.2034	
1974	0.3504	0.3437		0.3345	0.3327	0.3251	0.3194	
1975	0.3867	0.3793		0.3692	0.3673	0.3589	0.3527	0.3470
1976	0.414	0.4061	0.4004	0.3953	0.3938	0.3848	0.3781	0.3720
1977	0.4451	0.4366		0.4250	0.4233	0.4136	0.4064	0.3999
1978	0.4756	0.4665		0.4541	0.4518	0.4415	0.4338	
1979	0.5142	0.5044		0.4909	0.4882	0.4770	0.4687	0.4612
1980	0.5599	0.5492	0.5415	0.5346	0.5310	0.5189	0.5098	
1981	0.6142	0.6025	0.5941	0.5864	0.5830	0.5697	0.5598	0.5508
1982	0.6572	0.6446	0.6357	0.6275	0.6229	0.6087	0.5981	0.5885
1983	0.6861	0.6730	0.6636	0.6551	0.6504	0.6355	0.6245	0.6145
1984	0.7114	0.6978	0.6881	0.6792	0.6744	0.6590	0.6475	0.6371
1985	0.7349	0.7208		0.7016	0.6963	0.6804	0.6686	
1986	0.7526	0.7382		0.7185	0.7125	0.6962	0.6841	0.6731
1987	0.7733	0.7585		0.7383	0.7311	0.7144	0.7020	
1988	0.7986	0.7833		0.7625		0.7369		
1989	0.8293	0.8134		0.7918		0.7655	0.7522	
1990	0.8605	0.8440		0.8216	0.8125	0.7939	0.7801	0.7676
1991	0.894	0.8769		0.8535	0.8430	0.8237	0.8094	
1992	0.9174	0.8999		0.8759	0.8642	0.8444	0.8298	
1993	0.9393	0.9213		0.8968	0.8838	0.8636	0.8486	
1994 1995	0.9596 0.9804	0.9412 0.9616		0.9162 0.9360	0.9028 0.9218	0.8822 0.9007	0.8668 0.8851	0.8529 0.8709
1995	0.9804	0.9616	0.9483	0.9360 0.9547	0.9218	0.9007 0.9180	0.8851	0.8709
1996	1.0195	0.9609	0.9872	0.9547	0.9595	0.9180	0.9021	
1998	1.0339	1.0141		0.9734	0.9675	0.9454	0.9289	
1999	1.0474	1.0274		0.3071	0.9802	0.9578	0.9203	0.9260
2000	1.069	1.0486		1.0206	1	0.9771	0.9602	0.9447
2001	1.0937	1.0728		1.0442	1.0234	1	0.9826	
2002 estimate	1.1	1.0790		1.0502	1.0415	1.0177	1	
2003 estimate	1.6	1.5694		1.5276		1.0343	1.0163	
2004 estimate	1.2	1.1770		1.1457	1.0724	1.0479	1.0297	
2005 estimate	1.3	1.2751	1.2574	1.2412	1.0858	1.0610	1.0425	
2006 estimate	1.5	1.4713		1.4321	1.1021	1.0769	1.0582	
2007 estimate	1.7	1.6675		1.6231	1.1204	1.0948	1.0758	
2008 estimate	2	1.9617	1.9344	1.9095	1.1419	1.1158	1.0964	
2009 estimate	2	1.9617	1.9344	1.9095	1.1651	1.1385	1.1187	1.1007

### Centers Supported by NSF in FY 2003

Center	Institution
Engineering Research Centers	
Advanced Engineering Fibers and Films	Clemson U
Bioengineering Educational Technology	Vanderbilt U
Biomimetic Microelectronic Systems	U of Southern California
Biotechnology Process Engineering	Mass Institute of Tech
Collaborative Adaptive Sensing of the Atmosphere	U of Mass, Amherst
Computer-Integrated Surgical Systems and Technologies	Johns Hopkins U
Engineered Biomaterials	U of Washington
Engineering of Living Tissue	Georgia Institute of Tech
Environmentally Beneficial Catalysis	U of Kansas
Environmentally Benign Semiconductor Manufacturing	U of Arizona
Extreme Ultraviolet Science and Technology	Colorado State U
Integrated Media Systems	U of Southern California
Low Cost Electronic Packaging	Georgia Institute of Tech
Marine Bioproducts Engineering	U of Hawaii
Neuromorphic Systems Engineering	California Institute of Tech
Particle Science & Technology	U of Florida
Power Electronic Systems	Virginia Tech U
Reconfigurable Machining Systems	U of Michigan
Subsurface Sensing and Imaging Systems	Northeastern U
Wireless Integrated MicroSystems	U of Michigan
Engineering Research Groups	
Nano Modeling and Simulation Groups:	
Computational Nano-Engineering for Patterned Magnetic	Stanford U
Nanostructures	Kansas State U
Evolution of Nanoscale Film Morphology Molecular Nanoelectronics: Simulation from Molecules to	Purdue U
Circuits	Puldue U
Molecular Transport in Nanostructured Materials	U of Delaware
Nanoengineered Materials: Polymer Composites to	U of Pittsburgh
Structured Adsorbents	0 of Fittsburgh
Nanoscale Modeling of Flow of Macromolecules	U of Wisconsin-Madison
through Microfluidic Devices	
Nanoscale Simulation by Quantum Computation	Mass Institute of Tech
XYZ-on-a-Chip Groups:	
Assembly of Integrated Near-field Optical Microfluidic	U of California-Berkeley
Devices by Thin-film Transfer and Micromachining of	
Teflon, Group-III Nitrides and Silicon	
Biomolecular Motor/Nanotube Integration for Actuator	U of North Carolina-Chapel Hill
Nanotechnology	
Cellular Electrophysiology on a Chip	U of Missouri-Columbia
Development and Fabrication of Three-Dimensional	Boston College
Microdevices	
Large Area Biosensing Electronics	Carnegie Mellon U
Micromachined Magnetically Reconfigurable Frequency	U of California-Los Angeles
Selective Surfaces	
A Nanomaterials/Nanoelectrochemical Route for	U of Florida
Communication Between Biochemical Processes and IC	
Chips	
Patterning Flow at the Microscale: Open Architecture	Princeton U
Design for Integrated Fluidic Chips	
UV Fluorescence/Absorption Micro-Analysis System	Texas Tech U

#### Science and Technology Centers

Adaptive Optics Advanced Materials for Water Purification Behavioral Neuroscience **Biophotonics Science and Technology** Earth Surface Dynamics Embedded Networked Sensing Environmentally Responsible Solvents and Processes Integrated Space Weather Modeling Materials and Devices for Information Technology Research Nanobiotechnology Sustainability of Semi-Arid Hydrology and Riparian Areas **Plant Genome Virtual Centers** A Protein Interaction Database for Rice Protein Kinases A Rice Oligononucleotide Array Chromatin-based Control of Gene Expression Comparative and Functional Genomics of Tomato Comparative Evolutionary Genomics of Cotton Functional and Comparative Genomics of Disease Resistance Genes Deep Transcriptional Profiling of Rice Using Signature Sequencing Dissecting Phytophthora Resistance in Soybean using Expression Profiling and Analysis of Quantitative Train Loci Finishing the Rice Genome Functional Analyses of Genes Involved in Maize Leaf Initiation Functional Genomic Analysis of Tomato Fruit Flavor and Nutrition Pathways Functional Genomics of Hemicellulose Biosynthesis Functional Genomics of Maize Centromeres Gene Inventory and Function of the Model Legume Grass Genome Biodiversity Maize and Arabidopsis using Novel Spectroscopies High Density Genetic Map of Maize Transcripts Identification and Characterization of Plant Cell Wall Mutants Vitis vinifera: Abiotic Stress and Wine Quality Microarray Resources for Maize Research Molecular and Functional Diversity in the Maize Genome Oryza Map Alignment Project Plant Genes Involved in Plant Transformation Sequencing the Gene Space of a Model Legume Systematic Transposon Mutagenesis of the Maize Gene Techniques for Efficient Finishing and Mapping of Gene **Enriched Sequences** The Floral Genome Project The Plant Ontology Consortium Understanding Plastid Differentiation in Maize Through **Expression Analysis** Potato Functional Genomics: Analysis of Growth, Development, Metabolism and Responses to Stress

#### **Materials Centers**

Advanced Carbon Materials Center Center for Complex Materials Center for Materials for Information Science U of California-Santa Cruz U of Illinois Georgia State Univ U of California-Davis U of Minnesota U of California-Los Angeles U of North Carolina Boston U U of Washington Cornell U U of Arizona

U of Nebraska-Lincoln U of California-Davis U of Arizona Cornell U Iowa State U U of California-Davis

U of Delaware

VA Polytechnic Inst & St U

Cold Spring Harbor Lab U of Georgia U of Florida

Michigan State U U of Georgia U of California-Davis U of Georgia

Iowa State U Purdue U U of Nevada-Reno U of Arizona U of Wisconsin-Madison U of Arizona Purdue U U of Minnesota Cold Spring Harbor Lab U of Arizona

Penn State U Cold Spring Harbor Lab Cornell U

U of California-Berkeley

U of Kentucky Princeton U U of Alabama Center for Materials Research Center for Materials Science and Engineering Center for Micro- and Nanomechanics of Materials Center for Nanoscopic Materials Design Center for Nanomagnetic Structures Center for Nanoscale Science Center for Nanostructured Materials Center on Nanostructured Materials Center for Oxide Thin Films, Probes and Surfaces Center for Polymer Science and Engineering Center for Polymers at Engineered Interfaces Center for Polymer Interfaces and Macromolecular Assemblies Center for Response-Driven Polymeric Films Center for Science and Engineering of Materials Center for Semiconductor Physics in Nanostructures Center for Sensor Materials Center for Thermal Spray Research Ferroelectric Liquid Crystals Materials Research Center International Materials Institute: Advanced Neutron Scattering Network for Education and Research International Materials Institute: Materials Informatics and **Combinatorial Materials Science** Laboratory for Research on the Structure of Matter Materials Research Center Materials Research Center Materials Research Center Materials Research Science and Engineering Center US/Africa Materials Institute

#### Center for Ecological Analysis and Synthesis

#### Long Term Ecological Research Sites

Arctic Tundra: Toolik Field Station Bonanza Creek Experimental Forest Cedar Creek Natural History Area Central Arizona-Phoenix Urban LTER Coweeta Hydrologic Laboratory Florida Coastal Everglades Georgia Coastal Ecosystems H.J. Andrews Experimental Forest Harvard Forest Hubbard Brook Experimental Forest Jornada Experimental Range Kellogg Biological Station Konza Prairie Research Natural Area Luquillo Experimental Forest McMurdo Dry Valleys, Antarctica Metropolitan Baltimore Urban LTER Niwot Ridge-Green Lakes Valley North Temperate Lakes Palmer Station. Antarctica Plum Island Sound

Cornell U Mass Institute of Tech Brown U U of Virginia U of Nebraska Pennsylvania State U U of Wisconsin Johns Hopkins U U of Maryland U of Massachusetts SUNY-Stony Brook/ CUNY/ Polytechnic U Stanford U/ UC-Davis/IBM

U of Southern Mississippi California Institute of Tech U of Oklahoma/ U of Arkansas Michigan State U SUNY-Stoney Brook U of Colorado-Boulder U of Tenn/Oak Ridge Nat Lab

Rennselaer Poly/U of

U of Pennsylvania U of Chicago Harvard U Northwestern U U of California-Santa Barbara U of Minnesota Carnegie Mellon U Columbia U Princeton U

U of California-Santa Barbara

Marine Biological Lab U of Alaska U of Minnesota Arizona State U U of Georgia Florida International U U of Georgia Oregon State U Harvard U Syracuse U Duke U Michigan State U Kansas State U U of Puerto Rico-Rio Piedros Desert Research Institute Institute of Ecosystem Studies U of Colorado U of Wisconsin U of California Woods Hole

Santa Barbara Coastal LTER Sevilleta National Wildlife Refuge Shortgrass Steppe Virginia Coast Reserve

#### Earthquake Engineering Research Centers Mid-America Earthquake Center

Multidisciplinary Center for Earthquake Engineering Research

Pacific Earthquake Engineering Research Center

### **Chemistry Centers**

Chemical and Microbial Interactions at Environmental Interfaces Environmental Redox-Mediated Dehalogenation Chemistry Fundamental Studies of Nonparticle Formation in Air Pollution Institute for Environmental Bioinorganic Chemistry Laboratory for Molecular Sciences Molecular Environmental Chemistry of Mn Oxide Biomineralization Molecular Isotopic Tools for Environmental Research Molecular Level Analysis of Macromolecule-Surface Interactions in Bacterial Adhesion Molecular Structure and Microstructure of PM2.5 Derived from Stationary and Mobile Fossil Fuel Sources Role of Environmental Molecular Interfaces on the Chemical and Biological Reactivity of Pollutants Moderate Resolution Protein Structures by Chemical Cross-Linking and Mass Spectrometry Center for Environmental Molecular Science (CEMS) Role of Environmental Molecular Interfaces on the Chemical and Biological Reactivity of Pollutants Actinides and Heavy Metals in the Environment - The Formation, Stability, and Impact of Nano- and Micro-Particles Atom and Group Transfer Reactions: A Combined Synthetic, Structural, Theoretical, Kinetic, and Solution Calorimetry Investigation Next Generation Aromatics Multi-dimensional Molecular Metals, Crystal Design, and Superconductivity An Integrated Approach to Understanding the Air-Water Interface in Atmospherically Relevant Systems Micro Imaging for Sensory and Materials Applications Synthesis and Characterization of New Molecular Clusters of Tetrels Alternative Chemistries for Barrier Materials in Cu Metallization Multiply Bound Polymer Chains: Novel Chemistry for Improved Interfacial Properties Synthesis and Characterization of Fluorescent Porphyrinoid Bioconjugates for Imaging and Bioanalyses Lanthanide Binding Tags:New Chemical Tools for Proteomics **Mathematical Sciences Research Institutes** American Institute of Mathematics

U of California-Santa Barbara U of New Mexico Colorado State U U of Virginia

U of Illinois-Champaign-Urbana State U of NY-Buffalo

U of California-Berkeley

Stanford U

Johns Hopkins U

Worcester Polytechnic Inst

Princeton U California Institute of Tech U of California-San Diego

Woods Hole Penn State U

U of Kentucky

Ohio State U

U of California-San Francisco

SUNY-Stony Brook Ohio State U

U of Notre Dame

Mass Institute of Tech

U of Georgia Cornell U

U of California-Irvine

Mass Institute of Tech U of California-Davis

U of Florida

U of Tennessee

Louisiana State Univ

Mass Institute of Tech

Palo Alto

Institute for Mathematics and Its Applications Institute for Pure and Applied Mathematics Mathematical Biosciences Institute Mathematical Sciences Research Institute Statistical and Applied Mathematical Sciences Institute

#### **Information Technology Centers**

A Mobile Sensor Web for Polar Ice Sheet Measurements Active Information Spaces Based on Ubiquitous Computing Adaptable Voice Translation for Minority Languages Adaptive Software for Field-driven Simulations An Ensemble Approach to Data Assimilation in the Earth Sciences An International Virtual-Data Grid Laboratory for Data Intensive Science Building the Framework of the National Virtual Observatory Building the Tree of Life -- A National Resource for Phyloinformatics and Computational Phylogenetics Capturing, Coordinating and Remembering Human Experience Center for Applied Algorithms Center for Bits and Atoms Center for Computational Biophysics Cognitive and Social Design of Robotic Assistants Collaborative Research for a National Center for Empirical Software Engineering Research Collaborative Research: Modular Ocean Data Assimilation Computational Geometry for Structural Biology and Bioinformatics Computational Infrastructure for Microfluidic Systems with Applications to Biotechnology Computational Learning and Discovery in Biological Sequence, Structure and Function Mapping Computational Logic Tools for Research and Education Computational Tools for Modeling, Visualizing and Analyzing Historic and Archaeological Sites Creating the Next Generation of Intelligent Animated **Conversational Agents** Data Centers - Managing Data with Profiles Design and Simulation of Biologically-inspired Nanolattice Design Conformant Software Digital Clay for Shape Input and Display Discrete Models & Algorithms in the Sciences Dynamic Cooperative Performance Optimization Enabling the Science Environment for Ecological Knowledge Flexible Environments for Grand-Challenge **Climate Simulation** Foundations of Hybrid and Embedded Software Systems Foundations of Solid-State Quantum Information Processing FrameNet++: An On-Line Lexical Semantic Resource and its Application to Speech & Language Understanding From Bits to Information: Statistical Learning Technologies for Digital Information Management and Search From the Web to the Global InfoBase

U of Minnesota U of California-Los Angeles Ohio State U Berkeley Duke U

U of Kansas U of Illinois-Champaign-Urbana Carnegie Mellon U Cornell U Mass Institute of Tech

U of Florida

Johns Hopkins U University of New Mexico

Carnegie Mellon U

Carnegie Mellon U Mass Institute of Tech U of California - San Diego Carnegie Mellon U U of Maryland-College Park

Oregon State U Duke U

U of California-Santa Barbara

Carnegie Mellon U

Stanford U Columbia U

U of Colorado-Boulder

Brown U U of Florida Mass Institute of Tech GA Tech Res Corp-GIT U of California-Berkeley U of Massachusetts-Amherst U of New Mexico U of Chicago

U of California - Berkeley U of Urbana-Champaign Int'l Computer Sci Inst

Mass Institute of Tech

Stanford U

The GriPhyN Project: Towards Peta-Scale Virtual Data Grids Heterogeneous System Integration in System-on-a-Chip Designs Hierarchical and Reconfigurable Schemes for Distributed Control over Heterogeneous Network High-Speed Wavelength-Agile Optical Networks Institute for Quantum Information Interacting with the Visual World: Capturing, Understanding, and Predicting Appearance Interaction and Participation in Integrated Land Use, Transportation, and Environmental Modeling Investigation of a Model for Online Resource Creation and Sharing in Educational Settings ITR Linked Environments for Atmospheric Discovery (LEAD) Latent Semantic Analysis: Theory and Technology Learning-Centered Design Methodology: Meeting the Nation's Need for Computational Tools for K-12 Science Education Low Frequency Array (LOFAR) - A Digital Radio Telescope Methodologies and Tools for Designing and Implementing Large Scale Real-Time Systems Molecular Computation in Ciliates Multilingual Access to Large Spoken Archives Multimodal Human Computer Interaction: Toward a Proactive Computer A Multiresolution Analysis for the Global Internet Networked Infomechanical Systems (NIMS) New Approached to Human Capital Development through Information Technology Research Next Generation Bio-Molecular Imaging and Information Discoverv A 100 Megabits per second to 100 Million Households The Open Source Quality Project Personalized Spatial Audio via Scientific Computing and Computer Vision A Petabyte in Your Pocket Procedural Representation and Visualization Enabling Personalized Computational Fluid Dynamics Quality-Scalable Information Flow Systems for Environmental Observation and Forecasting Quantum Computing using Electrons on Helium Films Real-Time Long-Distance Terascale Computation for Full Bandwidth Tele-Immersion A Research Project to Create Cyberinfrastructure for the Geosciences Responding to the Unexpected Responsive Virtual Human Technology Research Robust Large-Scale Distributed Systems Self-Assembly of DNA Nano-Scale Structures for Computation Sensitive Information in a Wired World Simulation of Flows with Dynamic Interfaces on MultiU of Florida

U of Washington

U of Illinois-Champaign-Urbana

U of Urbana-Champaign California Institute of Tech Columbia U

U of Washington

Michigan State U

U of Oklahoma U of Colorado-Boulder U of Michigan-Ann Arbor

Northeast Radio Obs Corp

Vanderbilt U

Princeton U Survivors of the Shoah Visual History Foundation U of Illinois-Champaign-Urbana

U of Wisconsin-Madison U of Cal Los Angeles Northeastern U

U of Cal Santa Barbara

Carnegie Mellon University U of California-Berkeley U of Maryland-College Park

U of Wisconsin-Madison Purdue U

Oregon Health Sciences U

Case Western Reserve U U of North Carolina-Chapel Hill

U of California - San Diego

U of Cal Irvine Research Triangle Inst Mass Institute of Tech Duke U

Stanford University Carnegie-Mellon U

Teraflop Computers
Social and Economic Implications of IT: What is
Really Happening?
Societal Scale Information Systems: Technologies,
Design and Applications
Statistical Data Mining for Cosmology
Sustainable and Generalizable Technologies to Support
Collaboration in Science
Taming the Data Flood: Systems that Evolve, are
Available, and Maintainable (SEAM)
The Impacts of IT on Individuals and Their Organizations:
Conditions of Change and Transformation.
The OptIPuter
The SCEC Community Modeling Environment:
An Information Infrastructure for System-Level
Earthquake Research
The System Architecture of a Computing Utility
Understanding the Social Impact of the Internet: A
Multifaceted Multidisciplinary Approach
Virtual Grid Application Development Software (VGrADS)
Virtual Instruments: Scalable Software Instruments for the Grid
Visualization of Multi-Valued Scientific Data:
Applying Ideas from Art and Perceptual Psychology
moscale Science and Engineering Centers
Integrated Nanonatterning and Detection Technologies

#### Na

Integrated Nanopatterning and Detection Technologies Nanoscale Systems in Information Technologies Science of Nanoscale Systems and their Device Applications Electronic Transport in Molecular Nanostructures Nanoscience in Biological and Environmental Engineering Directed Assembly of Nanostructures Center for Integrated and Scalable Nanomanufacturing Nanoscale Chamical-Electrical-Mechanical Manufacturing Systems

#### **Physics Frontiers Centers**

Center for Cosmological Physics Center for Gravitational-Wave Phenomenology Frontiers of Optical, Coherent Ultrafast Science Center for the Study of the Origin and Structure of Matter Center for Theoretical Biological Physics

### Research Centers on the Human Dimensions of Global Change

Center for Integrated Study of the Human Dimensions of Global Change Center for the Study of Institutions, Population, and **Environmental Change** 

#### National Consortium for Violence Research

#### **Children's Research Centers**

Children's Digital Media Center North Carolina Child Development Research Collaborative Cornell Center for Research on Children Center for Research on Culture, Development and Education Center for the Analysis of Pathways from Childhood to

Mass Institute of Tech

U of California-Berkeley

Carnegie Mellon U U of Michigan-Ann Arbor

U of California-Berkeley

U of California-Irvine

U of California - San Diego U of Southern California

Stanford U U of Maryland-College Park

Rice Univ U of California-San Diego

Brown U

Northwestern U Cornell U Harvard U Columbia U Rice U Rensselaer Polytechnic Inst U of Calif-Los Angeles U of Illinois-Champaign-Urbana

U of Chicago Pennsylvania State U U of Michigan Hampton U U of California-San Diego

Carnegie Mellon U

Indiana U

Carnegie Mellon U

Georgetown U U of North Carolina Cornell U New York U U of Michigan

Adulthood