

# NATIONAL SCIENCE FOUNDATION

## Federal Funds

### RESEARCH AND RELATED ACTIVITIES

[(INCLUDING TRANSFER OF FUNDS)]

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; acquisition of aircraft; and authorized travel; **[\$5,617,920,000]** \$6,018,830,000, to remain available until September 30, **[2011]** 2012, of which not to exceed **[\$570,000,000]** \$590,000,000 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, including up to \$54,000,000 for the procurement of polar icebreaking services from the Coast Guard: Provided, That [from funds specified in the fiscal year 2010 budget request for icebreaking services, \$54,000,000 shall be transferred to the U.S. Coast Guard "Operating Expenses" within 60 days of enactment of this Act] the National Science Foundation shall only reimburse the Coast Guard for such sums as are agreed to according to the existing memorandum of agreement: Provided further, 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 [ : Provided further, That not less than \$147,120,000 shall be available for activities authorized by section 7002(c)(2)(A)(iv) of Public Law 110–69]. (Science Appropriations Act, 2010.)

### Program and Financing (in millions of dollars)

Identification code 49–0100–0–1–999	2009 actual	2010 est.	2011 est.
<b>Obligations by program activity:</b>			
00.01 Biological Sciences .....	914	712	768
00.02 Computer and Information Science and Engineering .....	810	617	685
00.03 Engineering .....	921	771	826
00.04 EPSCoR .....	163	167	154
00.05 Geosciences .....	1,156	882	955
00.06 Mathematical and Physical Sciences .....	1,719	1,378	1,410
00.07 Social, Behavioral and Economic Sciences .....	315	255	269
00.08 Office of International Science and Engineering .....	61	47	53
00.09 U.S. Polar Research Programs .....	576	384	460
00.10 U.S. Antarctic Logistical Support Activities .....	69	68	68
00.11 Integrative Activities .....	230	549	141
00.12 Office of Cyberinfrastructure .....	279	213	228
00.13 Arctic Research Commission .....	2	2	2
09.01 Reimbursable programs .....	105	120	120
10.00 Total new obligations .....	7,320	6,165	6,139
<b>Budgetary resources available for obligation:</b>			
21.40 Unobligated balance carried forward, start of year .....	1	481	.....
22.00 New budget authority (gross) .....	7,787	5,684	6,139
22.10 Resources available from recoveries of prior year obligations ....	11	.....	.....
22.22 Unobligated balance transferred from other accounts .....	3	.....	.....
23.90 Total budgetary resources available for obligation .....	7,802	6,165	6,139
23.95 Total new obligations .....	-7,320	-6,165	-6,139
23.98 Unobligated balance expiring or withdrawn .....	-1	.....	.....
24.40 Unobligated balance carried forward, end of year .....	481	.....	.....
<b>New budget authority (gross), detail:</b>			
Discretionary:			
40.00 Appropriation .....	7,683	5,618	6,019
41.00 Transferred to other accounts .....	.....	-54	.....
43.00 Appropriation (total discretionary) .....	7,683	5,564	6,019
Spending authority from offsetting collections:			
58.00 Offsetting collections (cash) .....	36	120	120
58.10 Change in uncollected customer payments from Federal sources (unexpired) .....	68	.....	.....
58.90 Spending authority from offsetting collections (total discretionary) .....	104	120	120
70.00 Total new budget authority (gross) .....	7,787	5,684	6,139

<b>Change in obligated balances:</b>				
72.40	Obligated balance, start of year .....	6,535	9,058	9,000
73.10	Total new obligations .....	7,320	6,165	6,139
73.20	Total outlays (gross) .....	-4,697	-6,223	-6,159
73.40	Adjustments in expired accounts (net) .....	-31	.....	.....
73.45	Recoveries of prior year obligations .....	-11	.....	.....
74.00	Change in uncollected customer payments from Federal sources (unexpired) .....	-68	.....	.....
74.10	Change in uncollected customer payments from Federal sources (expired) .....	10	.....	.....
74.40	Obligated balance, end of year .....	9,058	9,000	8,980
<b>Outlays (gross), detail:</b>				
86.90	Outlays from new discretionary authority .....	860	1,233	1,324
86.93	Outlays from discretionary balances .....	3,837	4,990	4,835
87.00	Total outlays (gross) .....	4,697	6,223	6,159
<b>Offsets:</b>				
Against gross budget authority and outlays:				
88.00	Offsetting collections (cash) from: Federal sources .....	-45	-120	-120
Against gross budget authority only:				
88.95	Change in uncollected customer payments from Federal sources (unexpired) .....	-68	.....	.....
88.96	Portion of offsetting collections (cash) credited to expired accounts .....	9	.....	.....
<b>Net budget authority and outlays:</b>				
89.00	Budget authority .....	7,683	5,564	6,019
90.00	Outlays .....	4,652	6,103	6,039

The Research and Related Activities appropriation enables the United States to provide leadership and promote progress across the expanding frontiers of scientific and engineering research and education. This appropriation provides resources for NSF to achieve the following strategic outcome goals: Discovery—fostering research that will advance the frontiers of knowledge, emphasizing areas of greatest opportunity and potential benefit and establishing the Nation as a global leader in fundamental and transformational science and engineering; Learning—cultivating a world-class, broadly inclusive science and engineering workforce and expanding the scientific literacy of all citizens; and Research Infrastructure—building the Nation's research capability through critical investments in advanced instrumentation, facilities, cyberinfrastructure, and experimental tools. Research activities will contribute to the achievement of these goals by advancing discovery, innovation, and education beyond the frontiers of current knowledge and empowering future generations in science and engineering.

The major research program activities of NSF are:

**Biological Sciences.**—This activity promotes scientific progress in biology through support of research on all levels, including molecules, cells, organisms, and ecosystems. This activity also supports a comprehensive research initiative on plant genomes, including research on economically significant crops.

**Computer and Information Science and Engineering.**—This activity supports research within and across the many sub-fields of computing, contributing to the education and training of computing professionals and informing the preparation of a U.S. workforce with computing competencies essential to success in an increasingly competitive, global market.

**Engineering.**—Research supported by this activity aims to increase U.S. engineering capability and strength, and focus that capability and strength on areas that are relevant to national problems and long-term needs. This activity also includes small business innovation research.

**Geosciences.**—This activity supports research and associated infrastructure to advance knowledge of the properties and dynamics of the planet on which we live. Research includes under-

RESEARCH AND RELATED ACTIVITIES—Continued

standing the causes and implications of climate change, as well as disruptive processes such as earthquakes and storms.

**Mathematical and Physical Sciences.**—Research in this activity is directed at increasing understanding of natural laws and phenomena across the astronomical sciences, chemistry, materials sciences, physics, and mathematical sciences. This fundamental research provides the long-term underpinnings for advances in areas such as sustainable energy and economic competitiveness.

**Social, Behavioral, and Economic Sciences.**—This activity supports research, education, and infrastructure in the social, behavioral, cognitive, and economic sciences and funds the collection and dissemination of statistics on the science and engineering enterprise.

**Office of International Science and Engineering.**—This activity promotes an integrated strategy for international science and engineering which complements and enhances NSF's broader research and education goals and which facilitates international collaboration.

**U.S. Polar Research Programs.**—This activity supports Arctic and Antarctic research and operational science support and other related activities for United States polar research programs.

**U.S. Antarctic Logistical Support Activities.**—This activity provides funding to reimburse Federal agencies for logistical and other related activities supported by the United States Antarctic Program.

**Integrative Activities.**—This activity supports emerging cross-disciplinary research efforts and major research instrumentation. This activity also provides support for the Science and Technology Policy Institute. The Experimental Program to Stimulate Competitive Research broadens participation of States and regions in science and engineering by helping institutions expand their research capacity and competitiveness.

**Office of Cyberinfrastructure.**—This activity supports research, development, acquisition, and operation of advanced shared and connecting cyberinfrastructure in support of the Nation's science and engineering research and education community.

The United States Arctic Research Commission promotes Arctic research and recommends national Arctic research policies to guide Federal agencies in developing and implementing their research programs in the Arctic region.

Object Classification (in millions of dollars)

Identification code 49-0100-0-1-999	2009 actual	2010 est.	2011 est.
<b>Direct obligations:</b>			
21.0 Travel and transportation of persons .....	21	21	21
25.1 Advisory and assistance services .....	96	96	96
25.2 Other services .....	5	5	5
25.3 Other purchases of goods and services from Government accounts .....	23	23	23
25.4 Operation and maintenance of facilities .....	435	435	435
25.5 Research and development contracts .....	14	14	14
26.0 Supplies and materials .....	1	1	1
31.0 Equipment .....	1	1	1
41.0 Grants, subsidies, and contributions .....	6,619	5,449	5,423
99.0 Direct obligations .....	7,215	6,045	6,019
99.0 Reimbursable obligations .....	105	120	120
99.9 Total new obligations .....	7,320	6,165	6,139

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 (42 U.S.C. 1861-1875), including authorized travel, **[\$117,290,000] \$165,190,000**, to remain available until expended **]: Provided, That none of the funds may be used to reimburse the Judgment Fund]. (Science Appropriations Act, 2010.)**

Program and Financing (in millions of dollars)

Identification code 49-0551-0-1-251	2009 actual	2010 est.	2011 est.
<b>Obligations by program activity:</b>			
00.01 Direct program activity .....	415	320	165
10.00 Total new obligations .....	415	320	165
<b>Budgetary resources available for obligation:</b>			
21.40 Unobligated balance carried forward, start of year .....	66	203	.....
22.00 New budget authority (gross) .....	552	117	165
23.90 Total budgetary resources available for obligation .....	618	320	165
23.95 Total new obligations .....	-415	-320	-165
24.40 Unobligated balance carried forward, end of year .....	203	.....	.....
<b>New budget authority (gross), detail:</b>			
Discretionary:			
40.00 Appropriation .....	552	117	165
<b>Change in obligated balances:</b>			
72.40 Obligated balance, start of year .....	177	443	433
73.10 Total new obligations .....	415	320	165
73.20 Total outlays (gross) .....	-149	-330	-266
74.40 Obligated balance, end of year .....	443	433	332
<b>Outlays (gross), detail:</b>			
86.90 Outlays from new discretionary authority .....	.....	7	10
86.93 Outlays from discretionary balances .....	149	323	256
87.00 Total outlays (gross) .....	149	330	266
<b>Net budget authority and outlays:</b>			
89.00 Budget authority .....	552	117	165
90.00 Outlays .....	149	330	266

The Major Research Equipment and Facilities Construction activity supports the acquisition, construction, and commissioning of unique national research platforms and major research facilities and equipment. Performance is measured against established construction schedules, costs, and milestones.

Object Classification (in millions of dollars)

Identification code 49-0551-0-1-251	2009 actual	2010 est.	2011 est.
<b>Direct obligations:</b>			
25.5 Research and development contracts .....	5	5	5
41.0 Grants, subsidies, and contributions .....	410	315	160
99.9 Total new obligations .....	415	320	165

AGENCY OPERATIONS AND AWARD MANAGEMENT

For agency operations and award management 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 **[\$9,200] \$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 Department of Homeland Security for security guard services; **[\$300,000,000] \$327,190,000**: *Provided, That contracts may be entered into under this heading in fiscal year [2010] 2011 for maintenance and operation of facilities, and for other services, to be provided during the next fiscal year. (Science Appropriations Act, 2010.)*

**Program and Financing** (in millions of dollars)

Identification code 49-0180-0-1-251	2009 actual	2010 est.	2011 est.
<b>Obligations by program activity:</b>			
00.01 Administration and management .....	294	300	329
09.01 Reimbursable programs .....	6	10	10
10.00 Total new obligations .....	300	310	339
<b>Budgetary resources available for obligation:</b>			
22.00 New budget authority (gross) .....	299	310	339
23.95 Total new obligations .....	-300	-310	-339
<b>New budget authority (gross), detail:</b>			
Discretionary:			
40.00 Appropriation .....	294	300	329
58.00 Spending authority from offsetting collections: Offsetting collections (cash) .....	5	10	10
70.00 Total new budget authority (gross) .....	299	310	339
<b>Change in obligated balances:</b>			
72.40 Obligated balance, start of year .....	70	72	64
73.10 Total new obligations .....	300	310	339
73.20 Total outlays (gross) .....	-297	-318	-341
73.40 Adjustments in expired accounts (net) .....	-1		
74.40 Obligated balance, end of year .....	72	64	62
<b>Outlays (gross), detail:</b>			
86.90 Outlays from new discretionary authority .....	236	256	280
86.93 Outlays from discretionary balances .....	61	62	61
87.00 Total outlays (gross) .....	297	318	341
<b>Offsets:</b>			
Against gross budget authority and outlays:			
88.00 Offsetting collections (cash) from: Federal sources .....	-5	-10	-10
<b>Net budget authority and outlays:</b>			
89.00 Budget authority .....	294	300	329
90.00 Outlays .....	292	308	331

This account provides funds to administer and manage NSF programs and to advance NSF's strategic goal of Stewardship—supporting excellence in science and engineering research and education through a capable and responsive organization. NSF continually develops and refines performance measures for development and monitoring of programs.

**Object Classification** (in millions of dollars)

Identification code 49-0180-0-1-251	2009 actual	2010 est.	2011 est.
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent .....	132	144	152
11.3 Other than full-time permanent .....	13	13	15
11.5 Other personnel compensation .....	7	8	9
11.8 Special personal services payments .....	1	2	2
11.9 Total personnel compensation .....	153	167	178
12.1 Civilian personnel benefits .....	36	37	39
21.0 Travel and transportation of persons .....	7	7	10
23.1 Rental payments .....	27	26	26
23.3 Communications, utilities, and miscellaneous charges .....	2	2	2
25.1 Advisory and assistance services .....	43	39	46
25.2 Other services .....	9	7	9
25.3 Other purchases of goods and services from Government accounts .....	8	6	8
26.0 Supplies and materials .....	5	5	6
31.0 Equipment .....	4	4	5
99.0 Direct obligations .....	294	300	329
99.0 Reimbursable obligations .....	6	10	10
99.9 Total new obligations .....	300	310	339

**Employment Summary**

Identification code 49-0180-0-1-251	2009 actual	2010 est.	2011 est.
Direct:			
1001 Civilian full-time equivalent employment .....	1,300	1,325	1,390

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, as amended (42 U.S.C. 1863) and Public Law 86-209 (42 U.S.C. 1880 et seq.), **[\$4,540,000] \$4,840,000: Provided,** That not to exceed **[\$2,800] \$2,500** shall be available for official reception and representation expenses. (Science Appropriations Act, 2010.)

**Program and Financing** (in millions of dollars)

Identification code 49-0350-0-1-251	2009 actual	2010 est.	2011 est.
<b>Obligations by program activity:</b>			
00.01 Direct program activity .....	4	5	5
10.00 Total new obligations .....	4	5	5
<b>Budgetary resources available for obligation:</b>			
22.00 New budget authority (gross) .....	4	5	5
23.95 Total new obligations .....	-4	-5	-5
<b>New budget authority (gross), detail:</b>			
Discretionary:			
40.00 Appropriation .....	4	5	5
<b>Change in obligated balances:</b>			
72.40 Obligated balance, start of year .....	2	2	1
73.10 Total new obligations .....	4	5	5
73.20 Total outlays (gross) .....	-3	-6	-5
73.40 Adjustments in expired accounts (net) .....	-1		
74.40 Obligated balance, end of year .....	2	1	1
<b>Outlays (gross), detail:</b>			
86.90 Outlays from new discretionary authority .....	3	4	4
86.93 Outlays from discretionary balances .....		2	1
87.00 Total outlays (gross) .....	3	6	5
<b>Net budget authority and outlays:</b>			
89.00 Budget authority .....	4	5	5
90.00 Outlays .....	3	6	5

This appropriation provides policy-making and related responsibilities for NSF and provides guidance on significant national policy issues in science and engineering research and education, as required by law.

**Object Classification** (in millions of dollars)

Identification code 49-0350-0-1-251	2009 actual	2010 est.	2011 est.
Direct obligations:			
11.1 Personnel compensation: Full-time permanent .....	2	3	3
21.0 Travel and transportation of persons .....	1		1
25.1 Advisory and assistance services .....	1	2	1
99.9 Total new obligations .....	4	5	5

**Employment Summary**

Identification code 49-0350-0-1-251	2009 actual	2010 est.	2011 est.
Direct:			

OFFICE OF THE NATIONAL SCIENCE BOARD—Continued  
Employment Summary—Continued

Identification code 49-0350-0-1-251	2009 actual	2010 est.	2011 est.
1001 Civilian full-time equivalent employment .....	17	17	18

OFFICE OF INSPECTOR GENERAL

For necessary expenses of the Office of Inspector General as authorized by the Inspector General Act of 1978, as amended, **[\$14,000,000]** \$14,350,000, to remain available until September 30, 2012. (Science Appropriations Act, 2010.)

Program and Financing (in millions of dollars)

Identification code 49-0300-0-1-251	2009 actual	2010 est.	2011 est.
<b>Obligations by program activity:</b>			
00.01 Direct program activity .....	12	16	14
10.00 Total new obligations .....	12	16	14
<b>Budgetary resources available for obligation:</b>			
21.40 Unobligated balance carried forward, start of year .....		2	
22.00 New budget authority (gross) .....	14	14	14
23.90 Total budgetary resources available for obligation .....	14	16	14
23.95 Total new obligations .....	-12	-16	-14
24.40 Unobligated balance carried forward, end of year .....	2		
<b>New budget authority (gross), detail:</b>			
Discretionary:			
40.00 Appropriation .....	14	14	14
<b>Change in obligated balances:</b>			
72.40 Obligated balance, start of year .....	3	2	3
73.10 Total new obligations .....	12	16	14
73.20 Total outlays (gross) .....	-13	-15	-14
74.40 Obligated balance, end of year .....	2	3	3
<b>Outlays (gross), detail:</b>			
86.90 Outlays from new discretionary authority .....	11	11	11
86.93 Outlays from discretionary balances .....	2	4	3
87.00 Total outlays (gross) .....	13	15	14
<b>Net budget authority and outlays:</b>			
89.00 Budget authority .....	14	14	14
90.00 Outlays .....	13	15	14

This appropriation provides agency-wide audit and investigative functions to identify and correct management and administrative deficiencies which create conditions for existing or potential instances of fraud, waste, and mismanagement consistent with the Inspector General Act of 1978, as amended (5 U.S.C. App. 3).

Object Classification (in millions of dollars)

Identification code 49-0300-0-1-251	2009 actual	2010 est.	2011 est.
Direct obligations:			
11.1 Personnel compensation: Full-time permanent .....	8	9	8
12.1 Civilian personnel benefits .....	2	3	3
25.2 Other services .....	2	4	3
99.9 Total new obligations .....	12	16	14

Employment Summary

Identification code 49-0300-0-1-251	2009 actual	2010 est.	2011 est.
Direct:			

1001 Civilian full-time equivalent employment .....	69	73	74
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EDUCATION AND HUMAN RESOURCES

For necessary expenses in carrying out science, mathematics 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, authorized travel, and rental of conference rooms in the District of Columbia, **[\$872,760,000]** \$892,000,000, to remain available until September 30, 2011: *Provided*, That not less than \$55,000,000 shall be available until expended for activities authorized by section 7030 of Public Law 110-69: *Provided further*, That not less than \$32,000,000 shall be available until expended for the Historically Black Colleges and Universities Undergraduate Program] 2012. (Science Appropriations Act, 2010.)

Program and Financing (in millions of dollars)

Identification code 49-0106-0-1-251	2009 actual	2010 est.	2011 est.
<b>Obligations by program activity:</b>			
00.01 Undergraduate education .....	368	292	290
00.02 Graduate education .....	182	197	185
00.03 Human resource development .....	154	157	169
00.04 Research on learning in formal and informal settings .....	227	242	248
00.91 Subtotal Appropriated Activities .....	931	888	892
Mandatory H-1B Non-Immigrant Petitioner Fees Activities:			
01.01 Low income scholarship program .....	61	120	75
01.02 ITEST grants for mathematics, science, or engineering enrichment courses .....	28	32	25
01.91 Subtotal Mandatory H-1B Non-Immigrant Petitioner Fee Activities .....	89	152	100
02.00 Total direct obligations .....	1,020	1,040	992
09.01 Reimbursable programs .....	9	15	15
10.00 Total new obligations .....	1,029	1,055	1,007
<b>Budgetary resources available for obligation:</b>			
21.40 Unobligated balance carried forward, start of year .....	51	67	
22.00 New budget authority (gross) .....	1,043	988	1,007
22.10 Resources available from recoveries of prior year obligations .....	2		
23.90 Total budgetary resources available for obligation .....	1,096	1,055	1,007
23.95 Total new obligations .....	-1,029	-1,055	-1,007
24.40 Unobligated balance carried forward, end of year .....	67		
<b>New budget authority (gross), detail:</b>			
Discretionary:			
40.00 Appropriation .....	945	873	892
Spending authority from offsetting collections:			
58.00 Offsetting collections (cash) .....	5	15	15
58.10 Change in uncollected customer payments from Federal sources (unexpired) .....	4		
58.90 Spending authority from offsetting collections (total discretionary) .....	9	15	15
Mandatory:			
60.20 Appropriation (special fund) .....	89	100	100
70.00 Total new budget authority (gross) .....	1,043	988	1,007
<b>Change in obligated balances:</b>			
72.40 Obligated balance, start of year .....	1,634	1,794	1,819
73.10 Total new obligations .....	1,029	1,055	1,007
73.20 Total outlays (gross) .....	-854	-1,030	-1,009
73.40 Adjustments in expired accounts (net) .....	-10		
73.45 Recoveries of prior year obligations .....	-2		
74.00 Change in uncollected customer payments from Federal sources (unexpired) .....	-4		
74.10 Change in uncollected customer payments from Federal sources (expired) .....	1		
74.40 Obligated balance, end of year .....	1,794	1,819	1,817
<b>Outlays (gross), detail:</b>			
86.90 Outlays from new discretionary authority .....	129	137	140
86.93 Outlays from discretionary balances .....	629	728	732
86.97 Outlays from new mandatory authority .....		11	11

86.98	Outlays from mandatory balances .....	96	154	126
87.00	Total outlays (gross) .....	854	1,030	1,009
<b>Offsets:</b>				
Against gross budget authority and outlays:				
88.00	Offsetting collections (cash) from: Federal sources .....	-6	-15	-15
Against gross budget authority only:				
88.95	Change in uncollected customer payments from Federal sources (unexpired) .....	-4		
88.96	Portion of offsetting collections (cash) credited to expired accounts .....	1		
<b>Net budget authority and outlays:</b>				
89.00	Budget authority .....	1,034	973	992
90.00	Outlays .....	848	1,015	994

Education and Human Resources (EHR) activities provide a comprehensive set of programs that further NSF's goal of ensuring a diverse, competitive, and globally engaged U.S. science, technology, engineering, and mathematics (STEM) workforce, as well as scientifically literate citizens. At the pre-kindergarten through grade 12 (pre-K–12) levels, EHR catalyzes reform of STEM education through the development of public-private partnerships. Its pre-K–12 programs provide new instructional materials for students and teachers that incorporate the latest advances in teaching, learning, and educational technologies; growth in the knowledge base; and teacher education opportunities that support the full continuum of STEM teacher education from pre-service and in-service, through life-long learning. Undergraduate programs improve curricula, strengthen laboratory course offerings, enhance faculty, and lead reform efforts in STEM disciplines. Programs for advanced technological education strengthen education for students preparing to enter the high-technology workforce. Graduate level support is directed primarily to fellowships and traineeships to sustain the U.S. world leadership in science and technology. All EHR programming focuses on broadening participation of groups underrepresented in STEM fields including activities focused on the improvement of infrastructure and academic programs at minority-serving institutions. EHR supports education research that advances our knowledge of how people learn in the STEM disciplines; it also supports the development and effective implementation of learning technologies. STEM evaluation activities ensure accountability by developing indicators that measure program impact and inform the education community of best practices and relevant information. EHR activities also include programs supported by H-1B non-immigrant visa fees. These programs provide undergraduate and graduate scholarships in STEM fields, improve educational opportunities for students, and support for STEM education by providing research opportunities for STEM teachers and students.

**Object Classification** (in millions of dollars)

Identification code 49-0106-0-1-251				
		2009 actual	2010 est.	2011 est.
Direct obligations:				
21.0	Travel and transportation of persons .....	3	3	3
25.1	Advisory and assistance services .....	26	29	29
25.2	Other services .....	2	2	2
41.0	Grants, subsidies, and contributions .....	989	1,006	958
99.0	Direct obligations .....	1,020	1,040	992
99.0	Reimbursable obligations .....	9	15	15
99.9	Total new obligations .....	1,029	1,055	1,007

**Trust Funds**

**DONATIONS**

**Special and Trust Fund Receipts** (in millions of dollars)

Identification code 49-8960-0-7-251				
		2009 actual	2010 est.	2011 est.
01.00	Balance, start of year .....	1	1	1
01.99	Balance, start of year .....	1	1	1
Receipts:				
02.20	Donations, National Science Foundation .....	47	25	25
02.99	Total receipts and collections .....	47	25	25
04.00	Total: Balances and collections .....	48	26	26
Appropriations:				
05.00	Donations .....	-47	-25	-25
05.99	Total appropriations .....	-47	-25	-25
07.99	Balance, end of year .....	1	1	1

**Program and Financing** (in millions of dollars)

Identification code 49-8960-0-7-251				
		2009 actual	2010 est.	2011 est.
<b>Obligations by program activity:</b>				
00.01	Atacama Large Millimeter Array .....	10	18	10
00.02	Gemini Telescope .....	47	41	15
10.00	Total new obligations .....	57	59	25
<b>Budgetary resources available for obligation:</b>				
21.40	Unobligated balance carried forward, start of year .....	44	34	
22.00	New budget authority (gross) .....	47	25	25
23.90	Total budgetary resources available for obligation .....	91	59	25
23.95	Total new obligations .....	-57	-59	-25
24.40	Unobligated balance carried forward, end of year .....	34		
<b>New budget authority (gross), detail:</b>				
Mandatory:				
60.26	Appropriation (trust fund) .....	47	25	25
<b>Change in obligated balances:</b>				
72.40	Obligated balance, start of year .....	38	45	35
73.10	Total new obligations .....	57	59	25
73.20	Total outlays (gross) .....	-50	-69	-25
74.40	Obligated balance, end of year .....	45	35	35
<b>Outlays (gross), detail:</b>				
86.97	Outlays from new mandatory authority .....		25	25
86.98	Outlays from mandatory balances .....	50	44	
87.00	Total outlays (gross) .....	50	69	25
<b>Net budget authority and outlays:</b>				
89.00	Budget authority .....	47	25	25
90.00	Outlays .....	50	69	25

This account consists of contributions from foreign governments, organizations, and individuals to fund various cooperative efforts in science, research, and education. These efforts include major international projects, such as operation of the GEMINI telescope, and the NSF' ocean drilling program. Other smaller activities supported include cooperative research, joint seminars, exchange of senior scientists, short-term research development visits, international conferences, and support for certain special functions of NSF and the National Science Board. These funds are not otherwise available.

**Object Classification** (in millions of dollars)

Identification code 49-8960-0-7-251				
		2009 actual	2010 est.	2011 est.
Direct obligations:				
25.4	Operation and maintenance of facilities .....	9	9	9
41.0	Grants, subsidies, and contributions .....	48	50	16

DONATIONS—Continued  
Object Classification—Continued

Identification code 49-8960-0-7-251		2009 actual	2010 est.	2011 est.
99.9	Total new obligations .....	57	59	25

**GENERAL FUND RECEIPT ACCOUNT**

(in millions of dollars)

	2009 actual	2010 est.	2011 est.
Offsetting receipts from the public:			
49-322000 All Other General Fund Proprietary Receipts Including Budget Clearing Accounts .....	2	2	2
General Fund Offsetting receipts from the public .....	2	2	2