

NATIONAL SCIENCE FOUNDATION

Federal Funds

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; acquisition of aircraft; and authorized travel; **[\$5,719,000,000] \$5,983,280,000**, to remain available until September 30, **[2013] 2014**, of which not to exceed **[\$550,000,000] \$500,000,000** 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: *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 **[**: *Provided further*, That not less than \$150,900,000 shall be available for activities authorized by section 7002(c)(2)(A)(iv) of Public Law 110–69: *Provided further*, That up to \$50,000,000 of funds made available under this heading within this Act may be transferred to "Major Research Equipment and Facilities Construction": *Provided further*, That funds so transferred shall not be subject to the transfer limitations described in the Administrative Provisions in this Act for the National Science Foundation, and shall be available until expended only after notification of such transfer to the Committees on Appropriations **]**. (*Science Appropriations Act, 2012.*)

Program and Financing (in millions of dollars)

Identification code 49–0100–0–1–999	2011 actual	2012 est.	2013 est.
Obligations by program activity:			
0001 Biological Sciences	712	712	734
0002 Computer and Information Science and Engineering	636	654	710
0003 Engineering	763	826	876
0004 EPSCoR	147	151	158
0005 Geosciences	885	885	906
0006 Mathematical and Physical Sciences	1,313	1,309	1,345
0007 Social, Behavioral and Economic Sciences	247	254	260
0008 Office of International Science and Engineering	49	50	51
0009 U.S. Polar Research Programs	373	368	382
0010 U.S. Antarctic Logistical Support Activities	68	68	68
0011 Integrative Activities	113	199	274
0012 Office of Cyberinfrastructure	301	212	218
0013 Arctic Research Commission	1	1	1
0799 Total direct obligations	5,608	5,689	5,983
0801 Reimbursable programs	121	128	120
0900 Total new obligations	5,729	5,817	6,103
Budgetary Resources:			
Unobligated balance:			
1000 Unobligated balance brought forward, Oct 1	1	8	.....
1021 Recoveries of prior year unpaid obligations	100	.....	.....
1050 Unobligated balance (total)	101	8	.....
Budget authority:			
Appropriations, discretionary:			
1100 Appropriation	5,575	5,719	5,983
1120 Appropriations transferred to other accts [70–0610]	–54	.....	.....
1120 Transferred to other accounts [49–0551] .....	.....	–30	.....
1130 Appropriations permanently reduced	–11	.....	.....
1160 Appropriation, discretionary (total)	5,510	5,689	5,983
Spending authority from offsetting collections, discretionary:			
1700 Collected	72	120	120
1701 Change in uncollected payments, Federal sources	54	.....	.....
1750 Spending auth from offsetting collections, disc (total)	126	120	120
1900 Budget authority (total)	5,636	5,809	6,103
1930 Total budgetary resources available	5,737	5,817	6,103
Memorandum (non-add) entries:			
1941 Unexpired unobligated balance, end of year	8	.....	.....
Change in obligated balance:			
Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	9,786	9,586	8,819
3010 Uncollected pymts, Fed sources, brought forward, Oct 1	–91	–127	–127

3020 Obligated balance, start of year (net)	9,695	9,459	8,692
3030 Obligations incurred, unexpired accounts	5,729	5,817	6,103
3031 Obligations incurred, expired accounts	1	.....	.....
3040 Outlays (gross)	–5,797	–6,584	–6,038
3050 Change in uncollected pymts, Fed sources, unexpired	–54	.....	.....
3051 Change in uncollected pymts, Fed sources, expired	18	.....	.....
3080 Recoveries of prior year unpaid obligations, unexpired	–100	.....	.....
3081 Recoveries of prior year unpaid obligations, expired	–33	.....	.....
Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)	9,586	8,819	8,884
3091 Uncollected pymts, Fed sources, end of year	–127	–127	–127
3100 Obligated balance, end of year (net)	9,459	8,692	8,757
Budget authority and outlays, net:			
Discretionary:			
4000 Budget authority, gross	5,636	5,809	6,103
Outlays, gross:			
4010 Outlays from new discretionary authority	836	1,258	1,317
4011 Outlays from discretionary balances	4,961	5,326	4,721
4020 Outlays, gross (total)	5,797	6,584	6,038
Offsets against gross budget authority and outlays:			
Offsetting collections (collected) from:			
4030 Federal sources	–89	–120	–120
Additional offsets against gross budget authority only:			
4050 Change in uncollected pymts, Fed sources, unexpired	–54	.....	.....
4052 Offsetting collections credited to expired accounts	17	.....	.....
4060 Additional offsets against budget authority only (total)	–37	.....	.....
4070 Budget authority, net (discretionary)	5,510	5,689	5,983
4080 Outlays, net (discretionary)	5,708	6,464	5,918
4180 Budget authority, net (total)	5,510	5,689	5,983
4190 Outlays, net (total)	5,708	6,464	5,918

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.

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 understanding 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, mathematical sciences, and physics. 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 col-

RESEARCH AND RELATED ACTIVITIES—Continued

lection 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	2011 actual	2012 est.	2013 est.
Direct obligations:			
21.0 Travel and transportation of persons	22	22	22
25.1 Advisory and assistance services	102	102	102
25.2 Other services from non-Federal sources	5	5	5
25.3 Other goods and services from Federal sources	32	32	32
25.4 Operation and maintenance of facilities	350	350	350
25.5 Research and development contracts	7	7	7
26.0 Supplies and materials	2	2	2
31.0 Equipment	2	2	2
41.0 Grants, subsidies, and contributions	5,086	5,167	5,461
99.0 Direct obligations	5,608	5,689	5,983
99.0 Reimbursable obligations	121	128	120
99.9 Total new obligations	5,729	5,817	6,103

Employment Summary

Identification code 49-0100-0-1-999	2011 actual	2012 est.	2013 est.
1001 Direct civilian full-time equivalent employment	3	3	3

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, **[\$167,055,000] \$196,170,000**, to remain available until expended: *Provided*, That none of the funds may be used to reimburse the Judgment Fund. (*Science Appropriations Act, 2012.*)

Program and Financing (in millions of dollars)

Identification code 49-0551-0-1-251	2011 actual	2012 est.	2013 est.
Obligations by program activity:			
0001 Direct program activity	125	198	196
Budgetary Resources:			
Unobligated balance:			
1000 Unobligated balance brought forward, Oct 1	9	1	.....
Budget authority:			
Appropriations, discretionary:			
1100 Appropriation	117	167	196
1121 Appropriations transferred from other accts [49-0100] .....	.....	30	.....
1160 Appropriation, discretionary (total)	117	197	196
1930 Total budgetary resources available	126	198	196
Memorandum (non-add) entries:			
1941 Unexpired unobligated balance, end of year	1	.....	.....
Change in obligated balance:			
Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	597	494	380
3030 Obligations incurred, unexpired accounts	125	198	196
3040 Outlays (gross)	-228	-312	-254
Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)	494	380	322
3100 Obligated balance, end of year (net)	494	380	322
Budget authority and outlays, net:			
Discretionary:			
4000 Budget authority, gross	117	197	196
Outlays, gross:			
4010 Outlays from new discretionary authority .....	.....	12	12
4011 Outlays from discretionary balances	228	300	242
4020 Outlays, gross (total)	228	312	254
4180 Budget authority, net (total)	117	197	196
4190 Outlays, net (total)	228	312	254

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 of each construction project is measured against an established baseline at regular intervals and at major milestones.

Object Classification (in millions of dollars)

Identification code 49-0551-0-1-251	2011 actual	2012 est.	2013 est.
Direct obligations:			
25.5 Research and development contracts	5	5	5
41.0 Grants, subsidies, and contributions	120	193	191
99.9 Total new obligations	125	198	196

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 \$8,280 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; \$299,400,000: *Provided*, That contracts may be entered into under this heading in fiscal year **[2012] 2013** for maintenance and operation of facilities, and for other services, to be provided during the next fiscal year. (*Science Appropriations Act, 2012.*)

Program and Financing (in millions of dollars)

Identification code 49-0180-0-1-251	2011 actual	2012 est.	2013 est.
Obligations by program activity:			
0001 Administration and management	300	299	299

0801	Reimbursable programs	7	10	10
0900	Total new obligations	307	309	309
Budgetary Resources:				
Budget authority:				
Appropriations, discretionary:				
1100	Appropriation	300	299	299
1130	Appropriations permanently reduced	-1		
1160	Appropriation, discretionary (total)	299	299	299
Spending authority from offsetting collections, discretionary:				
1700	Collected	7	10	10
1701	Change in uncollected payments, Federal sources	1		
1750	Spending auth from offsetting collections, disc (total)	8	10	10
1900	Budget authority (total)	307	309	309
1930	Total budgetary resources available	307	309	309

Change in obligated balance:				
Obligated balance, start of year (net):				
3000	Unpaid obligations, brought forward, Oct 1 (gross)	79	72	54
3010	Uncollected pymts, Fed sources, brought forward, Oct 1		-1	-1
3020	Obligated balance, start of year (net)	79	71	53
3030	Obligations incurred, unexpired accounts	307	309	309
3040	Outlays (gross)	-311	-327	-306
3050	Change in uncollected pymts, Fed sources, unexpired	-1		
3081	Recoveries of prior year unpaid obligations, expired	-3		
Obligated balance, end of year (net):				
3090	Unpaid obligations, end of year (gross)	72	54	57
3091	Uncollected pymts, Fed sources, end of year	-1	-1	-1
3100	Obligated balance, end of year (net)	71	53	56

Budget authority and outlays, net:				
Discretionary:				
4000	Budget authority, gross	307	309	309
Outlays, gross:				
4010	Outlays from new discretionary authority	252	255	255
4011	Outlays from discretionary balances	59	72	51
4020	Outlays, gross (total)	311	327	306
Offsets against gross budget authority and outlays:				
Offsetting collections (collected) from:				
4030	Federal sources	-7	-10	-10
Additional offsets against gross budget authority only:				
4050	Change in uncollected pymts, Fed sources, unexpired	-1		
4070	Budget authority, net (discretionary)	299	299	299
4080	Outlays, net (discretionary)	304	317	296
4180	Budget authority, net (total)	299	299	299
4190	Outlays, net (total)	304	317	296

This account funds NSF's scientific, professional, and administrative workforce, the physical and technological infrastructure necessary for a productive, safe and secure work environment, and the essential business operations critical to NSF's administrative processes.

Object Classification (in millions of dollars)

Identification code 49-0180-0-1-251	2011 actual	2012 est.	2013 est.	
Direct obligations:				
Personnel compensation:				
11.1	Full-time permanent	143	144	147
11.3	Other than full-time permanent	12	13	14
11.5	Other personnel compensation	7	3	4
11.8	Special personal services payments	1	1	1
11.9	Total personnel compensation	163	161	166
12.1	Civilian personnel benefits	40	42	43
21.0	Travel and transportation of persons	6	6	6
23.1	Rental payments	26	26	27
23.3	Communications, utilities, and miscellaneous charges	2	2	2
25.1	Advisory and assistance services	44	44	39
25.2	Other services from non-Federal sources	8	8	6
25.3	Other goods and services from Federal sources	2	2	2
26.0	Supplies and materials	4	4	4
31.0	Equipment	4	4	4
99.0	Direct obligations	299	299	299
99.0	Reimbursable obligations	8	10	10
99.9	Total new obligations	307	309	309

Employment Summary

Identification code 49-0180-0-1-251	2011 actual	2012 est.	2013 est.	
1001	Direct civilian full-time equivalent employment	1,323	1,327	1,352

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.), \$4,440,000: *Provided*, That not to exceed \$2,500 shall be available for official reception and representation expenses. (*Science Appropriations Act, 2012.*)

Program and Financing (in millions of dollars)

Identification code 49-0350-0-1-251	2011 actual	2012 est.	2013 est.
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Obligations by program activity:				
0001	Direct program activity	4	4	4

Budgetary Resources:				
Unobligated balance:				
1000	Unobligated balance brought forward, Oct 1		1	
Budget authority:				
Appropriations, discretionary:				
1100	Appropriation	5	4	4
1160	Appropriation, discretionary (total)	5	4	4
1930	Total budgetary resources available	5	5	4
Memorandum (non-add) entries:				
1940	Unobligated balance expiring		-1	
1941	Unexpired unobligated balance, end of year	1		

Change in obligated balance:				
Obligated balance, start of year (net):				
3000	Unpaid obligations, brought forward, Oct 1 (gross)	1	1	1
3030	Obligations incurred, unexpired accounts	4	4	4
3040	Outlays (gross)	-4	-4	-5
Obligated balance, end of year (net):				
3090	Unpaid obligations, end of year (gross)	1	1	
3100	Obligated balance, end of year (net)	1	1	

Budget authority and outlays, net:				
Discretionary:				
4000	Budget authority, gross	5	4	4
Outlays, gross:				
4010	Outlays from new discretionary authority	3	3	3
4011	Outlays from discretionary balances	1	1	2
4020	Outlays, gross (total)	4	4	5
4180	Budget authority, net (total)	5	4	4
4190	Outlays, net (total)	4	4	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	2011 actual	2012 est.	2013 est.	
Direct obligations:				
11.1	Personnel compensation: Full-time permanent	2	2	2
12.1	Civilian personnel benefits	1	1	1
25.1	Advisory and assistance services	1	1	1
99.9	Total new obligations	4	4	4

OFFICE OF THE NATIONAL SCIENCE BOARD—Continued
Employment Summary

Identification code 49-0350-0-1-251	2011 actual	2012 est.	2013 est.
1001 Direct civilian full-time equivalent employment	18	18	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, \$14,200,000, to remain available until September 30, 2014. (Science Appropriations Act, 2012.)

Program and Financing (in millions of dollars)

Identification code 49-0300-0-1-251	2011 actual	2012 est.	2013 est.
Obligations by program activity:			
0001 Direct program activity	14	16	14
Budgetary Resources:			
Unobligated balance:			
1000 Unobligated balance brought forward, Oct 1	2	2	
Budget authority:			
Appropriations, discretionary:			
1100 Appropriation	14	14	14
1160 Appropriation, discretionary (total)	14	14	14
1930 Total budgetary resources available	16	16	14
Memorandum (non-add) entries:			
1941 Unexpired unobligated balance, end of year	2		
Change in obligated balance:			
Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	3	3	6
3030 Obligations incurred, unexpired accounts	14	16	14
3040 Outlays (gross)	-14	-13	-15
Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)	3	6	5
3100 Obligated balance, end of year (net)	3	6	5
Budget authority and outlays, net:			
Discretionary:			
4000 Budget authority, gross	14	14	14
Outlays, gross:			
4010 Outlays from new discretionary authority	12	11	11
4011 Outlays from discretionary balances	2	2	4
4020 Outlays, gross (total)	14	13	15
4180 Budget authority, net (total)	14	14	14
4190 Outlays, net (total)	14	13	15

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	2011 actual	2012 est.	2013 est.
Direct obligations:			
11.1 Personnel compensation: Full-time permanent	9	9	9
12.1 Civilian personnel benefits	2	2	2
25.2 Other services from non-Federal sources	3	5	3
99.9 Total new obligations	14	16	14

Employment Summary

Identification code 49-0300-0-1-251	2011 actual	2012 est.	2013 est.
1001 Direct civilian full-time equivalent employment	74	78	78

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, **[\$829,000,000] \$875,610,000**, to remain available until September 30, **[2013: Provided, That not less than \$54,890,000 shall be available until expended for activities authorized by section 7030 of Public Law 110-69] 2014.** (Science Appropriations Act, 2012.)

Program and Financing (in millions of dollars)

Identification code 49-0106-0-1-251	2011 actual	2012 est.	2013 est.
Obligations by program activity:			
0001 Undergraduate education	285	303	246
0002 Graduate education	171	168	185
0003 Human resource development	157	125	135
0004 Research on learning in formal and informal settings	248	233	310
0091 Subtotal Appropriated Activities	861	829	876
0101 Low income scholarship program	78	121	75
0102 IT/EST grants for mathematics, science, or engineering enrichment courses	18	40	25
0191 Subtotal Mandatory H-1B Non-Immigrant Petitioner Fee Activities	96	161	100
0200 Total direct obligations	957	990	976
0799 Total direct obligations	957	990	976
0801 Reimbursable programs	6	20	15
0900 Total new obligations	963	1,010	991
Budgetary Resources:			
Unobligated balance:			
1000 Unobligated balance brought forward, Oct 1	50	66	
1021 Recoveries of prior year unpaid obligations	3		
1050 Unobligated balance (total)	53	66	
Budget authority:			
Appropriations, discretionary:			
1100 Appropriation	863	829	876
1120 Appropriations transferred to other accts [49-0106]	-87	-55	
1121 Appropriations transferred from other accts [49-0106]	87	55	
1130 Appropriations permanently reduced	-2		
1160 Appropriation, discretionary (total)	861	829	876
Appropriations, mandatory:			
1201 Appropriation (special or trust fund)	105	100	100
1260 Appropriations, mandatory (total)	105	100	100
Spending authority from offsetting collections, discretionary:			
1700 Collected	4	15	15
1701 Change in uncollected payments, Federal sources	6		
1750 Spending auth from offsetting collections, disc (total)	10	15	15
1900 Budget authority (total)	976	944	991
1930 Total budgetary resources available	1,029	1,010	991
Memorandum (non-add) entries:			
1941 Unexpired unobligated balance, end of year	66		
Change in obligated balance:			
Obligated balance, start of year (net):			
3000 Unpaid obligations, brought forward, Oct 1 (gross)	1,895	1,934	1,842
3010 Uncollected pymts, Fed sources, brought forward, Oct 1	-7	-12	-12
3020 Obligated balance, start of year (net)	1,888	1,922	1,830
3030 Obligations incurred, unexpired accounts	963	1,010	991
3040 Outlays (gross)	-912	-1,102	-1,045
3050 Change in uncollected pymts, Fed sources, unexpired	-6		
3051 Change in uncollected pymts, Fed sources, expired	1		
3080 Recoveries of prior year unpaid obligations, unexpired	-3		
3081 Recoveries of prior year unpaid obligations, expired	-9		
Obligated balance, end of year (net):			
3090 Unpaid obligations, end of year (gross)	1,934	1,842	1,788
3091 Uncollected pymts, Fed sources, end of year	-12	-12	-12
3100 Obligated balance, end of year (net)	1,922	1,830	1,776
Budget authority and outlays, net:			
Discretionary:			
4000 Budget authority, gross	871	844	891
Outlays, gross:			
4010 Outlays from new discretionary authority	102	131	138

4011	Outlays from discretionary balances	695	819	757
4020	Outlays, gross (total)	797	950	895
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4030	Federal sources	-5	-15	-15
	Additional offsets against gross budget authority only:			
4050	Change in uncollected pymts, Fed sources, unexpired	-6		
4052	Offsetting collections credited to expired accounts	1		
4060	Additional offsets against budget authority only (total)	-5		
4070	Budget authority, net (discretionary)	861	829	876
4080	Outlays, net (discretionary)	792	935	880
	Mandatory:			
4090	Budget authority, gross	105	100	100
	Outlays, gross:			
4100	Outlays from new mandatory authority		11	11
4101	Outlays from mandatory balances	115	141	139
4110	Outlays, gross (total)	115	152	150
4180	Budget authority, net (total)	966	929	976
4190	Outlays, net (total)	907	1,087	1,030

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	2011 actual	2012 est.	2013 est.
Direct obligations:			
21.0 Travel and transportation of persons	4	4	4
25.1 Advisory and assistance services	33	33	33
25.2 Other services from non-Federal sources	4	4	4
41.0 Grants, subsidies, and contributions	916	949	935
99.0 Direct obligations	957	990	976
99.0 Reimbursable obligations	6	20	15

99.9	Total new obligations	963	1,010	991
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Trust Funds
DONATIONS

Special and Trust Fund Receipts (in millions of dollars)

Identification code 49-8960-0-7-251	2011 actual	2012 est.	2013 est.	
0100	Balance, start of year			
	Receipts:			
0220	Donations, National Science Foundation	53	25	25
0400	Total: Balances and collections	53	25	25
	Appropriations:			
0500	Donations	-53	-25	-25
0799	Balance, end of year			

Program and Financing (in millions of dollars)

Identification code 49-8960-0-7-251	2011 actual	2012 est.	2013 est.	
	Obligations by program activity:			
0001	Atacama Large Millimeter Array	10	29	10
0002	Gemini Telescope	17	24	15
0003	B&M Gates Foundation	5	12	
0004	US Civilian Research	15	12	
0900	Total new obligations	47	77	25
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	46	52	
	Budget authority:			
	Appropriations, mandatory:			
1201	Appropriation (special or trust fund)	53	25	25
1260	Appropriations, mandatory (total)	53	25	25
1930	Total budgetary resources available	99	77	25
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	52		
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3000	Unpaid obligations, brought forward, Oct 1 (gross)	34	46	12
3030	Obligations incurred, unexpired accounts	47	77	25
3040	Outlays (gross)	-35	-111	-37
	Obligated balance, end of year (net):			
3090	Unpaid obligations, end of year (gross)	46	12	
3100	Obligated balance, end of year (net)	46	12	
	Budget authority and outlays, net:			
	Mandatory:			
4090	Budget authority, gross	53	25	25
	Outlays, gross:			
4100	Outlays from new mandatory authority		25	25
4101	Outlays from mandatory balances	35	86	12
4110	Outlays, gross (total)	35	111	37
4180	Budget authority, net (total)	53	25	25
4190	Outlays, net (total)	35	111	37

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 telescopes, 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.

DONATIONS—Continued
Object Classification (in millions of dollars)

Identification code 49–8960–0–7–251	2011 actual	2012 est.	2013 est.
Direct obligations:			
25.4 Operation and maintenance of facilities	9	9	9
41.0 Grants, subsidies, and contributions	38	68	16
99.9 Total new obligations	47	77	25

ADMINISTRATIVE PROVISION

Not to exceed 5 percent of any appropriation made available for the current fiscal year for the National Science Foundation in this Act may be transferred between such appropriations, but no such appropriation

shall be increased by more than 15 percent by any such transfers. Any transfer pursuant to this section shall be treated as a reprogramming of funds under section 505 of this Act and shall not be available for obligation except in compliance with the procedures set forth in that section. (*Science Appropriations Act, 2012.*)

GENERAL FUND RECEIPT ACCOUNT

(in millions of dollars)

	2011 actual	2012 est.	2013 est.
Offsetting receipts from the public:			
49–32200 All Other General Fund Proprietary Receipts Including Budget Clearing Accounts	1	2	2
General Fund Offsetting receipts from the public	1	2	2