

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Federal Funds

SCIENCE

For necessary expenses, not otherwise provided for, in the conduct and support of science research and development activities, including research, development, operations, support, and services; maintenance *and repair*, *facility planning and design*; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by 5 U.S.C. 5901–5902; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, **[\$4,469,000,000] \$5,005,600,000**, to remain available until September 30, **[2011] 2012**. (*Science Appropriations Act, 2010*.)

Program and Financing (in millions of dollars)

Identification code 80–0120–0–1–252	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
00.01 Direct program activity	4,586	4,695	4,996
10.00 Total new obligations	4,586	4,695	4,996
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year		317	91
22.00 New budget authority (gross)	4,903	4,469	5,006
23.90 Total budgetary resources available for obligation	4,903	4,786	5,097
23.95 Total new obligations	–4,586	–4,695	–4,996
24.40 Unobligated balance carried forward, end of year	317	91	101
New budget authority (gross), detail:			
Discretionary:			
40.00 Appropriation	4,903	4,469	5,006
Change in obligated balances:			
72.40 Obligated balance, start of year		2,351	2,608
73.10 Total new obligations	4,586	4,695	4,996
73.20 Total outlays (gross)	–2,235	–4,438	–4,784
74.40 Obligated balance, end of year	2,351	2,608	2,820
Outlays (gross), detail:			
86.90 Outlays from new discretionary authority	2,235	2,146	2,354
86.93 Outlays from discretionary balances		2,292	2,430
87.00 Total outlays (gross)	2,235	4,438	4,784
Net budget authority and outlays:			
89.00 Budget authority	4,903	4,469	5,006
90.00 Outlays	2,235	4,438	4,784

This appropriation provides for the Science Mission Directorate, which is comprised of the agency's Earth and space science programs. The appropriation provides for all of the research; development; operations; salaries and related expenses; and other general and administrative activities supporting the programs within this account. Detailed performance goals associated with these activities are addressed in NASA's detailed budget request.

NASA's Science Mission Directorate encompasses four themes: Earth Science, Planetary Science, Heliophysics, and Astrophysics. The Directorate seeks to answer fundamental questions concerning the ways in which Earth's climate is changing; the comparison of Earth with other planets in the solar system and around other stars; the connections among the Sun, Earth, and heliosphere; and the origin and evolution of planetary systems, the galaxy, and the universe, including the origin and distribution of life in the universe. The Directorate achieves its objectives through robotic flight missions, ground-based scientific research and data analysis, and the development of new technologies for future missions.

Object Classification (in millions of dollars)

Identification code 80–0120–0–1–252	2009 actual	2010 est.	2011 est.
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent	192	210	213
11.3 Other than full-time permanent	14	15	16
11.5 Other personnel compensation	1	1	1
11.9 Total personnel compensation	207	226	230
12.1 Civilian personnel benefits	53	58	59
21.0 Travel and transportation of persons	16	15	16
22.0 Transportation of things	1	1	1
23.2 Rental payments to others	5	5	5
23.3 Communications, utilities, and miscellaneous charges	6	6	6
24.0 Printing and reproduction	2	2	2
25.1 Advisory and assistance services	122	117	121
25.2 Other services	252	242	249
25.3 Other purchases of goods and services from Government accounts	112	108	111
25.4 Operation and maintenance of facilities	20	19	20
25.5 Research and development contracts	3,098	3,231	3,488
25.7 Operation and maintenance of equipment	63	61	63
26.0 Supplies and materials	24	23	24
31.0 Equipment	41	39	41
32.0 Land and structures	9	9	9
41.0 Grants, subsidies, and contributions	555	533	551
99.9 Total new obligations	4,586	4,695	4,996

Employment Summary

Identification code 80–0120–0–1–252	2009 actual	2010 est.	2011 est.
Direct:			
1001 Civilian full-time equivalent employment	1,710	1,832	1,832

AERONAUTICS AND SPACE RESEARCH AND TECHNOLOGY

For necessary expenses, not otherwise provided for, in the conduct and support of aeronautics *and space* research and development activities, including research, development, operations, support, and services; maintenance *and repair*, *facility planning and design*; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by 5 U.S.C. 5901–5902; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, **[\$501,000,000] \$1,151,800,000**, to remain available until September 30, **[2011] 2012**; of which **\$579,600,000** shall be for aeronautics activities; and of which **\$572,200,000** shall be for space research and technology activities. (*Science Appropriations Act, 2010*.)

Program and Financing (in millions of dollars)

Identification code 80–0126–0–1–402	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
00.01 Direct program activity	496	645	1,047
10.00 Total new obligations	496	645	1,047
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year		154	10
22.00 New budget authority (gross)	650	501	1,152
23.90 Total budgetary resources available for obligation	650	655	1,162
23.95 Total new obligations	–496	–645	–1,047
24.40 Unobligated balance carried forward, end of year	154	10	115
New budget authority (gross), detail:			
Discretionary:			
40.00 Appropriation	650	501	1,152

AERONAUTICS AND SPACE RESEARCH AND TECHNOLOGY—Continued
Program and Financing—Continued

Identification code 80-0126-0-1-402		2009 actual	2010 est.	2011 est.
Change in obligated balances:				
72.40	Obligated balance, start of year		210	311
73.10	Total new obligations	496	645	1,047
73.20	Total outlays (gross)	-286	-544	-823
74.40	Obligated balance, end of year	210	311	535
Outlays (gross), detail:				
86.90	Outlays from new discretionary authority	286	285	552
86.93	Outlays from discretionary balances		259	271
87.00	Total outlays (gross)	286	544	823
Net budget authority and outlays:				
89.00	Budget authority	650	501	1,152
90.00	Outlays	286	544	823

This appropriation provides for the full costs associated with both the aeronautics research program activities within the Aeronautics Research Mission Directorate (ARMD) and the new NASA organization that will conduct research in space technologies in support of the broad civilian space community. The full costs provide for all of the research; development; operations; salaries and related expenses; and other general and administrative activities required to execute the programs within this account. Costs include labor, travel, procurement, test and fabrication costs. Detailed performance goals associated with these activities are addressed in NASA's detailed budget request.

NASA's Aeronautics Research Mission Directorate is committed to expanding the boundaries of aeronautical knowledge for the benefit of the nation and the broad aeronautics community. NASA Aeronautics consists of the following integrated research programs: Fundamental Aeronautics, Aviation Safety, Airspace Systems and Integrated Systems Research Program, and the Aeronautics Test Program.

NASA's new space technology programs will increase the nation's ability to operate in the environment of space by supporting early stage research into critical technologies and innovations that will be of benefit to NASA missions, other Federal agencies, and the commercial space sector.

Object Classification (in millions of dollars)

Identification code 80-0126-0-1-402		2009 actual	2010 est.	2011 est.
Direct obligations:				
Personnel compensation:				
11.1	Full-time permanent	132	140	209
11.3	Other than full-time permanent	11	12	17
11.5	Other personnel compensation	1	1	2
11.9	Total personnel compensation	144	153	228
12.1	Civilian personnel benefits	36	38	57
21.0	Travel and transportation of persons	5	5	8
23.3	Communications, utilities, and miscellaneous charges	5	5	8
25.1	Advisory and assistance services	19	18	31
25.2	Other services	30	29	50
25.3	Other purchases of goods and services from Government accounts	4	4	6
25.4	Operation and maintenance of facilities	28	27	45
25.5	Research and development contracts	148	292	490
25.7	Operation and maintenance of equipment	13	12	21
26.0	Supplies and materials	13	12	21
31.0	Equipment	12	12	19
32.0	Land and structures	6	6	10
41.0	Grants, subsidies, and contributions	33	32	53
99.9	Total new obligations	496	645	1,047

Employment Summary

Identification code 80-0126-0-1-402		2009 actual	2010 est.	2011 est.
Direct:				
1001	Civilian full-time equivalent employment	1,317	1,374	2,021

EXPLORATION

For necessary expenses, not otherwise provided for, in the conduct and support of exploration research and development activities, including research, development, operations, support, and services; maintenance; construction of facilities including repair, rehabilitation, revitalization, and modification of facilities, construction of new facilities and additions to existing facilities, facility planning and design, and restoration, and acquisition or condemnation of real property, as authorized by law; space flight, spacecraft control, and communications activities; program management, personnel and related costs, including uniforms or allowances therefor, as authorized by 5 U.S.C. 5901-5902; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, **[\$3,746,300,000] \$4,263,400,000**, to remain available until September 30, **[2011: Provided, That notwithstanding section 505 of this Act, none of the funds provided herein and from prior years that remain available for obligation during fiscal year 2010 shall be available for the termination or elimination of any program, project or activity of the architecture for the Constellation program nor shall such funds be available to create or initiate a new program, project or activity, unless such program termination, elimination, creation, or initiation is provided in subsequent appropriations Acts] 2012: Provided, That when any activity has been initiated by the incurrence of obligations for construction of facilities or environmental compliance and restoration activities as authorized by law, such amount available for such activity shall remain available until September 30, 2016. (Science Appropriations Act, 2010.)**

Program and Financing (in millions of dollars)

Identification code 80-0124-0-1-252		2009 actual	2010 est.	2011 est.
Obligations by program activity:				
00.01	Direct program activity	3,677	3,928	3,880
10.00	Total new obligations	3,677	3,928	3,880
Budgetary resources available for obligation:				
21.40	Unobligated balance carried forward, start of year		228	46
22.00	New budget authority (gross)	3,905	3,746	4,263
23.90	Total budgetary resources available for obligation	3,905	3,974	4,309
23.95	Total new obligations	-3,677	-3,928	-3,880
24.40	Unobligated balance carried forward, end of year	228	46	429
New budget authority (gross), detail:				
Discretionary:				
40.00	Appropriation	3,905	3,746	4,263
Change in obligated balances:				
72.40	Obligated balance, start of year		1,327	1,409
73.10	Total new obligations	3,677	3,928	3,880
73.20	Total outlays (gross)	-2,350	-3,846	-3,933
74.40	Obligated balance, end of year	1,327	1,409	1,356
Outlays (gross), detail:				
86.90	Outlays from new discretionary authority	2,350	2,509	2,651
86.93	Outlays from discretionary balances		1,337	1,282
87.00	Total outlays (gross)	2,350	3,846	3,933
Net budget authority and outlays:				
89.00	Budget authority	3,905	3,746	4,263
90.00	Outlays	2,350	3,846	3,933

This appropriation provides for the full costs associated with the exploration activities of the agency within the exploration

account. The full costs provide for all of the research; development; operations; salaries and related expenses; design, repair, rehabilitation, modification of facilities, and construction of new facilities; and other general and administrative activities supporting the programs within this account.

Object Classification (in millions of dollars)

Identification code 80-0124-0-1-252	2009 actual	2010 est.	2011 est.
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent	330	363	368
11.3 Other than full-time permanent	38	42	42
11.5 Other personnel compensation	3	3	3
11.9 Total personnel compensation	371	408	413
12.1 Civilian personnel benefits	99	108	109
13.0 Benefits for former personnel		1	1
21.0 Travel and transportation of persons	20	20	20
22.0 Transportation of things	1	1	1
23.3 Communications, utilities, and miscellaneous charges	7	7	7
25.1 Advisory and assistance services	292	294	289
25.2 Other services	66	68	66
25.3 Other purchases of goods and services from Government accounts	52	52	52
25.4 Operation and maintenance of facilities	189	190	187
25.5 Research and development contracts	2,318	2,516	2,475
25.7 Operation and maintenance of equipment	50	50	50
26.0 Supplies and materials	41	41	41
31.0 Equipment	19	19	19
32.0 Land and structures	66	66	65
41.0 Grants, subsidies, and contributions	86	87	85
99.9 Total new obligations	3,677	3,928	3,880

Employment Summary

Identification code 80-0124-0-1-252	2009 actual	2010 est.	2011 est.
Direct:			
1001 Civilian full-time equivalent employment	3,440	3,709	3,709

EDUCATION

For necessary expenses, not otherwise provided for, in carrying out aerospace and aeronautical education research and development activities, including research, development, operations, support, and services; program management; personnel and related costs, uniforms or allowances therefor, as authorized by 5 U.S.C. 5901-5902; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, **[\$182,500,000] \$145,800,000**, to remain available until September 30, **[2011] 2012**. (*Science Appropriations Act, 2010*.)

Program and Financing (in millions of dollars)

Identification code 80-0128-0-1-252	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
00.01 Direct program activity	141	183	152
10.00 Total new obligations	141	183	152
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year		28	28
22.00 New budget authority (gross)	169	183	146
23.90 Total budgetary resources available for obligation	169	211	174
23.95 Total new obligations	-141	-183	-152
24.40 Unobligated balance carried forward, end of year	28	28	22
New budget authority (gross), detail:			
Discretionary:			
40.00 Appropriation	169	183	146
Change in obligated balances:			
72.40 Obligated balance, start of year		117	178
73.10 Total new obligations	141	183	152

73.20 Total outlays (gross)	-24	-122	-180
74.40 Obligated balance, end of year	117	178	150
Outlays (gross), detail:			
86.90 Outlays from new discretionary authority	23	37	37
86.93 Outlays from discretionary balances	1	85	143
87.00 Total outlays (gross)	24	122	180

Net budget authority and outlays:			
89.00 Budget authority	169	183	146
90.00 Outlays	24	122	180

This appropriation provides for the full costs associated with the education activities of the agency, which consist of the projects within the Office of Education. The full costs include all labor, travel, and procurement costs to execute these projects. Detailed performance goals associated with these activities are addressed in NASA's detailed budget request.

NASA's Education program works to inspire and educate students at all levels to pursue careers in the fields of science, technology, engineering, and mathematics (STEM), while also engaging the education community to reach this goal. To achieve this goal, NASA will continue to support projects that seek to: (1) strengthen the Nation's future STEM workforce through a portfolio of initiatives for students at all levels, especially underserved and underrepresented communities; (2) attract and retain students in STEM disciplines and encourage their pursuit of higher education in disciplines critical to NASA's scientific and technical needs; and (3) engage Americans in NASA's mission by building strategic partnerships and linkages between STEM formal and informal education providers.

Object Classification (in millions of dollars)

Identification code 80-0128-0-1-252	2009 actual	2010 est.	2011 est.
Direct obligations:			
11.1 Personnel compensation: Full-time permanent	4	4	4
12.1 Civilian personnel benefits	1		
21.0 Travel and transportation of persons	1	1	1
25.1 Advisory and assistance services	3	4	3
25.2 Other services	6	9	7
25.4 Operation and maintenance of facilities	1	1	1
25.5 Research and development contracts	7	9	7
25.7 Operation and maintenance of equipment	2	3	2
26.0 Supplies and materials	1	1	
41.0 Grants, subsidies, and contributions	115	151	127
99.9 Total new obligations	141	183	152

Employment Summary

Identification code 80-0128-0-1-252	2009 actual	2010 est.	2011 est.
Direct:			
1001 Civilian full-time equivalent employment	40	40	40

CROSS AGENCY SUPPORT

For necessary expenses, not otherwise provided for, in the conduct and support of science, aeronautics, exploration, space operations and education research and development activities, including research, development, operations, support, and services; maintenance and repair, facility planning and design; space flight, spacecraft control, and communications activities; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by 5 U.S.C. 5901-5902; travel expenses; purchase and hire of passenger motor vehicles; not to exceed **[\$70,000] \$120,000** for official reception and representation expenses; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, **[\$3,194,000,000] Provided**, That not more than \$2,206,300,000 shall be available for center management and operations: *Provided further*, That not less than \$40,000,000 shall

CROSS AGENCY SUPPORT—Continued

be available for independent verification and validation activities: *Provided further*, That within the amounts appropriated, \$63,000,000 shall be used for the projects, and in the amounts, specified in the explanatory statement accompanying this Act] \$3,111,400,000, to remain available until September 30, 2012. (*Science Appropriations Act, 2010.*)

Program and Financing (in millions of dollars)

Identification code 80-0122-0-1-252	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
00.01 Direct program activity	3,276	3,252	3,062
09.01 Reimbursable program	1,178	1,943	1,530
10.00 Total new obligations	4,454	5,195	4,592
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year		309	25
22.00 New budget authority (gross)	4,763	4,911	4,811
23.90 Total budgetary resources available for obligation	4,763	5,220	4,836
23.95 Total new obligations	-4,454	-5,195	-4,592
24.40 Unobligated balance carried forward, end of year	309	25	244
New budget authority (gross), detail:			
Discretionary:			
40.00 Appropriation	3,356	3,194	3,111
Spending authority from offsetting collections:			
58.00 Offsetting collections (cash)	602	1,717	1,700
58.10 Change in uncollected customer payments from Federal sources (unexpired)	805		
58.90 Spending authority from offsetting collections (total discretionary)	1,407	1,717	1,700
70.00 Total new budget authority (gross)	4,763	4,911	4,811
Change in obligated balances:			
72.40 Obligated balance, start of year		910	1,030
73.10 Total new obligations	4,454	5,195	4,592
73.20 Total outlays (gross)	-2,739	-5,075	-4,717
74.00 Change in uncollected customer payments from Federal sources (unexpired)	-805		
74.40 Obligated balance, end of year	910	1,030	905
Outlays (gross), detail:			
86.90 Outlays from new discretionary authority	2,739	3,953	3,585
86.93 Outlays from discretionary balances		1,122	1,132
87.00 Total outlays (gross)	2,739	5,075	4,717
Offsets:			
Against gross budget authority and outlays:			
Offsetting collections (cash) from:			
88.00 Federal sources	-485	-1,717	-1,700
88.40 Non-Federal sources	-117		
88.90 Total, offsetting collections (cash)	-602	-1,717	-1,700
Against gross budget authority only:			
88.95 Change in uncollected customer payments from Federal sources (unexpired)	-805		
Net budget authority and outlays:			
89.00 Budget authority	3,356	3,194	3,111
90.00 Outlays	2,137	3,358	3,017

This appropriation provides for the Agency supporting functions associated with the science, aeronautics, education, space operations, exploration, and construction and environmental compliance and restoration activities of the agency. This account provides for the research; development; operations; salaries and related expenses; maintenance; and other general and administrative activities supporting the programs within the Agency's five mission accounts.

Cross-Agency Support provides a strategic focus for managing agency mission support functions and some of NASA's unique research facilities. Center Management and Operations includes the basic costs to manage and operate each of the nine NASA

field centers and to maintain the technical capabilities required to support the Agency's Mission. This Budget is not directly identified or aligned to a specific program or project requirement, but is necessary for efficient and effective administration and operation of the NASA Centers.

Agency Management and Operations provides for the management and oversight of Agency programs, the performance of Agency-wide activities and functions, and the maintenance of unique research capabilities and facilities. Responsibilities include the determination of programs and projects; establishment of management policies, procedures, and performance criteria; evaluation of progress; and the coordination and integration of all phases of the Agency's mission.

Object Classification (in millions of dollars)

Identification code 80-0122-0-1-252	2009 actual	2010 est.	2011 est.
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent	753	810	837
11.3 Other than full-time permanent	43	45	48
11.5 Other personnel compensation	39	42	43
11.8 Special personal services payments	1	1	1
11.9 Total personnel compensation	836	898	929
12.1 Civilian personnel benefits	208	224	231
13.0 Benefits for former personnel	3	3	3
21.0 Travel and transportation of persons	30	28	25
22.0 Transportation of things	3	3	3
23.1 Rental payments to GSA	31	29	26
23.2 Rental payments to others	2	2	2
23.3 Communications, utilities, and miscellaneous charges	93	88	79
24.0 Printing and reproduction	6	6	5
25.1 Advisory and assistance services	194	183	164
25.2 Other services	380	360	322
25.3 Other purchases of goods and services from Government accounts	64	61	54
25.4 Operation and maintenance of facilities	331	313	279
25.5 Research and development contracts	350	349	312
25.6 Medical care	5	5	4
25.7 Operation and maintenance of equipment	373	353	315
26.0 Supplies and materials	36	34	30
31.0 Equipment	56	53	47
32.0 Land and structures	204	193	172
41.0 Grants, subsidies, and contributions	71	67	60
99.0 Direct obligations	3,276	3,252	3,062
99.0 Reimbursable obligations	1,178	1,943	1,530
99.9 Total new obligations	4,454	5,195	4,592

Employment Summary

Identification code 80-0122-0-1-252	2009 actual	2010 est.	2011 est.
Direct:			
1001 Civilian full-time equivalent employment	7,481	7,886	7,839
Reimbursable:			
2001 Civilian full-time equivalent employment	225	225	225

CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND [REMEDIATION] RESTORATION

For necessary expenses for construction of facilities including repair, rehabilitation, revitalization, and modification of facilities, construction of new facilities and additions to existing facilities, facility planning and design, and restoration, and acquisition or condemnation of real property, as authorized by law, and environmental compliance and restoration, [\$448,300,000] \$397,300,000, to remain available until September 30, [2015: *Provided*, That within the funds provided, \$13,700,000 shall be available to support science research and development activities; \$90,800,000 shall be available to support exploration research and development activities; \$27,300,000 shall be available to support space operations research and development activities; and \$316,500,000 shall be available for cross agency support activities: *Provided further*, That hereafter, notwithstanding section 315 of the National Aeronautics and

Space Act of 1958 (42 U.S.C. 2459j), all proceeds from leases entered into under that section shall be deposited into this account and shall be available for a period of 5 years, to the extent provided in annual appropriations Acts: *Provided further*, That such proceeds shall be available for obligation for fiscal year 2010 in an amount not to exceed \$6,226,000: *Provided further*, That each annual budget request shall include an annual estimate of gross receipts and collections and proposed use of all funds collected pursuant to section 315 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2459j) 2016. (*Science Appropriations Act, 2010.*)

Program and Financing (in millions of dollars)

Identification code 80-0130-0-1-252	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
00.01 Direct program activity		336	382
09.01 Reimbursable program		2	4
10.00 Total new obligations		338	386
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year			114
22.00 New budget authority (gross)		452	402
23.90 Total budgetary resources available for obligation		452	516
23.95 Total new obligations		-338	-386
24.40 Unobligated balance carried forward, end of year		114	130
New budget authority (gross), detail:			
Discretionary:			
40.00 Appropriation		448	397
58.00 Spending authority from offsetting collections: Offsetting collections (cash)		4	5
70.00 Total new budget authority (gross)		452	402
Change in obligated balances:			
72.40 Obligated balance, start of year			292
73.10 Total new obligations		338	386
73.20 Total outlays (gross)		-46	-267
74.40 Obligated balance, end of year		292	411
Outlays (gross), detail:			
86.90 Outlays from new discretionary authority		46	41
86.93 Outlays from discretionary balances			226
87.00 Total outlays (gross)		46	267
Offsets:			
Against gross budget authority and outlays:			
88.40 Offsetting collections (cash) from: Non-Federal sources		-4	-5
Net budget authority and outlays:			
89.00 Budget authority		448	397
90.00 Outlays		42	262

This appropriation provides for NASA's construction and environmental compliance and restoration activities. The full costs provide for all of the research; development; operations; design, repair, rehabilitation, modification of facilities, and construction of new facilities; and other general and administrative activities required to execute the programs within this account.

Object Classification (in millions of dollars)

Identification code 80-0130-0-1-252	2009 actual	2010 est.	2011 est.
25.4 Direct obligations: Operation and maintenance of facilities		336	382
99.0 Reimbursable obligations: reimbursable obligations		2	4
99.9 Total new obligations		338	386

SPACE OPERATIONS

For necessary expenses, not otherwise provided for, in the conduct and support of space operations research and development activities, including research, development, operations, support, and services; *maintenance; construction of facilities including repair, rehabilitation, revitalization, and modification of facilities, construction of new facilities and additions to existing facilities, facility planning and design, and restoration, and acquisition or condemnation of real property, as authorized by law;* space flight, spacecraft control and communications activities; [including operations, production, and services; maintenance;] program management; personnel and related costs, including uniforms or allowances therefor, as authorized by 5 U.S.C. 5901-5902; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance and operation of mission and administrative aircraft, [**\$6,146,800,000**] **\$4,887,700,000**, to remain available until September 30, [2011: *Provided*, That of the amounts provided under this heading, not more than \$3,157,100,000 shall be for Space Shuttle operations, production, research, development, and support, not more than \$2,317,000,000 shall be for International Space Station operations, production, research, development, and support, and not more than \$751,500,000 shall be for Space and Flight Support] 2012: *Provided*, That when any activity has been initiated by the incurrence of obligations for construction of facilities or environmental compliance and restoration activities as authorized by law, such amount available for such activity shall remain available until September 30, 2016. (*Science Appropriations Act, 2010.*)

Program and Financing (in millions of dollars)

Identification code 80-0115-0-1-252	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
00.01 Space operations	5,974	6,127	4,804
09.01 Reimbursable program	36		
10.00 Total new obligations	6,010	6,127	4,804
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year	211	43	63
22.00 New budget authority (gross)	5,758	6,147	4,888
22.10 Resources available from recoveries of prior year obligations ...	84		
23.90 Total budgetary resources available for obligation	6,053	6,190	4,951
23.95 Total new obligations	-6,010	-6,127	-4,804
24.40 Unobligated balance carried forward, end of year	43	63	147
New budget authority (gross), detail:			
Discretionary:			
40.00 Appropriation	5,765	6,147	4,888
Spending authority from offsetting collections:			
58.00 Offsetting collections (cash)	96		
58.10 Change in uncollected customer payments from Federal sources (unexpired)	-103		
58.90 Spending authority from offsetting collections (total discretionary)	-7		
70.00 Total new budget authority (gross)	5,758	6,147	4,888
Change in obligated balances:			
72.40 Obligated balance, start of year	2,236	1,434	1,271
73.10 Total new obligations	6,010	6,127	4,804
73.20 Total outlays (gross)	-6,836	-6,290	-4,840
73.40 Adjustments in expired accounts (net)	-15		
73.45 Recoveries of prior year obligations	-84		
74.00 Change in uncollected customer payments from Federal sources (unexpired)	103		
74.10 Change in uncollected customer payments from Federal sources (expired)	20		
74.40 Obligated balance, end of year	1,434	1,271	1,235
Outlays (gross), detail:			
86.90 Outlays from new discretionary authority	4,581	4,915	3,616
86.93 Outlays from discretionary balances	2,255	1,375	1,224
87.00 Total outlays (gross)	6,836	6,290	4,840
Offsets:			
Against gross budget authority and outlays:			
Offsetting collections (cash) from:			

SPACE OPERATIONS—Continued
Program and Financing—Continued

Identification code 80-0115-0-1-252	2009 actual	2010 est.	2011 est.
88.00 Federal sources	-120		
88.40 Non-Federal sources	5		
88.90 Total, offsetting collections (cash)	-115		
Against gross budget authority only:			
88.95 Change in uncollected customer payments from Federal sources (unexpired)	103		
88.96 Portion of offsetting collections (cash) credited to expired accounts	19		
Net budget authority and outlays:			
89.00 Budget authority	5,765	6,147	4,888
90.00 Outlays	6,721	6,290	4,840

This appropriation provides for the full costs associated with the space operations activities of the agency. The full costs include all labor, travel, procurement, test and fabrication costs to execute these programs, which provide for all of the research; development; operations; salaries and related expenses; design, repair, rehabilitation, modification of facilities, and construction of new facilities; and other general and administrative activities supporting the programs within this account. Major programs within the Space Operations Mission Directorate include the Space Shuttle, International Space Station, and Space and Flight Support. Detailed performance goals associated with these activities are addressed in NASA's detailed budget request.

After nearly 30 years, the Space Shuttle is retiring after helping to build the International Space Station. The International Space Station is a complex of research laboratories in low Earth orbit in which America and its multi-national partners, including Russia, Canada, Europe, and Japan, conduct unique scientific and technological investigations in a microgravity environment. The objective of the Space Station is to support human space exploration and conduct science experiments unique to the orbit location of the facility.

Space and Flight Support is comprised of multiple capabilities that provide on-going customer support for a wide range of services. The programs include Space Communications and Navigation, Human Space Flight Operations, Launch Services, and Rocket Propulsion Testing, and are provided to a wide range of customers including NASA, other U.S. Federal agencies, foreign governments, and commercial customers.

Object Classification (in millions of dollars)

Identification code 80-0115-0-1-252	2009 actual	2010 est.	2011 est.
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent	321	331	275
11.3 Other than full-time permanent	30	31	26
11.5 Other personnel compensation	4	4	3
11.9 Total personnel compensation	355	366	304
12.1 Civilian personnel benefits	90	93	77
13.0 Benefits for former personnel	1	1	1
21.0 Travel and transportation of persons	21	22	15
22.0 Transportation of things	476	628	832
23.2 Rental payments to others	2	2	1
23.3 Communications, utilities, and miscellaneous charges	36	37	26
24.0 Printing and reproduction	1	1	1
25.1 Advisory and assistance services	71	73	52
25.2 Other services	160	163	118
25.3 Other purchases of goods and services from Government accounts	118	121	86
25.4 Operation and maintenance of facilities	1,567	1,607	1,144
25.5 Research and development contracts	2,631	2,557	1,822
25.7 Operation and maintenance of equipment	239	245	175
26.0 Supplies and materials	54	55	39
31.0 Equipment	111	114	81
32.0 Land and structures	35	36	26

41.0 Grants, subsidies, and contributions	6	6	4
99.0 Direct obligations	5,974	6,127	4,804
99.0 Reimbursable obligations	36		
99.9 Total new obligations	6,010	6,127	4,804

Employment Summary

Identification code 80-0115-0-1-252	2009 actual	2010 est.	2011 est.
Direct:			
1001 Civilian full-time equivalent employment	3,254	3,288	2,711
Reimbursable:			
2001 Civilian full-time equivalent employment	16		

OFFICE OF INSPECTOR GENERAL

For necessary expenses of the Office of Inspector General in carrying out the Inspector General Act of 1978, **[\$36,400,000]** \$37,000,000. (Science Appropriations Act, 2010.)

Program and Financing (in millions of dollars)

Identification code 80-0109-0-1-252	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
00.01 Direct program activity	34	38	37
10.00 Total new obligations	34	38	37
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year		2	
22.00 New budget authority (gross)	36	36	37
23.90 Total budgetary resources available for obligation	36	38	37
23.95 Total new obligations	-34	-38	-37
24.40 Unobligated balance carried forward, end of year	2		
New budget authority (gross), detail:			
Discretionary:			
40.00 Appropriation	36	36	37
Change in obligated balances:			
72.40 Obligated balance, start of year	4	7	11
73.10 Total new obligations	34	38	37
73.20 Total outlays (gross)	-31	-34	-38
74.40 Obligated balance, end of year	7	11	10
Outlays (gross), detail:			
86.90 Outlays from new discretionary authority	28	32	33
86.93 Outlays from discretionary balances	3	2	5
87.00 Total outlays (gross)	31	34	38
Net budget authority and outlays:			
89.00 Budget authority	36	36	37
90.00 Outlays	31	34	38

This appropriation provides for the full costs associated with the operations of the NASA Office of Inspector General. The mission of the Office of Inspector General is to conduct audits and investigations of agency activities. The Inspector General keeps the Administrator and the Congress informed of problems and deficiencies in agency programs and operations.

Object Classification (in millions of dollars)

Identification code 80-0109-0-1-252	2009 actual	2010 est.	2011 est.
Direct obligations:			
11.1 Personnel compensation: Full-time permanent	19	23	23
12.1 Civilian personnel benefits	6	6	6
21.0 Travel and transportation of persons	1	1	1
25.2 Other services	8	8	
26.0 Supplies and materials			7

99.9	Total new obligations	34	38	37
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Employment Summary

Identification code 80-0109-0-1-252	2009 actual	2010 est.	2011 est.
Direct:			
1001 Civilian full-time equivalent employment	182	213	213

SCIENCE, AERONAUTICS, AND EXPLORATION

Program and Financing (in millions of dollars)

Identification code 80-0114-0-1-999	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
00.01 Direct program activity	343	26	
09.01 Reimbursable program	343		
10.00 Total new obligations	686	26	
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year	585	26	
22.00 New budget authority (gross)	-24		
22.10 Resources available from recoveries of prior year obligations	155		
23.90 Total budgetary resources available for obligation	716	26	
23.95 Total new obligations	-686	-26	
23.98 Unobligated balance expiring or withdrawn	-4		
24.40 Unobligated balance carried forward, end of year	26		

New budget authority (gross), detail:

Discretionary:			
Spending authority from offsetting collections:			
58.00 Offsetting collections (cash)	285		
58.10 Change in uncollected customer payments from Federal sources (unexpired)	-309		
58.90 Spending authority from offsetting collections (total discretionary)	-24		

Change in obligated balances:

72.40 Obligated balance, start of year	5,974	1,126	693
73.10 Total new obligations	686	26	
73.20 Total outlays (gross)	-5,715	-459	
73.40 Adjustments in expired accounts (net)	-25		
73.45 Recoveries of prior year obligations	-155		
74.00 Change in uncollected customer payments from Federal sources (unexpired)	309		
74.10 Change in uncollected customer payments from Federal sources (expired)	52		
74.40 Obligated balance, end of year	1,126	693	693

Outlays (gross), detail:

86.93 Outlays from discretionary balances	5,715	459	
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Offsets:

Against gross budget authority and outlays:			
Offsetting collections (cash) from:			
88.00 Federal sources	-338		
88.40 Non-Federal sources	2		
88.90 Total, offsetting collections (cash)	-336		
Against gross budget authority only:			
88.95 Change in uncollected customer payments from Federal sources (unexpired)	309		
88.96 Portion of offsetting collections (cash) credited to expired accounts	51		

Net budget authority and outlays:

89.00 Budget authority			
90.00 Outlays	5,379	459	

NASA's Science, Aeronautics and Exploration account formerly included Science, Aeronautics Research, Exploration Systems and Cross Agency Support Programs. Beginning in 2009, Science, Aeronautics, Exploration, Education and Cross Agency Support were split into five separate appropriation accounts. The Science,

Aeronautics, and Exploration account shows spending from balances prior to the account restructuring.

Object Classification (in millions of dollars)

Identification code 80-0114-0-1-999	2009 actual	2010 est.	2011 est.
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent	45		
11.3 Other than full-time permanent	4		
11.5 Other personnel compensation	2		
11.9 Total personnel compensation	51		
12.1 Civilian personnel benefits	7		
21.0 Travel and transportation of persons	2		
23.2 Rental payments to others	3		
23.3 Communications, utilities, and miscellaneous charges	2		
25.1 Advisory and assistance services	20	2	
25.2 Other services	28	3	
25.3 Other purchases of goods and services from Government accounts	6	1	
25.4 Operation and maintenance of facilities	28	3	
25.5 Research and development contracts	107	10	
25.7 Operation and maintenance of equipment	5		
26.0 Supplies and materials	7	1	
31.0 Equipment	5		
32.0 Land and structures	36	3	
41.0 Grants, subsidies, and contributions	36	3	
99.0 Direct obligations	343	26	
99.0 Reimbursable obligations	343		
99.9 Total new obligations	686	26	

Employment Summary

Identification code 80-0114-0-1-999	2009 actual	2010 est.	2011 est.
Direct:			
1001 Civilian full-time equivalent employment	410		
Reimbursable:			
2001 Civilian full-time equivalent employment	74		

HUMAN SPACE FLIGHT

Program and Financing (in millions of dollars)

Identification code 80-0111-0-1-252	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
09.01 Reimbursable program	1		
10.00 Total new obligations (object class 25.2)	1		

Budgetary resources available for obligation:

21.40 Unobligated balance carried forward, start of year		1	1
22.00 New budget authority (gross)	1		
22.10 Resources available from recoveries of prior year obligations	1		
23.90 Total budgetary resources available for obligation	2	1	1
23.95 Total new obligations	-1		
24.40 Unobligated balance carried forward, end of year	1	1	1

New budget authority (gross), detail:

Discretionary:			
58.00 Spending authority from offsetting collections: Offsetting collections (cash)	1		

Change in obligated balances:

72.40 Obligated balance, start of year	9	8	8
73.10 Total new obligations	1		
73.20 Total outlays (gross)	-3		
73.45 Recoveries of prior year obligations	-1		
74.10 Change in uncollected customer payments from Federal sources (expired)	2		
74.40 Obligated balance, end of year	8	8	8

Outlays (gross), detail:

86.90 Outlays from new discretionary authority	1		
86.93 Outlays from discretionary balances	2		

HUMAN SPACE FLIGHT—Continued
Program and Financing—Continued

Identification code 80-0111-0-1-252	2009 actual	2010 est.	2011 est.
87.00 Total outlays (gross)	3		
Offsets:			
Against gross budget authority and outlays:			
88.40 Offsetting collections (cash) from: Non-Federal sources	-4		
Against gross budget authority only:			
88.96 Portion of offsetting collections (cash) credited to expired accounts	3		
Net budget authority and outlays:			
89.00 Budget authority			
90.00 Outlays	-1		

NASA's Human Space Flight account formerly included the International Space Station; Space Shuttle Payload and Expendable Launch Vehicle Support; Human Exploration and Development of Space Investments and Support; Space Communications and Data Systems; and Safety, Mission Assurance and Engineering. Beginning in 2004, Safety, Mission Assurance, and Engineering was allocated as an indirect charge to all programs and all other programs (along with the Crosscutting Technologies portion of the Aerospace Technology Enterprise) were rolled into the Space Flight Capabilities account. In 2005, the Space Flight Capabilities account was renamed the Exploration Capabilities account. In 2009, the Exploration Capabilities account was renamed Space Operations. The Human Space Flight account shows spending from balances prior to the account restructuring.

SCIENCE, AERONAUTICS AND TECHNOLOGY

Program and Financing (in millions of dollars)

Identification code 80-0110-0-1-999	2009 actual	2010 est.	2011 est.
Change in obligated balances:			
72.40 Obligated balance, start of year		3	3
73.20 Total outlays (gross)	-17		
73.40 Adjustments in expired accounts (net)	-31		
74.10 Change in uncollected customer payments from Federal sources (expired)	12		
74.40 Obligated balance, end of year	3	3	3
Outlays (gross), detail:			
86.93 Outlays from discretionary balances	17		
Offsets:			
Against gross budget authority and outlays:			
88.40 Offsetting collections (cash) from: Non-Federal sources	-2		
Against gross budget authority only:			
88.96 Portion of offsetting collections (cash) credited to expired accounts	2		
Net budget authority and outlays:			
89.00 Budget authority			
90.00 Outlays	15		

NASA's Science, Aeronautics and Technology account formerly included Space Science, Biological and Physical Research, Earth Science, Aerospace Technology, and Education. Beginning in 2004, Space Science, Biological and Physical Research, Earth Science, the Aeronautics portion of Aerospace Technology, and Education were rolled into the Science, Aeronautics and Exploration account. The Science, Aeronautics, and Technology account shows spending from balances prior to the account restructuring.

MISSION SUPPORT
Program and Financing (in millions of dollars)

Identification code 80-0112-0-1-999	2009 actual	2010 est.	2011 est.
Budgetary resources available for obligation:			
24.40 Unobligated balance carried forward, end of year			
Change in obligated balances:			
72.40 Obligated balance, start of year	3	3	3
74.40 Obligated balance, end of year	3	3	3
Net budget authority and outlays:			
89.00 Budget authority			
90.00 Outlays			

NASA's Mission Support account formerly included Research and Program Management and Construction of Facilities. The Mission Support account shows spending from residual construction of facilities balances from prior to 2004.

WORKING CAPITAL FUND

Program and Financing (in millions of dollars)

Identification code 80-4546-0-4-252	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
09.00 Reimbursable program	79	75	75
10.00 Total new obligations	79	75	75
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year	13	12	12
22.00 New budget authority (gross)	77	75	75
22.10 Resources available from recoveries of prior year obligations	1		
23.90 Total budgetary resources available for obligation	91	87	87
23.95 Total new obligations	-79	-75	-75
24.40 Unobligated balance carried forward, end of year	12	12	12
New budget authority (gross), detail:			
Discretionary:			
58.00 Spending authority from offsetting collections: Offsetting collections (cash)	77	75	75
Change in obligated balances:			
72.40 Obligated balance, start of year	34	37	33
73.10 Total new obligations	79	75	75
73.20 Total outlays (gross)	-75	-79	-75
73.45 Recoveries of prior year obligations	-1		
74.40 Obligated balance, end of year	37	33	33
Outlays (gross), detail:			
86.90 Outlays from new discretionary authority	2	37	37
86.93 Outlays from discretionary balances	73	42	38
87.00 Total outlays (gross)	75	79	75
Offsets:			
Against gross budget authority and outlays:			
Offsetting collections (cash) from:			
88.00 Federal sources	-70	-35	-35
88.40 Non-Federal sources	-7	-40	-40
88.90 Total, offsetting collections (cash)	-77	-75	-75
Net budget authority and outlays:			
89.00 Budget authority			
90.00 Outlays	-2	4	

The Working Capital Fund provides goods and services on a reimbursable basis. The Fund finances Scientific & Engineering Workstation Procurement and the NASA Shared Services Center. The Shared Services Center commenced operation in 2006 and performs selected financial management, human resources, in-

formation technology, and procurement services for NASA Headquarters and Centers.

Object Classification (in millions of dollars)

Identification code 80-4546-0-4-252	2009 actual	2010 est.	2011 est.
Reimbursable obligations:			
11.1 Personnel compensation: Full-time permanent	11		
12.1 Civilian personnel benefits	3		
21.0 Travel and transportation of persons	1		
23.3 Communications, utilities, and miscellaneous charges	1	1	1
25.1 Advisory and assistance services	1	1	1
25.2 Other services	52	63	63
25.4 Operation and maintenance of facilities	2	2	2
25.7 Operation and maintenance of equipment	7	7	7
31.0 Equipment	1	1	1
99.9 Total new obligations	79	75	75

Employment Summary

Identification code 80-4546-0-4-252	2009 actual	2010 est.	2011 est.
Reimbursable:			
2001 Civilian full-time equivalent employment	132		

Trust Funds

SCIENCE, SPACE, AND TECHNOLOGY EDUCATION TRUST FUND

Special and Trust Fund Receipts (in millions of dollars)

Identification code 80-8978-0-7-503	2009 actual	2010 est.	2011 est.
01.00 Balance, start of year	14	14	14
01.99 Balance, start of year	14	14	14
Receipts:			
02.40 Earnings on Investments, Science, Space and Technology Education Trust Fund	1	1	1
02.99 Total receipts and collections	1	1	1
04.00 Total: Balances and collections	15	15	15
Appropriations:			
05.00 Science, Space, and Technology Education Trust Fund	-1	-1	-1
05.99 Total appropriations	-1	-1	-1
07.99 Balance, end of year	14	14	14

Program and Financing (in millions of dollars)

Identification code 80-8978-0-7-503	2009 actual	2010 est.	2011 est.
Obligations by program activity:			
00.01 Direct program activity	1	1	1
10.00 Total new obligations (object class 41.0)	1	1	1
Budgetary resources available for obligation:			
22.00 New budget authority (gross)	1	1	1
23.95 Total new obligations	-1	-1	-1
New budget authority (gross), detail:			
Mandatory:			
60.26 Appropriation (trust fund)	1	1	1
Change in obligated balances:			
73.10 Total new obligations	1	1	1
73.20 Total outlays (gross)	-1	-1	-1
74.40 Obligated balance, end of year			
Outlays (gross), detail:			
86.97 Outlays from new mandatory authority	1	1	1
Net budget authority and outlays:			
89.00 Budget authority	1	1	1
90.00 Outlays	1	1	1

Memorandum (non-add) entries:

92.01 Total investments, start of year: Federal securities: Par value	15	15	15
92.02 Total investments, end of year: Federal securities: Par value	15	15	15

NATIONAL SPACE GRANT PROGRAM

Program and Financing (in millions of dollars)

Identification code 80-8977-0-7-252	2009 actual	2010 est.	2011 est.
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year	3	3	3
24.40 Unobligated balance carried forward, end of year	3	3	3
Net budget authority and outlays:			
89.00 Budget authority			
90.00 Outlays			

ADMINISTRATIVE PROVISIONS

Funds for announced prizes otherwise authorized shall remain available, without fiscal year limitation, until the prize is claimed or the offer is withdrawn.

Not to exceed 5 percent of any appropriation made available for the current fiscal year for the National Aeronautics and Space Administration in this Act may be transferred between such appropriations, but no such appropriation, except as otherwise specifically provided, shall be increased by more than 10 percent by any such transfers. Any transfer pursuant to this provision 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.

【Notwithstanding any other provision of law, no funds shall be used to implement by Reduction in Force or other involuntary separations (except for cause) by the National Aeronautics and Space Administration prior to September 30, 2010.】

The unexpired balances of 【the Science, Aeronautics, and Exploration account】 *previous accounts*, for activities for which funds are provided under this Act, may be transferred to the new accounts established in this Act that provide such activity. Balances so transferred shall be merged with the funds in the newly established accounts, but shall be available under the same terms, conditions and period of time as previously appropriated.

Section 20 of the National Aeronautics and Space Administration Authorization Act of FY 1992 (Public Law 102-195, 42 U.S.C. 2467a) is amended by adding at the end thereof: "(d) Availability of Funds—The interest accruing from the National Aeronautics and Space Administration Endeavor Teacher Fellowship Trust Fund principal shall be available in FY 2011 and hereafter for the purpose of the Endeavor Science Teacher Certificate Program."

Of funds provided under the headings "Science" and "Exploration" in this Act, up to \$15,000,000 shall be available for a reimbursable agreement with the Department of Energy for the purpose of re-establishing facilities to produce fuel required for radioisotope thermoelectric generators to enable future missions. (Science Appropriations Act, 2010.)

GENERAL FUND RECEIPT ACCOUNT

(in millions of dollars)

	2009 actual	2010 est.	2011 est.
Offsetting receipts from the public:			
80-322000 All Other General Fund Proprietary Receipts Including Budget Clearing Accounts	6	15	15
General Fund Offsetting receipts from the public	6	15	15
Intragovernmental payments:			
80-388500 Undistributed Intragovernmental Payments and Receivables from Cancelled Accounts	2		
General Fund Intragovernmental payments	2		

