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 sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, [\$7,138,900,000] \$6,306,500,000, to remain available until September 30, [2021: Provided, That, \$1,971,800,000 shall be for Earth Science; \$2,713,400,000 shall be for Planetary Science; \$1,306,200,000 shall be for Astrophysics; \$423,000,000 shall be for the James Webb Space Telescope; and \$724,500,000 shall be for Heliophysics: *Provided* further, That of the amounts provided, \$592,600,000 is for an orbiter to meet the science goals for the Jupiter Europa mission as recommended in previous Planetary Science Decadal surveys: Provided further, That the National Aeronautics and Space Administration shall use the Space Launch System as the launch vehicles for the Jupiter Europa missions, plan for an orbiter launch no later than 2025 and a lander launch no later than 2027, and include in the fiscal year 2021 budget the 5-year funding profile necessary to achieve these goals \[\textit{2022. (Science Appropriations} \] Act, 2020.)

Program and Financing (in millions of dollars)

Identif	ication code 080-0120-0-1-252	2019 actual	2020 est.	2021 est.
0001	Obligations by program activity: Science	6,576	7,139	6,307
	Budgetary resources:			
1000	Unobligated balance: Unobligated balance brought forward, Oct 1	400	745	749
1021	Recoveries of prior year unpaid obligations	34	74	74
1050	Unobligated balance (total)	434	819	823
1100	Appropriations, discretionary:	0.000	7.100	0.007
1100 1120	Appropriation	6,906	7,139	6,307
1120	[080-0130]	-10		
1131	[080–0126] Unobligated balance of appropriations permanently reduced	-9		
	reduced			
1160 1930	Appropriation, discretionary (total)	6,887 7,321	7,069 7,888	6,307 7,130
	Memorandum (non-add) entries:	,-	,	,
1941	Unexpired unobligated balance, end of year	745	749	823
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	4,082	4,367	5,304
3010	New obligations, unexpired accounts	6,576	7,139	6,307
3011	Obligations ("upward adjustments"), expired accounts	108		
3020	Outlays (gross)	-6,254	-6,128	-6,490
3040	Recoveries of prior year unpaid obligations, unexpired	-34	-74	-74
3041	Recoveries of prior year unpaid obligations, expired	-111		
3050	Unpaid obligations, end of year Memorandum (non-add) entries:	4,367	5,304	5,047
3100	Obligated balance, start of year	4,082	4,367	5,304
3200	Obligated balance, end of year	4,367	5,304	5,047
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross	6,887	7,069	6,307
4010	Outlays from new discretionary authority	2,575	2,616	2,334
4011	Outlays from discretionary balances	3,679	3,512	4,156
4020	Outlays, gross (total)	6,254	6,128	6,490
4033	Non-Federal sources Additional offsets against gross budget authority only:	-7		
4052	Offsetting collections credited to expired accounts	7		

4060	Additional offsets against budget authority only (total)	7	<u></u>	
4070	Budget authority, net (discretionary)	6,887	7,069	6,307
4080	Outlays, net (discretionary)	6,247	6,128	6,490
4180	Budget authority, net (total)	6,887	7,069	6,307
4190	Outlays, net (total)	6,247	6,128	6,490

The Science appropriation provides for NASA's science mission, which is comprised of the agency's Earth and space science programs: Earth Science, Planetary Science, Heliophysics, the James Webb Space Telescope, and Astrophysics. These programs, which are managed by the Science Mission Directorate, focus on three interdisciplinary objectives: discovering the secrets of the Universe; searching for life in the Solar System and beyond; and safeguarding and improving life on Earth. These objectives include research concerning the global Earth system; 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. Program objectives are pursued through robotic flight missions, ground-based scientific research and data analysis, and the development of new technologies for future missions. Additionally, the Budget funds within Science a lunar robotic exploration program that will support innovative approaches to achieving human and science exploration goals. It also supports a Mars exploration program that develops and operates robotic missions and conducts research and analysis to address decadal science objectives and prepare for future human exploration.

The Science appropriation provides 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, and test and fabrication costs. Performance goals associated with these activities are addressed in NASA's detailed budget request.

Object Classification (in millions of dollars)

Identi	dentification code 080-0120-0-1-252		2020 est.	2021 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	263	257	252
11.3	Other than full-time permanent	3	3	3
11.5	Other personnel compensation	1	1	1
11.9	Total personnel compensation	267	261	256
12.1	Civilian personnel benefits	84	91	81
21.0	Travel and transportation of persons	24	26	23
22.0	Transportation of things	9	10	9
23.2	Rental payments to others	4	4	4
23.3	Communications, utilities, and miscellaneous charges	6	7	6
24.0	Printing and reproduction	1	1	1
25.1	Advisory and assistance services	97	105	93
25.2	Other services from non-Federal sources	131	142	126
25.3	Other goods and services from Federal sources	246	267	236
25.4	Operation and maintenance of facilities	23	25	22
25.5	Research and development contracts	4,641	5,068	4,449
25.7	Operation and maintenance of equipment	128	139	123
26.0	Supplies and materials	34	37	33
31.0	Equipment	40	43	38
32.0	Land and structures	1	1	1
41.0	Grants, subsidies, and contributions	840	912	806
99.9	Total new obligations, unexpired accounts	6,576	7,139	6,307

Employment Summary

Identification code 080-0120-0-1-252	2019 actual	2020 est.	2021 est.
1001 Direct civilian full-time equivalent employment	2,010	1,851	1,862

AERONAUTICS

For necessary expenses, not otherwise provided for, in the conduct and support of aeronautics research and development activities, including research, development,

AERONAUTICS—Continued

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 sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, [\$783,900,000] \$819,000,000, to remain available until September 30, [2021] 2022. (Science Appropriations Act, 2020.)

Program and Financing (in millions of dollars)

Identif	ication code 080-0126-0-1-402	2019 actual	2020 est.	2021 est.
0001	Obligations by program activity: Aeronautics	729	784	819
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance: Unobligated balance brought forward, Oct 1	25	27	39
1021	Recoveries of prior year unpaid obligations	6	12	12
1050	Unobligated balance (total)	31	39	51
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	725	784	819
1120	Appropriations transferred to other CECR [080–0130]	-9		
1121	Appropriations transferred from other acct Science	9		
	[080-0120]			
1160	Appropriation, discretionary (total)	725	784	819
1930	Total budgetary resources available	756	823	870
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	27	39	51
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	395	406	473
3010	New obligations, unexpired accounts	729	784	819
3020	Outlays (gross)	-710	-705	-796
3040	Recoveries of prior year unpaid obligations, unexpired	-6	-12	-12
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year	406	473	484
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	395	406	473
3200	Obligated balance, end of year	406	473	484
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	725	784	819
	Outlays, gross:			
4010	Outlays from new discretionary authority	372	400	418
4011	Outlays from discretionary balances	338	305	378
4020	Outlays, gross (total)	710	705	796
4180	Budget authority, net (total)	725	784	819
4190	Outlays, net (total)	710	705	796
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This appropriation provides for the full costs associated with NASA's Aeronautics Research mission, which aims to expand the boundaries of aeronautical knowledge for the benefit of the nation and the broad aeronautics community. The mission is managed by NASA's Aeronautics Research Mission Directorate, and consists of the following integrated research programs: Airspace Operations and Safety, Advanced Air Vehicles, Integrated Aviation Systems, Transformative Aeronautics Concepts, and Aerosciences Evaluation and Test Capabilities. Full costs of these programs include all labor, travel, procurement, test, and fabrication costs associated with the research, development, operations, and other general and administrative activities required to execute the programs. Performance goals associated with these activities are addressed in NASA's detailed budget request.

Object Classification (in millions of dollars)

Identific	ation code 080-0126-0-1-402	2019 actual	2020 est.	2021 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	163	149	156

11.3	Other than full-time permanent	4	4	4
11.9	Total personnel compensation	167	153	160
12.1	Civilian personnel benefits	53	57	60
21.0	Travel and transportation of persons	7	8	8
23.3	Communications, utilities, and miscellaneous charges	3	3	3
25.1	Advisory and assistance services	24	26	27
25.2	Other services from non-Federal sources	28	30	31
25.3	Other goods and services from Federal sources	6	6	7
25.4	Operation and maintenance of facilities	40	43	45
25.5	Research and development contracts	262	296	308
25.7	Operation and maintenance of equipment	39	55	58
26.0	Supplies and materials	16	17	18
31.0	Equipment	28	30	31
32.0	Land and structures	1	1	1
41.0	Grants, subsidies, and contributions	55	59	62
99.9	Total new obligations, unexpired accounts	729	784	819

Employment Summary

Identification code 080-0126-0-1-402		2019 actual	2020 est.	2021 est.
1001	Direct civilian full-time equivalent employment	1,374	1,194	1,161

[SPACE] EXPLORATION TECHNOLOGY

For necessary expenses, not otherwise provided for, in the conduct and support of space exploration technology [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 sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, [\$1,100,000,000] \$1,578,300,000, to remain available until September 30, [2021: Provided, That \$227,200,000 shall be for RESTORE-L/SPace Infrastructure DExterous Robot: Provided further, That \$110,000,000 shall be for the development and demonstration of a nuclear thermal propulsion system, of which \$80,000,000 shall be for the design of a flight demonstration system: Provided further, That, not later than 180 days after the enactment of this Act, the National Aeronautics and Space Administration (NASA) shall provide a plan for the design of a flight demonstration 32022. (Science Appropriations Act, 2020.)

Program and Financing (in millions of dollars)

Identif	ication code 080-0131-0-1-252	2019 actual	2020 est.	2021 est.
0001	Obligations by program activity: Exploration Technology	906	1,100	1,578
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	40	67	79
1021	Recoveries of prior year unpaid obligations	6	12	12
1050	Unobligated balance (total) Budget authority: Appropriations, discretionary:	46	79	91
1100	Appropriations, discretionary: Appropriation	927	1.100	1.578
	Total budgetary resources available	973	1,179	1,669
1000	Memorandum (non-add) entries:	0.0	1,170	1,000
1941	Unexpired unobligated balance, end of year	67	79	91
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	528	613	658
3010	New obligations, unexpired accounts	906	1,100	1,578
3011	Obligations ("upward adjustments"), expired accounts	2		
3020	Outlays (gross)	-813	-1,043	-1,219
3040	Recoveries of prior year unpaid obligations, unexpired	-6	-12	-12
3041	Recoveries of prior year unpaid obligations, expired		<u></u>	
3050	Unpaid obligations, end of year	613	658	1,005
3100	Obligated balance, start of year	528	613	658
3200	Obligated balance, end of year	613	658	1,005
4000	Budget authority and outlays, net: Discretionary: Budget authority, gross	927	1,100	1,578

	Outlays, gross:			
4010	Outlays from new discretionary authority	384	451	647
4011	Outlays from discretionary balances	429	592	572
4020	Outlays, gross (total)	813	1,043	1,219
	Offsets against gross budget authority and outlays: Offsetting collections (collected) from:			
4033	Non-Federal sources	-1		
4052	Additional offsets against gross budget authority only: Offsetting collections credited to expired accounts	1	<u></u>	
4070	Budget authority, net (discretionary)	927	1,100	1,578
4080	Outlays, net (discretionary)	812	1,043	1,219
4180	Budget authority, net (total)	927	1,100	1,578
4190	Outlays, net (total)	812	1,043	1,219

The Budget renames the Space Technology account to Exploration Technology to better reflect the focus of this account on supporting the Exploration Campaign. Space Technology Mission Directorate is and will continue to be the organization name.

The Exploration Technology appropriation provides for the costs associated with the research and technology development needed for space exploration. 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, and those associated with fabrication, tests and flight demonstrations.

The programs within the Exploration Technology account enable and reduce barriers to new exploration missions by drawing on talent from the NASA workforce, academia, small businesses and the broader space enterprise to deliver innovative solutions that dramatically improve technological capabilities for NASA and the Nation. The Exploration Technology appropriation funds several programs: Small Business Innovative Research (SBIR), Small Business Technology Transfer (STTR), Early Stage Innovation & Partnerships, Technology Maturation, and Technology Demonstrations. Performance goals associated with these activities are addressed in NASA's detailed budget request.

Object Classification (in millions of dollars)

Identif	ication code 080-0131-0-1-252	2019 actual	2020 est.	2021 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	92	90	90
11.3	Other than full-time permanent	2	2	
11.9	Total personnel compensation	94	92	93
12.1	Civilian personnel benefits	30	40	44
21.0	Travel and transportation of persons	5	6	ç
22.0	Transportation of things	2	2	3
25.1	Advisory and assistance services	34	45	71
25.2	Other services from non-Federal sources	35	46	74
25.3	Other goods and services from Federal sources	32	41	68
25.4	Operation and maintenance of facilities	4	5	7
25.5	Research and development contracts	582	713	1,035
25.7	Operation and maintenance of equipment	19	23	43
26.0	Supplies and materials	11	13	19
31.0	Equipment	9	11	16
41.0	Grants, subsidies, and contributions	49	63	96
99.9	Total new obligations, unexpired accounts	906	1,100	1,578

Employment Summary

Identification code 080-0131-0-1-252	2019 actual	2020 est.	2021 est.
1001 Direct civilian full-time equivalent employment	751	668	669

DEEP SPACE EXPLORATION SYSTEMS

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 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 sections 5901 and 5902 of title 5, United States Code; travel ex-

penses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, [\$6,017,600,000] \$8,761,700,000, to remain available until September 30, \$\ 2021: Provided, That not less than \$1,406,700,000 shall be for the Orion Multi-Purpose Crew Vehicle: Provided further, That not less than \$2,585,900,000 shall be for the Space Launch System (SLS) launch vehicle, which shall have a lift capability not less than 130 metric tons and which shall have core elements and an Exploration Upper Stage developed simultaneously to be used to the maximum extent practicable, including for Earth to Moon missions and a Moon landing: Provided further, That of the amounts provided for SLS, not less than \$300,000,000 shall be for Exploration Upper Stage development: Provided further, That \$590,000,000 shall be for Exploration Ground Systems: Provided further, That the National Aeronautics and Space Administration shall provide to the Committees on Appropriations of the House of Representatives and the Senate, concurrent with the annual budget submission, a 5year budget profile for an integrated system that includes the SLS, the Orion Multi-Purpose Crew Vehicle, and associated ground systems that will ensure an Exploration Mission-2 crewed launch as early as possible, as well as a system-based funding profile for a sustained launch cadence beyond the initial crewed test launch: Provided further, That \$1,435,000,000 shall be for exploration research and development 2022. (Science Appropriations Act, 2020.)

Program and Financing (in millions of dollars)

Identif	ication code 080-0124-0-1-252	2019 actual	2020 est.	2021 est.
0001	Obligations by program activity: Deep Space Exploration Systems	5,290	6,018	8,762
	Budgetary resources:			
1000	Unobligated balance:	***	100	0.5
1000	Unobligated balance brought forward, Oct 1	416	198	25
1021	Recoveries of prior year unpaid obligations	27	53	53
1050	Unobligated balance (total)	443	251	304
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	5,051	6,018	8,762
1120	Appropriations transferred to other CECR [080–0130]			
1160	Appropriation, discretionary (total)	5.045	6,018	8,762
1930	Total budgetary resources available	5,488	6,269	9,066
	Memorandum (non-add) entries:	-,	-,	-,
1941	Unexpired unobligated balance, end of year	198	251	304
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	1.375	2.118	2.517
3010	New obligations, unexpired accounts	5,290	6,018	8,762
3011	Obligations ("upward adjustments"), expired accounts	26		
3020	Outlays (gross)	-4,523	-5.566	-7.14
3040	Recoveries of prior year unpaid obligations, unexpired	-27	-53	-53
3041	Recoveries of prior year unpaid obligations, expired	-23		
3050	Unpaid obligations, end of year	2,118	2,517	4,085
	Memorandum (non-add) entries:	-,	_,	.,
3100	Obligated balance, start of year	1.375	2,118	2,517
3200	Obligated balance, end of year	2,118	2,517	4,085
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	5,045	6,018	8,762
	Outlays, gross:	0.000	0.071	5.04
4010	Outlays from new discretionary authority	3,099	3,671	5,345
4011	Outlays from discretionary balances	1,424	1,895	1,796
4020	Outlays, gross (total) Offsets against gross budget authority and outlays:	4,523	5,566	7,14
4022	Offsetting collections (collected) from:	1		
4033	Non-Federal sources	-1		
4052	Additional offsets against gross budget authority only: Offsetting collections credited to expired accounts	1		
4070	Budget authority, net (discretionary)	5,045	6,018	8,762
4080	Outlays, net (discretionary)	4,522	5,566	7,14
4180	Budget authority, net (total)	5,045	6,018	8,762
4190	Outlays, net (total)	4,522	5,566	7,141

The Budget has renamed the Exploration account Deep Space Exploration Systems to better reflect the activities in the account.

This appropriation provides for costs associated with the development of systems and capabilities required for human exploration of space. The capabilities include launch and crew vehicles for missions beyond low

DEEP SPACE EXPLORATION SYSTEMS—Continued

Earth orbit; providing integrated systems to keep astronauts safe, healthy, and functional during deep space missions; and advancing the tools to increase exploration capabilities and reduce the launch mass and cost of deep space missions. The full costs provide for 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. Performance goals associated with these activities are addressed in NASA's detailed budget request.

NASA's human deep space exploration programs include the Space Launch System, Orion, Exploration Ground Systems under the Exploration Systems Development theme, as well as the Exploration Research and Development theme which consists of Advanced Exploration Systems, the Gateway, Advanced Cislunar and Surface Capabilities, the Human Landing System, and the Human Research Program.

Object Classification (in millions of dollars)

Identif	ication code 080-0124-0-1-252	2019 actual	2020 est.	2021 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	343	390	400
11.3	Other than full-time permanent	3	3	5
11.5	Other personnel compensation	2	2	3
11.8	Special personal services payments	1	1	2
11.9	Total personnel compensation	349	396	410
12.1	Civilian personnel benefits	114	130	189
13.0	Benefits for former personnel	1	1	2
21.0	Travel and transportation of persons	15	17	25
22.0	Transportation of things	1	1	2
23.3	Communications, utilities, and miscellaneous charges	25	28	41
25.1	Advisory and assistance services	397	452	658
25.2	Other services from non-Federal sources	48	55	80
25.3	Other goods and services from Federal sources	40	45	66
25.4	Operation and maintenance of facilities	133	151	220
25.5	Research and development contracts	3,466	3,944	5,908
25.7	Operation and maintenance of equipment	182	207	301
26.0	Supplies and materials	42	48	70
31.0	Equipment	55	63	91
32.0	Land and structures	349	397	578
41.0	Grants, subsidies, and contributions	73	83	121
99.9	Total new obligations, unexpired accounts	5,290	6,018	8,762

Employment Summary

Identification code 080-0124-0-1-252	2019 actual	2020 est.	2021 est.
1001 Direct civilian full-time equivalent employment	2,793	2,703	2,785

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS ENGAGEMENT

[For necessary expenses, not otherwise provided for, in the conduct and support of aerospace and aeronautical education research and development activities, including research, development, operations, support, and services; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, \$120,000,000, to remain available until September 30, 2021, of which \$24,000,000 shall be for the Established Program to Stimulate Competitive Research and \$48,000,000 shall be for the National Space Grant College and Fellowship Program [*] Unobligated balances previously appropriated under this heading shall be available for purposes of the closure of the Office of STEM Engagement, including, but not limited to, ongoing administration, oversight, monitoring, and funding of grants previously awarded by the Office of STEM Engagement. (Science Appropriations Act, 2020.)

Program and Financing (in millions of dollars)

Identif	ication code 080-0128-0-1-252	2019 actual	2020 est.	2021 est.
0001	Obligations by program activity: STEM Engagement	110	120	
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	8	9	11
1021	Recoveries of prior year unpaid obligations	1	2	2
1050	Unobligated balance (total)	9	11	13
1100	Appropriation	110	120	
1930	Total budgetary resources available	119	131	13
1000	Memorandum (non-add) entries:	110	101	10
1941	Unexpired unobligated balance, end of year	9	11	13
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	148	149	151
3010	New obligations, unexpired accounts	110	120	
3011	Obligations ("upward adjustments"), expired accounts	1		
3020	Outlays (gross)	-107	-116	-89
3040	Recoveries of prior year unpaid obligations, unexpired	-1	-2	-2
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year Memorandum (non-add) entries:	149	151	60
3100	Obligated balance, start of year	148	149	151
3200	Obligated balance, end of year	149	151	60
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross Outlays, gross:	110	120	
4010	Outlays from new discretionary authority	14	16	
4011	Outlays from discretionary balances	93	100	89
4020	Outlays, gross (total)	107	116	89
4180	Budget authority, net (total)	110	120	
4190	Outlays, net (total)	107	116	89

The Budget proposes to terminate funding for the Office of Science, Technology, Engineering, and Mathematics (STEM) Engagement's portfolio of programs and projects. Unobligated balances previously appropriated may be used to support close-out costs. Moving forward, a small team at NASA headquarters funded out of Safety, Security, and Mission Services will be accountable for strategic direction and coordination of the agency's STEM engagement efforts.

Object Classification (in millions of dollars)

Identific	cation code 080-0128-0-1-252	2019 actual	2020 est.	2021 est.
11.1	Direct obligations: Personnel compensation: Full-time			
	permanent	4	4	
11.9	Total personnel compensation	4	4	
12.1	Civilian personnel benefits	2	2	
25.1	Advisory and assistance services	2	2	
25.2	Other services from non-Federal sources	6	7	
25.5	Research and development contracts	6	7	
25.7	Operation and maintenance of equipment	6	7	
41.0	Grants, subsidies, and contributions	84	91	
99.9	Total new obligations, unexpired accounts	110	120	

Employment Summary

Identification code 080-0128-0-1-252	2019 actual	2020 est.	2021 est.
1001 Direct civilian full-time equivalent employment	36	38	

SAFETY, SECURITY AND MISSION SERVICES

For necessary expenses, not otherwise provided for, in the conduct and support of science, aeronautics, space technology, 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 sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; not to exceed \$63,000 for official reception and representation expenses; and purchase, lease, charter, maintenance, and operation of mission and administrative aircraft, [\$2,913,300,000] \$3,009,900,000, to remain available until September 30, [2021] 2022. (Science Appropriations Act, 2020.)

Program and Financing (in millions of dollars)

Identif	ication code 080-0122-0-1-252	2019 actual	2020 est.	2021 est.
	Obligations by program activity:			
0001	Safety, Security and Mission Services	2,776	2,913	3,010
0801	Cross Agency Support (Reimbursable)	1,633	2,344	1,932
0900	Total new obligations, unexpired accounts	4,409	5,257	4,942
	Budgetary resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	550	781	829
1021	Recoveries of prior year unpaid obligations	62	48	48
1050	Unobligated balance (total)	612	829	877
	Budget authority:			
1100	Appropriations, discretionary:	0.755	0.010	0.010
1100	Appropriation	2,755	2,913	3,010
1700	Spending authority from offsetting collections, discretionary: Collected	1,582	2,344	1,932
1701	Change in uncollected payments, Federal sources	241	2,344	1,332
	change in anomotica paymonts, reactar courses immini			
1750	Spending auth from offsetting collections, disc (total)	1,823	2,344	1,932
1900	Budget authority (total)	4,578	5,257	4,942
1930	Total budgetary resources available	5,190	6,086	5,819
1941	Unexpired unobligated balance, end of year	781	829	877
1341	Onexpired unobligated balance, end of year	701	023	077
	Change in obligated balance:			
3000	Unpaid obligations: Unpaid obligations, brought forward, Oct 1	2,420	2,134	1,887
3010	New obligations, unexpired accounts	4,409	5,257	4,942
3011	Obligations ("upward adjustments"), expired accounts	20	0,207	7,572
3020	Outlays (gross)	-4,629	-5,456	-5,336
3040	Recoveries of prior year unpaid obligations, unexpired	-62	-48	-48
3041	Recoveries of prior year unpaid obligations, expired	-24		
3050	Unpaid obligations, end of year	2,134	1,887	1,445
2000	Uncollected payments:	1 000	1 007	1 007
3060 3070	Uncollected pymts, Fed sources, brought forward, Oct 1 Change in uncollected pymts, Fed sources, unexpired	-1,882 -241	-1,907	-1,907
3071	Change in uncollected pymts, Fed sources, unexpired	216		
	change in anomotion printer, the dealest, expired immining			-
3090	Uncollected pymts, Fed sources, end of year Memorandum (non-add) entries:	-1,907	-1,907	-1,907
3100	Obligated balance, start of year	538	227	-20
3200	Obligated balance, end of year	227	-20	-462
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	4,578	5,257	4,942
4010	Outlays, gross: Outlays from new discretionary authority	2,720	3,127	3,065
4010	Outlays from discretionary balances	1,909	2,329	2,271
4011	outlays from discretionary balances	1,505		
4020	Outlays, gross (total)	4,629	5,456	5,336
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4030	Federal sources	-1,588	-2,094	-1,682
4033	Non-Federal sources		-250	
4040	Offsets against gross budget authority and outlays (total) Additional offsets against gross budget authority only:	-1,797	-2,344	-1,932
4050	Change in uncollected pymts, Fed sources, unexpired	-241		
4052	Offsetting collections credited to expired accounts	215		
4060	Additional offsets against budget authority only (total)	-26		
			· 	
4070	Budget authority, net (discretionary)	2,755	2,913	3,010
4080	Outlays, net (discretionary)	2,832	3,112	3,404
4180 4190	Budget authority, net (total)	2,755	2,913	3,010
	Unitaly 191 (10131)	2,832	3,112	3,404

Safety, Security, and Mission Services (SSMS) manages agency-wide mission support functions and some of NASA's research facilities. This appropriation provides for the operations and maintenance, salaries and related expenses, and other general and administrative activities that support all NASA's missions. Beginning in FY 2021, NASA's Operating Plan and accounting structure will reflect the new architecture adopted by the Agency for the administrative functions funded under SSMS. Under the new architecture, programs, projects and activities fall under the two Themes described below.

Mission Services and Capabilities (MSaC) delivers enterprise solutions through three programs: Information Technology; Mission Enabling Services; and Infrastructure and Technical Capabilities. These programs meet workforce, infrastructure, information technology and business operations requirements necessary to enable NASA's mission. MSaC ensures that critical Agency operations across all NASA Centers are effective, efficient, safe, and meet statutory, regulatory, and fiduciary responsibilities.

Engineering, Safety, and Operations (ESO) provides for the ongoing management of NASA Headquarters, nine Centers, and component facilities. It funds medical and engineering technical authorities and contributes to the reduction of program risks by ensuring that technical skills and assets are ready and available to meet program and project requirements. ESO ensures that Center practices are technically and scientifically sound and that specialized infrastructure at the Centers is safe and reliable.

Object Classification (in millions of dollars)

Identif	dentification code 080-0122-0-1-252		2020 est.	2021 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	897	941	973
11.3	Other than full-time permanent	20	21	22
11.5	Other personnel compensation	36	38	39
11.9	Total personnel compensation	953	1,000	1,034
12.1	Civilian personnel benefits	295	310	320
13.0	Benefits for former personnel	1	1	1
21.0	Travel and transportation of persons	25	26	27
22.0	Transportation of things	1	1	1
23.2	Rental payments to others	21	22	23
23.3	Communications, utilities, and miscellaneous charges	82	86	89
24.0	Printing and reproduction	3	3	3
25.1	Advisory and assistance services	241	253	261
25.2	Other services from non-Federal sources	238	250	258
25.3	Other goods and services from Federal sources	46	48	50
25.4	Operation and maintenance of facilities	203	213	220
25.5	Research and development contracts	160	168	173
25.6	Medical care	7	7	8
25.7	Operation and maintenance of equipment	388	407	421
26.0	Supplies and materials	16	17	17
31.0	Equipment	60	63	65
32.0	Land and structures	16	17	17
41.0	Grants, subsidies, and contributions	20	21	22
99.0	Direct obligations	2,776	2,913	3,010
99.0	Reimbursable obligations	1,633	2,344	1,932
99.9	Total new obligations, unexpired accounts	4,409	5,257	4,942
	Employment Summary			

Identification code 080-0122-0-1-252	2019 actual	2020 est.	2021 est.
1001 Direct civilian full-time equivalent employment	7,158	7,601	7,602
	434	301	301

CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND 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, [\$373,400,000] \$539,085,000, to remain available until September 30, [2025] 2026: Provided, That proceeds from leases deposited into this account shall be available for a period of 5 years to the extent and in amounts as provided in annual appropriations Acts: Provided further, That such proceeds referred to in the preceding proviso shall be available for obligation for fiscal year [2020] 2021 in an amount not to exceed [\$17,000,000] \$18,700,000: Provided further, That each annual budget request shall include an annual estimate of gross

CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION—Continued receipts and collections and proposed use of all funds collected pursuant to section 20145 of title 51, United States Code. (Science Appropriations Act, 2020.)

Program and Financing (in millions of dollars)

Identif	fication code 080-0130-0-1-252	2019 actual	2020 est.	2021 est.
0001	Obligations by program activity: Construction and Environmental Compliance and Restoration			
	(Direct)	460	373	539
0801	Construction and Environmental Compliance and Restoration (Reimbursable)		22	22
0000				
1900	Total new obligations, unexpired accounts	460	395	561
	Budgetary resources:			
1000	Unobligated balance: Unobligated balance brought forward, Oct 1	370	319	393
1021	Recoveries of prior year unpaid obligations	17	75	75
1050	Unobligated balance (total)	387	394	468
	Budget authority:	007		
100	Appropriations, discretionary:	0.40	070	500
1100 1120	AppropriationAppropriations transferred to other acct Space Operations	348	373	539
1120	[080–0115]	-2		
1121	Appropriations transferred from other acct Aeronautics	9		
1121	[080-0126]Appropriations transferred from other Science	9		
	[080-0120]	10		
1121	Appropriations transferred from other Exploration [080-0124]	6		
1121	Appropriations transferred from other Space Operations	Ü	•••••	
	[080–0115]	1		
160	Appropriation, discretionary (total)	372	373	539
	Spending authority from offsetting collections, discretionary:			
1700 1900	CollectedBudget authority (total)	22 394	21 394	21 560
	Total budgetary resources available	781	788	1,028
	Memorandum (non-add) entries:	701	700	1,020
1940	Unobligated balance expiring	-2		
1941	Unexpired unobligated balance, end of year	319	393	467
	Change in obligated belongs			
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	784	753	562
3010	New obligations, unexpired accounts	460	395	561
3011	Obligations ("upward adjustments"), expired accounts	18		
3020	Outlays (gross)	-475	-511	-500
3031	Unpaid obligations transferred from other accts [080–0110]	1		
3040	Recoveries of prior year unpaid obligations, unexpired	-17		-75
3041	Recoveries of prior year unpaid obligations, expired	-18		
3050	Unpaid obligations, end of year	753	562	548
0000	Memorandum (non-add) entries:	755	302	340
3100	Obligated balance, start of year	784	753	562
3200	Obligated balance, end of year	753	562	548
	Budget authority and outlays, net:			
	Discretionary:			
1000	Budget authority, gross Outlays, gross:	394	394	560
1010	Outlays, gross: Outlays from new discretionary authority	18	25	35
1011	Outlays from discretionary balances	457	486	465
1020	Outlays, gross (total)	475	511	500
.020	Offsets against gross budget authority and outlays:	47.0	011	300
	Offsetting collections (collected) from:		-:	
4033	Non-Federal sources	-22	-21	-21
4180	9 2,	372 453	373 490	539 479
4190				

This appropriation provides for NASA's construction and environmental compliance and restoration activities, and makes available the net proceeds from Enhanced Use Leases for maintenance, capital revitalization, and improvement of real property assets and related personal property at NASA Centers received under the authority of section 20145 of the National Aeronautics and Space Act (51 U.S.C. 20145). The funding provides 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)

Identi	fication code 080-0130-0-1-252	2019 actual	2020 est.	2021 est.
	Direct obligations:			
23.3	Communications, utilities, and miscellaneous charges	2	2	2
25.1	Advisory and assistance services	24	19	28
25.2	Other services from non-Federal sources	52	42	61
25.3	Other goods and services from Federal sources	52	42	61
25.4	Operation and maintenance of facilities	53	45	63
25.5	Research and development contracts	9	7	11
25.7	Operation and maintenance of equipment	20	16	24
31.0	Equipment	1	1	1
32.0	Land and structures	246	199	288
99.0	Direct obligations	459	373	539
99.0	Reimbursable obligations	1	22	22
99.9	Total new obligations, unexpired accounts	460	395	561

[SPACE] LEO AND SPACEFLIGHT 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; space flight, spacecraft control and communications activities, including operations, production, and services; maintenance and repair, facility planning and design; program management; personnel and related costs, including uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; travel expenses; purchase and hire of passenger motor vehicles; and purchase, lease, charter, maintenance and operation of mission and administrative aircraft, [\$4,140,200,000] \$4,187,300,000, to remain available until September 30, [2021] 2022. (Science Appropriations Act, 2020.)

Program and Financing (in millions of dollars)

Identif	fication code 080-0115-0-1-252	2019 actual	2020 est.	2021 est.
	Obligations by program activity:			
0001	LEO and Spaceflight Operations	4,780	4,140	4,187
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	117	98	425
1021	Recoveries of prior year unpaid obligations	121	327	327
1050	Unobligated balance (total)	238	425	752
1030	Budget authority:	230	423	732
	Appropriations, discretionary:			
1100	Appropriation	4,639	4,140	4,187
1120	Appropriations transferred to other accts CECR			
	[080–0130]	-1		
1121	Appropriations transferred from other acct CECR			
	[080–0130]	2		
1160	Appropriation, discretionary (total)	4,640	4,140	4,187
1900	Budget authority (total)	4,640	4.140	4.187
1930	Total budgetary resources available	4,878	4,565	4,939
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	98	425	752
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	2,426	2,593	2,066
3010	New obligations, unexpired accounts	4,780	4,140	4,187
3011	Obligations ("upward adjustments"), expired accounts	13		
3020	Outlays (gross)	-4,499	-4,340	-4,201
3040	Recoveries of prior year unpaid obligations, unexpired	-121	-327	-327
3041	Recoveries of prior year unpaid obligations, expired			
3050	Unpaid obligations, end of year	2,593	2,066	1,725
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	2,426	2,593	2,066
3200	Obligated balance, end of year	2,593	2,066	1,725
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	4,640	4,140	4,187
	Outlays, gross:			
4010	Outlays from new discretionary authority	2,964	2,774	2,805

4011	Outlays from discretionary balances	1,535	1,566	1,396
4020	Outlays, gross (total)	4,499	4,340	4,201
4033	Non-Federal sources	-3		
4052	Offsetting collections credited to expired accounts	3		
4060	Additional offsets against budget authority only (total)	3		
4070	Budget authority, net (discretionary)	4,640	4,140	4,187
4080	Outlays, net (discretionary)	4,496	4,340	4,201
4180	Budget authority, net (total)	4,640	4,140	4,187
4190	Outlays, net (total)	4,496	4,340	4,201

This appropriation provides for the full costs associated with human-related Low Earth Orbit (LEO) and spaceflight operations activities of the Agency. The full costs include all labor, travel, procurement, test, and fabrication costs associated with the research, development, operations, and other general and administrative activities conducted by the programs within this account. Major themes within the LEO and Spaceflight Operations account include the International Space Station, Space Transportation, Space and Flight Support, and Commercial LEO Development. Performance goals associated with these activities are addressed in NASA's detailed budget request.

The International Space Station (ISS) is a complex of research laboratories in LEO where America and its international partners, including Russia, Canada, Europe, and Japan, conduct unique scientific and technological investigations in a microgravity environment. The objective of the International Space Station is to support human space exploration and conduct science experiments and technology development activities unique to the on-orbit attributes of the facility.

The Space Transportation theme is comprised of the Commercial Crew Program and Crew and Cargo Program, which transport U.S. astronauts and cargo safely back and forth to the ISS and, in the future, to other orbital platforms and destinations. Maintaining the ISS requires a fleet of vehicles and launch locations to transport astronauts, science experiments, supplies, maintenance hardware, and propellant to the ISS, and to dispose of waste generated on the ISS. The Commercial Crew Program partners with two U.S. companies, SpaceX and Boeing, to develop and operate safe, reliable, and affordable crew transportation to LEO. The Crew and Cargo Program purchases cargo transportation services to the ISS through contracts with Northrop Grumman, SpaceX, and Sierra Nevada and purchases crew transportation services from Boeing and SpaceX. Payments to develop and test commercial crew vehicles, and for initial Post Certification Missions for each provider are funded by the Commercial Crew Program, whereas subsequent payments for operational commercial crew missions are funded by the Crew and Cargo Program.

Space and Flight Support is comprised of multiple programs that provide ongoing support for a wide range of services required for safe and successful space mission operations. These programs include Space Communications and Navigation, Communications Services Program, Human Space Flight Operations, Launch Services, and Rocket Propulsion Testing. Services are provided to a wide range of customers including NASA, other U.S. Federal agencies, foreign governments, and industry partners.

Commercial LEO Development supports efforts to expand commercial activities in LEO, with a focus on enabling, developing, and deploying commercial platforms that can be used by NASA and other customers and on supporting the growth of private sector activity in LEO.

$\textbf{Object Classification} \ (\text{in millions of dollars})$

Identif	ication code 080-0115-0-1-252	2019 actual	2020 est.	2021 est.
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent	292	253	256
11.3	Other than full-time permanent	3	3	3
11.5	Other personnel compensation	2	2	2
11.9	Total personnel compensation	297	258	261
12.1	Civilian personnel benefits	95	82	83

21.0	Travel and transportation of persons	15	13	13
22.0	Transportation of things	1,932	1,673	1,692
23.2	Rental payments to others	2	2	2
23.3	Communications, utilities, and miscellaneous charges	10	9	9
25.1	Advisory and assistance services	103	89	90
25.2	Other services from non-Federal sources	175	152	153
25.3	Other goods and services from Federal sources	76	66	67
25.4	Operation and maintenance of facilities	45	39	39
25.5	Research and development contracts	1,674	1,449	1,466
25.7	Operation and maintenance of equipment	274	237	240
26.0	Supplies and materials	18	16	16
31.0	Equipment	15	13	13
32.0	Land and structures	7	6	6
41.0	Grants, subsidies, and contributions	42	36	37
99.9	Total new obligations, unexpired accounts	4,780	4,140	4,187

Employment Summary

Identification code 080-0115-0-1-252	2019 actual	2020 est.	2021 est.
1001 Direct civilian full-time equivalent employment	2,290	2,175	2,155

OFFICE OF INSPECTOR GENERAL

For necessary expenses of the Office of Inspector General in carrying out the Inspector General Act of 1978, [\$41,700,000] \$44,200,000, [of which \$500,000 shall] to remain available until September 30, [2021] 2022. (Science Appropriations Act. 2020.)

Program and Financing (in millions of dollars)

Identif	ication code 080-0109-0-1-252	2019 actual	2020 est.	2021 est.
	Obligations by program activity:			
0001	Office of Inspector General (Direct)	39	42	43
0801	Office of Inspector General (Reimbursable)	1	2	2
0900	Total new obligations, unexpired accounts	40	44	45
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1		
1000	Budget authority:	•		
	Appropriations, discretionary:			
1100	Appropriation	39	42	44
	Spending authority from offsetting collections, discretionary:			
1700	Collected	1	2	2
1900	Budget authority (total)	40	44	46
1930		41	44	46
	Memorandum (non-add) entries:			
1940	Unobligated balance expiring	-1		
1941	Unexpired unobligated balance, end of year			1
	Change in obligated balance:			
	Unpaid obligations:	_	_	_
3000	Unpaid obligations, brought forward, Oct 1	5	7	7
3010	New obligations, unexpired accounts	40	44	45
3011 3020	Obligations ("upward adjustments"), expired accounts Outlays (gross)	1 -38	_44	_45
3041	Recoveries of prior year unpaid obligations, expired	-36 -1	-44	-40
3041	Recoveries of prior year unipaid obligations, expired			
3050	Unpaid obligations, end of year	7	7	7
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	5	7	7
3200	Obligated balance, end of year	7	7	7
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	40	44	46
	Outlays, gross:			
4010	Outlays from new discretionary authority	34	39	40
4011	Outlays from discretionary balances	4	5	5
4020	Outlays, gross (total)	38	44	45
.020	Offsets against gross budget authority and outlays:	00		
	Offsetting collections (collected) from:			
4030	Federal sources	-1	-2	-2
4180	Budget authority, net (total)	39	42	44
	Outlays, net (total)	37	42	43

This appropriation provides for the operations of the NASA Office of Inspector General. The mission of the Office of Inspector General is to

OFFICE OF INSPECTOR GENERAL—Continued

conduct audits and investigations of agency activities to prevent and detect fraud, waste, abuse, and mismanagement. The Inspector General keeps the NASA Administrator and the Congress informed of problems and deficiencies in agency programs and operations.

Object Classification (in millions of dollars)

Identifi	cation code 080-0109-0-1-252	2019 actual	2020 est.	2021 est.
	Direct obligations:			
11.1	Personnel compensation: Full-time permanent	22	23	23
12.1	Civilian personnel benefits	9	10	10
21.0	Travel and transportation of persons	1	1	1
25.2	Other services from non-Federal sources	3	4	5
25.3	Other goods and services from Federal sources	1	1	1
25.7	Operation and maintenance of equipment	2	2	2
31.0	Equipment	1	1	1
99.0	Direct obligations	39	42	43
99.0	Reimbursable obligations	1	2	2
99.9	Total new obligations, unexpired accounts	40	44	45

Employment Summary

Identification code 080-0109-0-1-252	2019 actual	2020 est.	2021 est.
1001 Direct civilian full-time equivalent employment	170	184	187
2001 Reimbursable civilian full-time equivalent employment	5	5	5

SCIENCE, AERONAUTICS, AND EXPLORATION

Program and Financing (in millions of dollars)

Identif	ication code 080-0114-0-1-999	2019 actual	2020 est.	2021 est.
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1		
1029	Other balances withdrawn to Treasury	-1		
4180	Budget authority, net (total)			
4190	Outlays, net (total)			

HUMAN SPACE FLIGHT

$\label{eq:program} \textbf{Program and Financing} \ \ (\text{in millions of dollars})$

Identif	ication code 080-0111-0-1-252	2019 actual	2020 est.	2021 est.
	Budgetary resources:			
1021	Unobligated balance: Recoveries of prior year unpaid obligations	1		
		1		
1029	Other balances withdrawn to Treasury	-1		
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	1		
3040	Recoveries of prior year unpaid obligations, unexpired Memorandum (non-add) entries:	-1		
3100	Obligated balance, start of year	1		
4180	Budget authority, net (total)			
4190	Outlays, net (total)			

SCIENCE, AERONAUTICS AND TECHNOLOGY

Program and Financing (in millions of dollars)

Identifica	tion code 080-0110-0-1-999	2019 actual	2020 est.	2021 est.
В	udgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1		
1029	Other balances withdrawn to Treasury	-1		

Change in obligated balance:

Unpaid obligations:			
Unpaid obligations, brought forward, Oct 1	1		
Unpaid obligations transferred to other accts [080-0130]	-1		
Memorandum (non-add) entries:			
Obligated balance, start of year	1		
Budget authority, net (total)			
Outlays, net (total)			
	Unpaid obligations, brought forward, Oct 1	Unpaid obligations, brought forward, Oct 1	Unpaid obligations, brought forward, Oct 1

MISSION SUPPORT

Program and Financing (in millions of dollars)

Identif	ication code 080-0112-0-1-999	2019 actual	2020 est.	2021 est.
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1		
1029	Other balances withdrawn to Treasury	-1		
	Budget authority, net (total)			

WORKING CAPITAL FUND

Program and Financing (in millions of dollars)

Identif	ication code 080–4546–0–4–252	2019 actual	2020 est.	2021 est.
0801	Obligations by program activity: Working Capital Fund (Reimbursable)	482	531	558
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	14	30	38
1021	Recoveries of prior year unpaid obligations	2	8	8
1050	Unobligated balance (total)	16	38	46
	Spending authority from offsetting collections, discretionary:			
1700	Collected	496	531	558
1930	Total budgetary resources available	512	569	604
1941	Memorandum (non-add) entries: Unexpired unobligated balance, end of year	30	38	46
	Change in obligated balance:			
0000	Unpaid obligations:	105	014	100
3000	Unpaid obligations, brought forward, Oct 1	195	214	198 558
3010 3020	New obligations, unexpired accounts Outlays (gross)	482 -461	531 539	–547
3040	Recoveries of prior year unpaid obligations, unexpired	-401 -2	-8	-547 -8
3050	Unpaid obligations, end of year	214	198	201
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	195	214	198
3200	Obligated balance, end of year	214	198	201
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross	496	531	558
	Outlays, gross:			
4010	Outlays from new discretionary authority	272	319	335
4011	Outlays from discretionary balances	189	220	212
4020	Outlays, gross (total) Offsets against gross budget authority and outlays:	461	539	547
4000	Offsetting collections (collected) from:	470	400	400
4030 4033	Federal sources	-476 -20	-496 -35	-496 -62
4033	Non-Federal sources	-20	-35	-b2
4040	Offsets against gross budget authority and outlays (total)	-496	-531	-558
4080	Outlays, net (discretionary)	-35	8	-11
4180	Budget authority, net (total)			
4190	Outlays, net (total)	-35	8	-11

The Working Capital Fund provides goods and services on a reimbursable basis. The Fund finances four program activities. The first is the Solutions for Enterprise-wide Procurement program, which finances, on an agencywide basis, scientific and engineering workstation procurement. The second program is the Information Technology Infrastructure Integration Program

which consolidates and centralizes management of NASA information technology services in the areas of customer service and ordering, web services and technologies, enterprise business and management applications, integrated network/communications services, end user services, and data center services. The third program, NASA's Shared Services Center, performs selected financial management, human resources, information technology, and procurement services for NASA Headquarters and Centers. The last program, the National Center for Critical Information Processing and Storage, provides federal customers collocation services with complete redundancy in the electrical distribution system from the national grid to the rack level.

Object Classification (in millions of dollars)

Identification code 080-4546-0-4-252		2019 actual	2020 est.	2021 est.
	Reimbursable obligations:			
11.1	Personnel compensation: Full-time permanent	15	17	19
12.1	Civilian personnel benefits	5	6	6
21.0	Travel and transportation of persons	1	1	1
23.3	Communications, utilities, and miscellaneous charges	7	8	8
25.2	Other services from non-Federal sources	43	48	50
25.3	Other goods and services from Federal sources	1	1	1
25.4	Operation and maintenance of facilities	24	27	28
25.7	Operation and maintenance of equipment	384	421	443
26.0	Supplies and materials	1	1	1
31.0	Equipment	1	1	1
99.9	Total new obligations, unexpired accounts	482	531	558

Employment Summary

Identification code 080-4546-0-4-252	2019 actual	2020 est. 2021 est.	
2001 Reimbursable civilian full-time equivalent employment	138	179	179

Trust Funds

SCIENCE, SPACE, AND TECHNOLOGY EDUCATION TRUST FUND

$\textbf{Special and Trust Fund Receipts} \ (\text{in millions of dollars})$

Identif	fication code 080-8978-0-7-503	2019 actual	2020 est.	2021 est.
0100	Balance, start of year	16	16	16
1140	Earnings on Investments, Science, Space and Technology Education Trust Fund		1	1
2000	Total: Balances and receipts	16	17	17
2101 5098	Science, Space, and Technology Education Trust Fund	-1 1		
5099	Balance, end of year	16	16	16

Program and Financing (in millions of dollars)

Identification code 080-8978-0-7-503		2019 actual	2019 actual 2020 est.	
0001	Obligations by program activity: Science, Space, and Technology Education Trust Fund	1	1	1
0900	Total new obligations, unexpired accounts (object class 41.0) $\ldots \ldots$	1	1	1
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1	1	1
	Budget authority: Appropriations, mandatory:			
1201	Appropriation (special or trust fund)	1	1	1
1930	Total budgetary resources available	2	2	2
1941	Unexpired unobligated balance, end of year	1	1	1

Change in obligated balance:

	Unpaid obligations:			
3010	New obligations, unexpired accounts	1	1	1

3020	Outlays (gross)	-1	-1	-1
	Budget authority and outlays, net:			
4000	Mandatory:	1	1	1
4090	Budget authority, gross Outlavs, gross:	1	1	1
4100	Outlays from new mandatory authority		1	1
4101	Outlays from mandatory balances			
4110	Outlays, gross (total)	1	1	1
4180	Budget authority, net (total)	1	1	1
4190	Outlays, net (total)	1	1	1
	Memorandum (non-add) entries:			
5000	Total investments, SOY: Federal securities: Par value	17	16	15
5001	Total investments, EOY: Federal securities: Par value	16	15	14

Administrative Provisions

(INCLUDING TRANSFERS OF FUNDS)

Funds for any announced prize otherwise authorized shall remain available, without fiscal year limitation, until a 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 funds transferred to "Construction and Environmental Compliance and Restoration" for construction activities shall not increase that account by more than [\$75,300,000] 20 percent. Balances so transferred shall be merged with and available for the same purposes and the same time period as the appropriations to which transferred. Any transfer pursuant to this provision shall be treated as a reprogramming of funds under section [505] 504 of this Act and shall not be available for obligation except in compliance with the procedures set forth in that section.

Not to exceed 5 percent of any appropriation provided for the National Aeronautics and Space Administration under previous appropriations Acts that remains available for obligation or expenditure in fiscal year [2020] 2021 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 retain its original availability and shall be treated as a reprogramming of funds under section [505] 504 of this Act and shall not be available for obligation except in compliance with the procedures set forth in that section.

Notwithstanding the limitations in the preceding two paragraphs, upon the determination of the Administrator that such action is necessary in support of establishment of a United States strategic presence on the Moon, the Administrator may transfer funds between Deep Space Exploration Systems and LEO and Spaceflight Operations appropriations available to the National Aeronautics and Space Administration, including funds appropriated in prior Acts that remain available for obligation or expenditure, to be merged with and to be available for the same purposes as the appropriation to which transferred. Any transfer pursuant to this provision shall be treated as a reprogramming of funds under section 504 of this Act and shall not be available for obligation except in compliance with the procedures set forth in that section

The spending plan required by this Act shall be provided by NASA at the theme [,] and program [, project and activity] level. The spending plan, as well as any subsequent change of an amount established in that spending plan that meets the notification requirements of section [505] 504 of this Act, shall be treated as a reprogramming under section [505] 504 of this Act and shall not be available for obligation or expenditure except in compliance with the procedures set forth in that section.

[Not more than 40 percent of the amounts made available in this Act for the Gateway; Advanced Cislunar and Surface Capabilities; Commercial LEO Development; and Lunar Discovery and Exploration, excluding the Lunar Reconnaissance Orbiter, may be obligated until the Administrator submits a multi-year plan to the Committees on Appropriations of the House of Representatives and the Senate that identifies estimated dates, by fiscal year, for Space Launch System flights to build the Gateway; the commencement of partnerships with commercial entities for additional LEO missions to land humans and rovers on the Moon; and conducting additional scientific activities on the Moon. The multi-year plan shall include key milestones to be met by fiscal year to achieve goals for each of the lunar programs de-

1186 Administrative Provisions—Continued THE BUDGET FOR FISCAL YEAR 2021

scribed in the previous sentence and funding required by fiscal year to achieve such milestones.] (Science Appropriations Act, 2020.)

GENERAL FUND RECEIPT ACCOUNTS

(in millions of dollars)

Offsetting receipts from the public: 080–322000 All Other General Fund Proprietary Receipts Including Budget Clearing Accounts	2	4

General Fund Offsetting receipts from the public	2	4	4
Intragovernmental payments: 080-388500 Undistributed Intragovernmental Payments and Receivables from Cancelled Accounts	1	2	2
General Fund Intragovernmental payments	1	2	2