NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Budget Authority, dollars in millions	FY 2011 Actual	FY 2012 Estimate		Notional				
			FY 2013 Request	FY 2014	FY 2015	FY 2016	FY 2017	
NASA FY 2013	18,448.0	17,770.0	17,711.4	17,711.4	17,711.4	17,711.4	17,711.4	
Science	4,919.7	5,073.7	4,911.2	4,914.4	4,914.4	4,914.4	4,914.4	
Earth Science	1,721.9	1,760.5	1,784.8	1,775.6	1,835.5	1,826.2	1,772.8	
Planetary Science	1,450.8	1,501.4	1,192.3	1,133.7	1,102.0	1,119.4	1,198.8	
Astrophysics	631.1	672.7	659.4	703.0	693.7	708.9	710.2	
James Webb Space Telescope	476.8	518.6	627.6	659.1	646.6	621.6	571.1	
Heliophysics	639.2	620.5	647.0	643.0	636.7	638.3	661.6	
Aeronautics	533.5	569.4	551.5	551.5	551.5	551.5	551.5	
Space Technology	456.3	573.7	699.0	699.0	699.0	699.0	699.0	
Exploration	3,821.2	3,712.8	3,932.8	4,076.5	4,076.5	4,076.5	4,076.5	
Exploration Systems Development	2,982.1	3,007.1	2,769.4	2,913.1	2,913.1	2,913.1	2,913.1	
Commercial Spaceflight	606.8	406.0	829.7	829.7	829.7	829.7	829.7	
Exploration Research and Development	232.3	299.7	333.7	333.7	333.7	333.7	333.7	
Space Operations	5,146.3	4,187.0	4,013.2	4,035.1	4,035.1	4,035.1	4,035.1	
Space Shuttle	1,592.9	556.2	70.6	0.0	0.0	0.0	0.0	
International Space Station	2,713.6	2,829.9	3,007.6	3,177.6	3,170.9	3,212.8	3,234.3	
Space and Flight Support (SFS)	839.8	800.9	935.0	857.5	864.2	822.3	800.8	
Education	145.4	136.1	100.0	100.0	100.0	100.0	100.0	
Cross-Agency Support	2,956.4	2,993.9	2,847.5	2,847.5	2,847.5	2,847.5	2,847.5	
Center Management and Operations	2,189.0	2,204.1	2,093.3	2,093.3	2,093.3	2,093.3	2,093.3	
Agency Management and Operations	767.4	789.8	754.2	754.2	754.2	754.2	754.2	
Construction and Environmental Compliance and Restoration	432.9	487.0	619.2	450.4	450.4	450.4	450.4	
Construction of Facilities	373.3	441.3	552.8	359.5	362.9	360.0	360.0	
Environmental Compliance and	59.6	45.6	66.4	90.9	87.5	90.4	90.4	
Office of Inspector General	36.3	38.3	37.0	37.0	37.0	37.0	37.0	
NASA FY 2013	18,448.0	17,770.0	17,711.4	17,711.4	17,711.4	17,711.4	17,711.4	

^{1.} FY 2011 and FY 2012 are consistent with submitted operating plans. However, for comparability purposes, values for Space Technology in those years reflect the funding for Space Technology-related activities executed in Exploration, Space Operations, and Cross Agency Support.

^{2.} FY 2012 Estimates include the impact to appropriation accounts of the \$30 million rescission included in the 2012 Appropriation Act, in addition to \sim \$1 million from other prior appropriations included in the total.

^{3.} Funds associated with outyear estimates for programmatic construction remain in programmatic accounts.

^{4.} FY 2014 - FY 2017 outyear amounts are notional.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

FY 2013 PRESIDENT'S BUDGET REQUEST SUMMARY

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				Notional				
udget Authority, dollars in millions	FY 2011 Actual	FY 2012 Estimate	FY 2013 Request	FY 2014	FY 2015	FY 2016	FY 2017	
ASA FY 2013	18,448.0	17,770.0	17,711.4	17,711.4	17,711.4	17,711.4	17,711.4	
cience	4,919.7	5,073.7	4,911.2	4,914.4	4,914.4	4,914.4	4,914.4	
Earth Science	1,721.9	1,760.5	1,784.8	1,775.6	1,835.5	1,826.2	1,772.8	
Earth Science Research	461.1	440.1	433.6	461.7	485.1	497.3	508.1	
Earth Science Research and Analysis	299.0	332.3	324.3	327.8	336.4	343.7	347.9	
Computing and Management	162.1	107.7	109.3	133.9	148.7	153.6	160.2	
Earth Systematic Missions	841.2	881.1	886.0	<u>787.6</u>	813.2	835.6	<u>756.4</u>	
Global Precipitation Measurement (GPM)	133.6	92.9	88.0	66.2	19.1	18.1	10.2	
Landsat Data Continuity Mission (LDCM) Ice, Cloud, and land Elevation Satellite (ICESat-	166.0 59.7	159.3 120.5	54.7 157.2	2.1 145.4	2.1 89.7	2.2 92.7	2.3 14.1	
Soil Moisture Active and Passive (SMAP)	92.5	176.3	237.4	89.1	89.7 86.7	15.9	14.1	
Other Missions and Data Analysis	389.5	332.0	348.7	484.7	615.7	706.7	718.5	
Earth System Science Pathfinder	182.8	188.3	219.5	270.9	275.6	224.2	234.4	
OCO-2	89.0	98.4	75.3	57.9	45.4	16.0	4.0	
Venture Class Missions	32.0	53.6	106.2	173.6	190.1	167.1	188.9	
Other Missions and Data Analysis	61.7	36.3	38.0	39.4	40.1	41.1	41.5	
Earth Science Multi-Mission Operations	147.4	163.4	161.7	170.2	172.9	176.5	177.6	
Earth Science Multi-Mission Operations	147.4	163.4	161.7	170.2	172.9	176.5	177.6	
Earth Science Technology	52.8	51.2	49.5	50.1	52.1	54.1	56.1	
Earth Science Technology	52.8	51.2	49.5	50.1	52.1	54.1	56.1	
Applied Sciences	36.6	36.4	34.6	35.0	36.7	38.4	40.1	
Pathways	36.6	36.4	34.6	35.0	36.7	38.4	40.1	
Planetary Science	1,450.8	1,501.4	1,192.3	1,133.7	1,102.0	1,119.4	1,198.8	
Planetary Science Research	158.8	174.1	188.5	222.5	233.4	231.7	230.3	
Planetary Science Research and Analysis	122.3	122.3	125.3	130.1	133.5	134.6	135.5	
Other Missions and Data Analysis	24.0	27.4	38.8	64.6	72.1	69.5	66.9	
Education and Directorate Management	4.6	4.0	4.0	7.3	7.3	7.1	7.4	
Near Earth Object Observations	7.8	20.4	20.5	20.5	20.5	20.5	20.5	
Lunar Quest Program	130.2	<u>139.9</u>	61.5	6.2	0.0	0.0	0.0	
Lunar Science	61.7	66.7	17.3	3.7	0.0	0.0	0.0	
Lunar Atmosphere and Dust Environment	64.5	70.4	41.4	2.5	0.0	0.0	0.0	
Surface Science Lander Technology	4.0	2.8	2.8	0.0	0.0	0.0	0.0	
Discovery Other Missions and Parts Application	192.0	172.6	189.6	242.2	235.6	193.8	134.3	
Other Missions and Data Analysis New Frontiers	192.0	172.6 160.7	189.6	242.2 269.8	235.6 279.6	193.8 259.9	134.3	
OSIRIS-REx	213.2 4.9	110.3	175.0 137.5	228.8	224.2	202.1	155.1 44.9	
Other Missions and Data Analysis	208.3	50.5	37.5	41.0	55.4	57.8	110.1	
Mars Exploration	547.4	587.0	360.8	227.7	188.7	266.9	503.1	
MAVEN	160.6	245.7	146.4	37.6	17.3	5.3	0.0	
Other Missions and Data Analysis	386.8	341.4	214.4	190.1	171.4	261.6	503.1	
Outer Planets	91.9	122.1	84.0	80.8	78.8	76.2	76.3	
Outer Planets	91.9	122.1	84.0	80.8	78.8	76.2	76.3	
Technology	117.3	144.9	132.9	84.6	85.9	90.9	99.6	
Technology	117.3	144.9	132.9	84.6	85.9	90.9	99.6	
Astrophysics	631.1	672.7	659.4	703.0	693.7	708.9	710.2	
Astrophysics Research	146.9	164.1	176.2	189.1	205.1	211.5	218.7	
Astrophysics Research and Analysis	59.6	64.6	64.2	65.5	66.8	68.2	69.5	
Balloon Project	26.8	31.6	31.3	31.2	32.8	34.2	34.3	
Other Missions and Data Analysis	60.5	67.9	80.6	92.3	105.4	109.2	114.8	
Cosmic Origins	229.1	237.3	240.4	228.5	215.1	205.3	205.7	
Hubble Space Telescope	91.7	95.7	98.3	98.3	94.3	90.2	90.5	
Stratospheric Observatory for Infrared Astronomy	79.9	84.2	85.5	88.0	88.0	86.0	85.9	
Other Missions And Data Analysis	57.6	57.4	56.6	42.2	32.8	29.1	29.3	
Physics of the Cosmos	108.7	108.3	111.8	109.6	96.3	92.7	74.6	
Other Missions and Data Analysis	108.7	108.3	111.8	109.6	96.3	92.7	74.6	
Exoplanet Exploration	46.4	50.8	<u>56.0</u>	<u>41.6</u>	43.3	42.4	45.6	
Other Missions and Data Analysis	46.4	50.8	56.0	41.6	43.3	42.4	45.6	
Astrophysics Explorer	100.0	112.2	<u>75.1</u>	134.3	133.9	<u>157.0</u>	165.6	
1 1 1 1 1							0.0	
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Other Missions and Data Analysis	41.0	37.2	24.1	97.1	131.2	156.8	165.6	
Astrophysics Explorer Nuclear Spectroscopic Telescope Array (NuSTAR) Gravity and Extreme Magnetism Other Missions and Data Analysis	100.0 36.1 23.0 41.0	112.2 11.8 63.2 37.2	75.1 4.7 46.4 24.1	134.3 4.4 32.9 97.1	133.9 0.0 2.7 131.2	157.0 0.0 0.2 156.8		

				Notional			
Budget Authority, dollars in millions	FY 2011 Actual	FY 2012 Estimate	FY 2013 Request	FY 2014	FY 2015	FY 2016	FY 2017
James Webb Space Telescope	476.8	518.6	627.6	659.1	646.6	621.6	571.1
Heliophysics	639.2	620.5	647.0	643.0	636.7	638.3	661.6
Heliophysics Research	<u>160.8</u>	175.2	<u>178.9</u>	<u>162.6</u>	<u>168.5</u>	<u>170.3</u>	<u>171.6</u>
Heliophysics Research and Analysis	34.0	32.9	32.7	31.0	31.5	31.5	31.5
Sounding Rockets Research Range	45.9 19.5	52.3 20.1	56.1 20.5	51.6 21.0	56.3 21.3	53.0 21.6	53.0 21.7
Other Missions and Data Analysis	61.4	69.9	69.6	58.9	59.5	64.2	65.5
Living with a Star	218.4	196.3	232.6	212.2	286.2	336.6	351.7
Radiation Belt Storm Probes (RBSP)	146.1	86.1	37.7	14.5	9.1	0.0	0.0
Solar Probe Plus	13.9	49.5	112.1	103.2	137.1	229.3	215.2
Solar Orbiter Collaboration	8.3	21.3	21.3	58.2	102.1	75.6	100.0
Other Missions and Data Analysis	50.2	39.3	61.5	36.3	37.8	31.8	36.5
Solar Terrestrial Probes	168.3	188.7	189.4	179.8	64.5	46.7	53.4
Magnetospheric MultiScale (MMS)	150.8	170.3	168.3	157.6	42.9	20.4	12.5
Other Missions and Data Analysis	17.4	18.5	21.1	22.2	21.6	26.3	40.9
Heliophysics Explorer IRIS	91.7 63.5	60.2 39.1	46.1 12.1	88.4 7.3	117.5 1.2	$\frac{84.8}{0.0}$	84.8 0.0
Other Missions and Data Analysis	28.1	21.1	34.0	81.1	116.3	84.8	84.8
New Millennium	0.1	0.0	0.0	0.0	0.0	0.0	0.0
New Millennium	0.1	0.0	0.0	0.0	0.0	0.0	$\frac{0.0}{0.0}$
Aeronautics	533.5	569.4	551.5	551.5	551.5	551.5	551.5
Aeronautics	533.5	569.4	551.5	551.5	551.5	551.5	551.5
Aviation Safety	<u>67.3</u>	80.1	81.1	81.0	81.4	<u>81.9</u>	82.5
Aviation Safety	67.3	80.1	81.1	81.0	81.4	81.9	82.5
Airspace Systems	<u>87.2</u>	92.7	93.3	92.6	91.9	91.2	90.5
Airspace Systems	87.2	92.7	93.3	92.6	91.9	91.2	90.5
Fundamental Aeronautics Fundamental Aeronautics	206.3 206.3	186.3 186.3	168.7 168.7	171.3 171.3	173.3 173.3	175.3 175.3	<u>177.1</u> 177.1
Aeronautics Test	76.4	79.4	78.1	78.0	78.0	78.1	78.2
Aeronautics Test	76.4	79.4	78.1	78.0	78.0	78.1	78.2
Integrated Systems Research	75.9	104.2	104.0	102.3	101.2	100.1	98.8
Integrated Systems Research	75.9	104.2	104.0	102.3	101.2	100.1	98.8
Aeronautics Strategy and Management	20.4	<u>26.7</u>	<u>26.4</u>	<u>26.2</u>	<u>25.7</u>	<u>25.0</u>	24.4
Aeronautics Strategy and Management	20.4	26.7	26.4	26.2	25.7	25.0	24.4
Space Technology	456.3	573.7	699.0	699.0	699.0	699.0	699.0
Space Technology	456.3	573.7	699.0	699.0	699.0	699.0	699.0
SBIR and STTR SBIR and STTR	<u>164.7</u> 164.7	166.7 166.7	173.7 173.7	181.9 181.9	187.2 187.2	195.3 195.3	206.0 206.0
Partnerships Dev & Strategic Integration	26.6	29.5	29.5	29.5	29.5	29.5	29.5
Partnership Development and Strategic	26.6	29.5	29.5	29.5	29.5	29.5	29.5 29.5
Crosscutting Space Tech Development	120.4	187.7	293.8	272.1	266.6	259.7	247.0
Crosscutting Space Tech Development	120.4	187.7	293.8	272.1	266.6	259.7	247.0
Exploration Technology Development	144.6	<u>189.9</u>	202.0	<u>215.5</u>	<u>215.7</u>	214.5	216.5
Exploration Technology Development Exploration	144.6 3,821.2	189.9 3,712.8	202.0 3,932.8	215.5 4,076.5	215.7 4,076.5	214.5 4,076.5	216.5 4,076.5
Exploration Exploration Systems Development	2,982.1	3,007.1	2,769.4	2,913.1	2,913.1	2,913.1	2,913.1
Multi-Purpose Crew Vehicle	1,196.0	1,200.0	1,024.9	1,028.2	1,028.2	1,028.2	1,028.2
Crew Vehicle Development	1,086.0	1,142.9	968.5	975.8	980.2	984.2	983.7
MPCV Program Integration and Support	110.0	57.1	56.4	52.4	48.0	44.0	44.4
Space Launch System	1,536.1	1,502.6	1,340.0	1,429.3	1,429.3	1,429.3	1,429.3
Launch Vehicle Development	1,313.8	1,456.1	1,304.1	1,399.1	1,397.9	1,393.4	1,364.4
SLS Program Integration and Support	222.3	46.4	35.9	30.2	31.4	35.9	64.9
Exploration Ground Systems Exploration Ground Systems	250.0 250.0	304.5 304.5	404.5 404.5	455.6 455.6	455.6 455.6	455.6 455.6	455.6 455.6
Commercial Spaceflight	606.8	406.0	829.7	829.7	829.7	829.7	829.7
Commercial Cargo	299.4	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Orbital Transportation Services	299.4	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Crew	<u>307.4</u>	406.0	829.7	829.7	829.7	829.7	829.7
Commercial Crew	307.4	406.0	829.7	829.7	829.7	829.7	829.7

		FY 2012 Estimate	FY 2013 Request	Notional				
Budget Authority, dollars in millions	FY 2011 Actual			FY 2014	FY 2015	FY 2016	FY 2017	
Exploration Research and Development	232.3	299.7	333.7	333.7	333.7	333.7	333.7	
Human Research Program	154.7	157.7	164.7	164.7	164.7	164.7	164.7	
Human Research Program	154.7	157.7	164.7	164.7	164.7	164.7	164.7	
Advanced Exploration Systems Advanced Exploration Systems	77.6 77.6	$\frac{142.0}{142.0}$	169.0 169.0	169.0 169.0	169.0 169.0	169.0 169.0	169.0 169.0	
Space Operations	5,146.3	4,187.0	4,013.2	4,035.1	4,035.1	4,035.1	4,035.1	
Space Shuttle	1,592.9	556.2	70.6	0.0	0.0	0.0	0.0	
Space Shuttle Program	1,592.9	556.2	70.6	0.0	0.0	0.0	0.0	
SPOC Pension Liability	0.0	470.0	0.0	0.0	0.0	0.0	0.0	
Program Integration	618.6	19.4	31.9	0.0	0.0	0.0	0.0	
Flight and Ground Operations	502.4	40.0	24.9	0.0	0.0	0.0	0.0	
Flight Hardware	471.9	26.8	13.8	0.0	0.0	0.0	0.0	
International Space Station	2,713.6	2,829.9	3,007.6	3,177.6	3,170.9	3,212.8	3,234.3	
International Space Station Program	2,713.6	2,829.9	3,007.6	3,177.6	3,170.9	3,212.8	3,234.3	
ISS Systems Operations and Maintenance	1,681.1	1,418.7	1,493.5	1,354.4	1,200.1	1,170.0	1,077.8	
ISS Research	175.7	225.5	229.3	227.4	231.3	238.3	241.7	
ISS Crew and Cargo Transportation	856.8	1,185.7	1,284.8	1,595.8	1,739.6	1,804.5	1,914.8	
Space and Flight Support	839.8	800.9	935.0	857.5	864.2	822.3	800.8	
21st Century Space Launch Complex	142.8	123.5	41.1	47.0	47.0	47.0	47.0	
21st Century Space Launch Complex	142.8	123.5	41.1	47.0	47.0	47.0	47.0	
Space Communications and Navigation	<u>456.7</u>	445.5	<u>655.6</u>	<u>570.7</u>	<u>577.3</u>	535.4	<u>513.9</u>	
Space Communications Networks	347.8	364.2	440.3	423.9	432.9	435.1	437.0	
Space Communications Support TDRS Replenishment	92.0 16.9	66.0 15.2	78.2 137.1	79.5 67.2	71.5 73.0	71.8 28.6	74.3 2.6	
Human Space Flight Operations	112.8	107.3	111.1	111.1	111.1	111.1	111.1	
Human Space Flight Operations	112.8	107.3	111.1	111.1	111.1	111.1	111.1	
Launch Services	83.3	81.0	81.2	82.8	82.8	82.8	82.8	
Launch Services	83.3	81.0	81.2	82.8	82.8	82.8	82.8	
Rocket Propulsion Test	44.2	43.6	45.9	45.9	45.9	45.9	45.9	
Rocket Propulsion Testing	44.2	43.6	45.9	45.9	45.9	45.9	45.9	
Education	145.4	136.1	100.0	100.0	100.0	100.0	100.0	
Education	145.4	136.1	100.0	100.0	100.0	100.0	100.0	
Aerospace Research and Career Development	70.4	<u>56.1</u>	33.0	33.0	33.0	33.0	33.0	
NASA Space Grant	45.5	38.9	24.0	24.0	24.0	24.0	24.0	
EPSCoR	24.9	17.3	9.0	9.0	9.0	9.0	9.0	
STEM Education and Accountability Minority University Research Education Program	75.0 28.5	$\frac{80.0}{30.0}$	$\frac{67.0}{30.0}$	$\frac{67.0}{30.0}$	$\frac{67.0}{30.0}$	$\frac{67.0}{30.0}$	67.0 30.0	
STEM Education and Accountability Projects	46.5	50.0	37.0	37.0	37.0	37.0	37.0	
Cross-Agency Support	2,956.4	2,993.9	2,847.5	2,847.5	2,847.5	2,847.5	2,847.5	
Center Management and Operations	2,189.0	2,204.1	2,093.3	2,093.3	2,093.3	2,093.3	2,093.3	
Center Management and Operations	2,189.0	2,204.1	2,093.3	2,093.3	2,093.3	2,093.3	2,093.3	
Center Institutional Capabilities	1,710.8	1,703.4	1,628.5	1,623.6	1,617.0	1,606.7	1,594.2	
Center Programmatic Capabilities	478.1	500.7	464.8	469.7	476.3	486.6	499.1	
Agency Management and Operations	767.4	789.8	754.2	754.2	754.2	754.2	754.2	
Agency Management	<u>401.9</u>	403.2	<u>391.8</u>	<u>391.8</u>	<u>391.8</u>	<u>391.8</u>	<u>391.8</u>	
Agency Management	401.9	403.2	391.8	391.8	391.8	391.8	391.8	
Safety and Mission Success	<u>191.2</u>	198.2	182.4	182.4	182.4	182.4	182.4	
Safety and Mission Assurance	48.1	49.4	47.8	47.8	47.8	47.8	47.8	
Chief Engineer Chief Health and Medical Officer	99.2 4.0	105.2 4.5	98.6	98.6 4.3	98.6	98.6	98.6	
Independent Verification and Validation	39.9	39.1	4.3 31.7	31.7	4.3 31.7	4.3 31.7	4.3 31.7	
Agency IT Services	145.0	159.1	152.0	152.0	152.0	152.0	152.0	
IT Management	15.0	14.6	10.5	10.5	10.5	10.5	10.5	
Applications	75.3	67.8	67.8	67.8	67.8	67.8	67.8	
Infrastructure	54.7	76.6	73.7	73.7	73.7	73.7	73.7	
Strategic Capabilities Assets Program	29.4	29.3	28.0	28.0	28.0	28.0	28.0	
Strategic Capabilities Assets Program	29.4	29.3	28.0	28.0	28.0	28.0	28.0	

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Budget Authority, dollars in millions	FY 2011 Actual	FY 2012 Estimate	FY 2013 Request	Notional				
				FY 2014	FY 2015	FY 2016	FY 2017	
Construction and Environmental Compliance and Restoration	432.9	486.0	619.2	450.4	450.4	450.4	450.4	
Construction of Facilities	373.3	441.2	552.8	359.5	362.9	360.0	360.0	
Institutional CoF	265.1	310.6	384.0	<u>359.5</u>	<u>362.9</u>	360.0	360.0	
Institutional CoF	265.1	310.6	384.0	359.5	362.9	360.0	360.0	
Science CoF	52.5	11.5	3.2	0.0	0.0	0.0	0.0	
Science CoF	52.5	11.5	3.2	0.0	0.0	0.0	0.0	
Exploration CoF	<u>15.1</u>	<u>52.5</u>	143.7	0.0	0.0	0.0	0.0	
Exploration CoF	15.1	52.5	143.7	0.0	0.0	0.0	0.0	
Space Operations CoF	<u>40.6</u>	66.7	21.9	0.0	0.0	0.0	0.0	
Space Operations CoF	40.6	66.7	21.9	0.0	0.0	0.0	0.0	
Environmental Compliance and Restoration	59.6	44.8	66.4	90.9	87.5	90.4	90.4	
Office of Inspector General	36.3	38.3	37.0	37.0	37.0	37.0	37.0	
Prior Appropriation Accounts	0.0	(1.0)	0.0	0.0	0.0	0.0	0.0	
NASA FY 2013	18,448.0	17,770.0	17,711.4	17,711.4	17,711.4	17,711.4	17,711.4	