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NASA Appropriations and Authorizations: A Fact Sheet

Daniel Morgan

Specialist in Science and Technology Policy

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Overview

Congressional deliberations about the National Aeronautics and Space Administration (NASA) often focus on the availability of funding. This fact sheet provides data on past and current NASA appropriations, as well as the President's budget request for FY2020 and congressional action on FY2020 appropriations.

Table 1 shows appropriations for NASA from FY2014 through FY2019. The data for FY2014 through FY2018 include supplemental appropriations, rescissions, transfers, and reprogramming. They are taken from NASA's congressional budget justifications for FY2016 through FY2020.¹ Congressional budget justifications are available on the NASA budget website (<http://www.nasa.gov/news/budget/>) for the current year and for past years back to FY2002. The data for FY2019 are as enacted by the Consolidated Appropriations Act, 2019 (P.L. 116-6). For amounts not specified in that act, see the conference report, H.Rept. 116-9.

Table 2 shows FY2018 appropriations as enacted (i.e., without the supplemental appropriations and other adjustments reflected in **Table 1**); the Administration's request for FY2019; authorization and appropriations amounts for FY2019 that were proposed in legislation in the 115th and 116th Congresses; and the appropriations for FY2019 that were enacted in February 2019 in the Consolidated Appropriations Act, 2019 (P.L. 116-6).

Table 3 shows FY2019 appropriations as enacted, the Administration's request for FY2020, additional FY2020 funding requested in the Administration's May 2019 budget amendment, and FY2020 funding that would be provided by the Commerce, Justice, Science, and Related Agencies Appropriations Act, 2020 (Division A of H.R. 3055 as passed by the House in June 2019). The table will be updated to add other authorization and appropriations amounts proposed in legislation when that information becomes available.

Note that the Administration's budget requests for FY2019 and FY2020 proposed new names for some NASA accounts. In the enacted FY2019 appropriation, Education became Science, Technology, Engineering and Mathematics (STEM) Engagement. The Administration has also proposed renaming Space Technology as Exploration Technology; Exploration as Deep Space Exploration Systems; and Space Operations as Low Earth Orbit (LEO) and Spaceflight Operations. The Administration's proposals would also transfer certain activities from Exploration to Space Technology, so the amounts shown for those items in **Table 2** and **Table 3** represent somewhat different content in different columns.

Figure 1 shows NASA's total annual budget authority from the agency's establishment in FY1958 to FY2019, in both current dollars and inflation-adjusted FY2019 dollars.

For additional information on selected NASA programs, see also CRS In Focus IF10940, *The James Webb Space Telescope*; CRS In Focus IF10828, *The International Space Station (ISS) and the Administration's Proposal to End Direct NASA Funding by 2025*; and the discussion of NASA's use of commercial space capabilities in CRS Report R45416, *Commercial Space: Federal Regulation, Oversight, and Utilization*.

¹ FY2016 and FY2017 Education amounts are not shown in the FY2018 and FY2019 congressional budget justifications and are instead taken from the explanatory statement for the Consolidated Appropriations Act, 2016 (P.L. 114-113), *Congressional Record*, December 17, 2015, pp. H9741-H9743, and the explanatory statement for the Consolidated Appropriations Act, 2017 (P.L. 115-31), *Congressional Record*, May 3, 2017, pp. H3374-H3375.

Table I. NASA Appropriations, FY2014-FY2019
(budget authority in \$ millions)

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Science	\$5,148	\$5,243	\$5,584	\$5,762	\$6,212	\$6,906
Earth Science	1,825	1,784	1,927	1,908	1,921	1,931
Planetary Science	1,346	1,447	1,628	1,828	2,218	2,759
Astrophysics	678	731	762	783	850	1,192
James Webb Space Telescope	658	645	620	569	534	305
Heliophysics	641	636	647	675	689	720
Aeronautics	566	642	634	656	685	725
Space Technology	576	600	686	687	760	927
Exploration	4,113	3,543	3,996	4,324	4,790	5,051
Exploration Systems Development	3,115	3,212	3,641	3,929	4,395	4,093
<i>Orion</i>	<i>1,197</i>	<i>1,190</i>	<i>1,270</i>	<i>1,330</i>	<i>1,350</i>	<i>1,350</i>
<i>Space Launch System</i>	<i>1,600</i>	<i>1,679</i>	<i>1,972</i>	<i>2,127</i>	<i>2,150</i>	<i>2,150</i>
<i>Exploration Ground Systems</i>	<i>318</i>	<i>343</i>	<i>399</i>	<i>472</i>	<i>895</i>	<i>593</i>
Commercial Spaceflight	696	— ^a	— ^a	— ^a	— ^a	— ^a
Exploration R&D	302	331	355	395	395	958
Space Operations	3,774	4,626	5,032	4,943	4,749	4,639
Space Shuttle	0	8	5	0	0	0
International Space Station	2,964	1,525	1,436	1,451	1,493	n/s
Space Transportation	— ^b	2,254	2,668	2,589	2,346	n/s
Space and Flight Support	810	839	923	903	910	n/s
Commercial LEO Development	—	—	—	—	—	40
Education / STEM Engagement	117	119	115	100	100	110
Space Grant	40	40	40	40	40	44
EPSCoR	18	18	18	18	18	21
MUREP	30	32	32	32	32	33
Other	29	29	25	10	10	12
Safety, Security, & Mission Svcs.	2,793	2,755	2,772	2,769	2,827	2,755
Construction and EC&R	522	446	427	485^c	657^d	348
Inspector General	38	37	37	38	39	39
Total	17,647	18,010	19,285	19,762^c	20,817^d	21,500

Sources: FY2014-FY2018 from NASA FY2016-FY2020 congressional budget justifications. FY2019 from P.L. 116-6 and H.Rept. 116-9.

Notes: Some totals may not add because of rounding. R&D = Research and Development. LEO = Low Earth Orbit. STEM = Science, Technology, Engineering, and Mathematics. EPSCoR = Established Program to Stimulate Competitive Research. MUREP = Minority University Research and Education Program. EC&R = Environmental Compliance and Remediation. n/s = not specified.

- a. Included in Space Transportation under Space Operations.
- b. Commercial Crew funded under Exploration. Remainder of Space Transportation included in International Space Station.
- c. Includes \$109 million in additional emergency funding from Section 540 of the Consolidated Appropriations Act, 2017 (P.L. 115-31) that is not shown in the NASA FY2019 congressional budget justification.
- d. Includes \$81 million in supplemental emergency funding from the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2018 (Division B of P.L. 115-123) that is not shown in the NASA FY2020 congressional budget justification.

Table 2. NASA Appropriations and Authorizations, FY2019
(budget authority in \$ millions)

	FY2018 Enacted	FY2019 Appropriations				FY2019 Auth.	
		Request	House (115 th)	Senate (115 th)	Enacted (116 th)	House (115 th)	Senate (115 th)
Science	\$6,222	\$5,895	\$6,681	\$6,400	\$6,906	\$6,624	\$6,400
Earth Science	1,921	1,784	1,900	1,931	1,931	1,921	n/s
Planetary Science	2,228	2,235	2,759	2,202	2,759	2,637	n/s
Astrophysics	850	1,185	1,029	1,243	1,192	1,375	n/s
James Webb Space Telescope	534	— ^a	305	305	305	—	n/s
Heliophysics	689	691	689	720	720	691	n/s
Aeronautics	685	634	715	725	725	685	725
Space Tech. / Exploration Tech.	760	1,003	900	933	927	1,018	1,003
Exploration / Deep Sp. Exp. Sys.	4,790	4,559	5,084	5,339	5,051	4,929	5,339
Exploration Systems Development	4,395	3,670	4,045	4,295	4,093	4,040	n/s
<i>Orion</i>	1,350	1,164	1,350	1,350	1,350	1,350	n/s
<i>Space Launch System</i>	2,150	2,078	2,150	2,150	2,150	2,150	n/s
<i>Exploration Ground Systems</i>	895	428	545	795	593	540	n/s
Exploration R&D	395	889	1,039	1,044	958	889	n/s
Space Ops. / LEO and Spflt. Ops.	4,752	4,625	4,625	4,639	4,639	4,625	4,639
International Space Station	n/s	1,462	n/s	n/s	n/s	1,462	n/s
Space Transportation	n/s	2,109	n/s	2,109	n/s	2,109	n/s
Space and Flight Support	n/s	904	n/s	n/s	n/s	904	n/s
Commercial LEO Development	—	150	150	40	40	150	n/s
Education / STEM Engagement	100	0	90	110	110	108	100
Space Grant	40	0	40	44	44	40	n/s
EPSCoR	18	0	18	21	21	18	n/s
MUREP	32	0	32	33	33	n/s	n/s
Other	10	0	0	12	12	n/s	n/s
Safety, Security, & Mission Svcs.	2,827	2,750	2,850	2,750	2,755	2,750	2,850
Construction and EC&R	562	388	562	388	348	438	451
Inspector General	39	39	39	39	39	39	39
Total	20,736	19,892	21,546	21,323	21,500	21,215	21,546

Sources: FY2018 enacted from P.L. 115-141 and explanatory statement, *Congressional Record*, March 22, 2018, pp. H2094-H2096. Request from FY2019 NASA congressional budget justification. House (115th Congress) from H.R. 5952 as reported and H.Rept. 115-704. Senate (115th Congress) from S. 3072 as reported and S.Rept. 115-275; H.R. 21 as passed by the House would have provided the same amounts. Enacted from P.L. 116-6 and H.Rept. 116-9; H.R. 648 as passed by the House would have provided the same amounts. Authorizations from H.R. 5503 (115th Congress) as reported and S. 3799 (115th Congress) as introduced.

Notes: Some totals may not add because of rounding. R&D = Research and Development. LEO = Low Earth Orbit. STEM = Science, Technology, Engineering, and Mathematics. EPSCoR = Established Program to Stimulate Competitive Research. MUREP = Minority University Research and Education Program. EC&R = Environmental Compliance and Remediation. n/s = not specified. See text for name changes and variations in program content.

a. \$305 million included in Astrophysics.

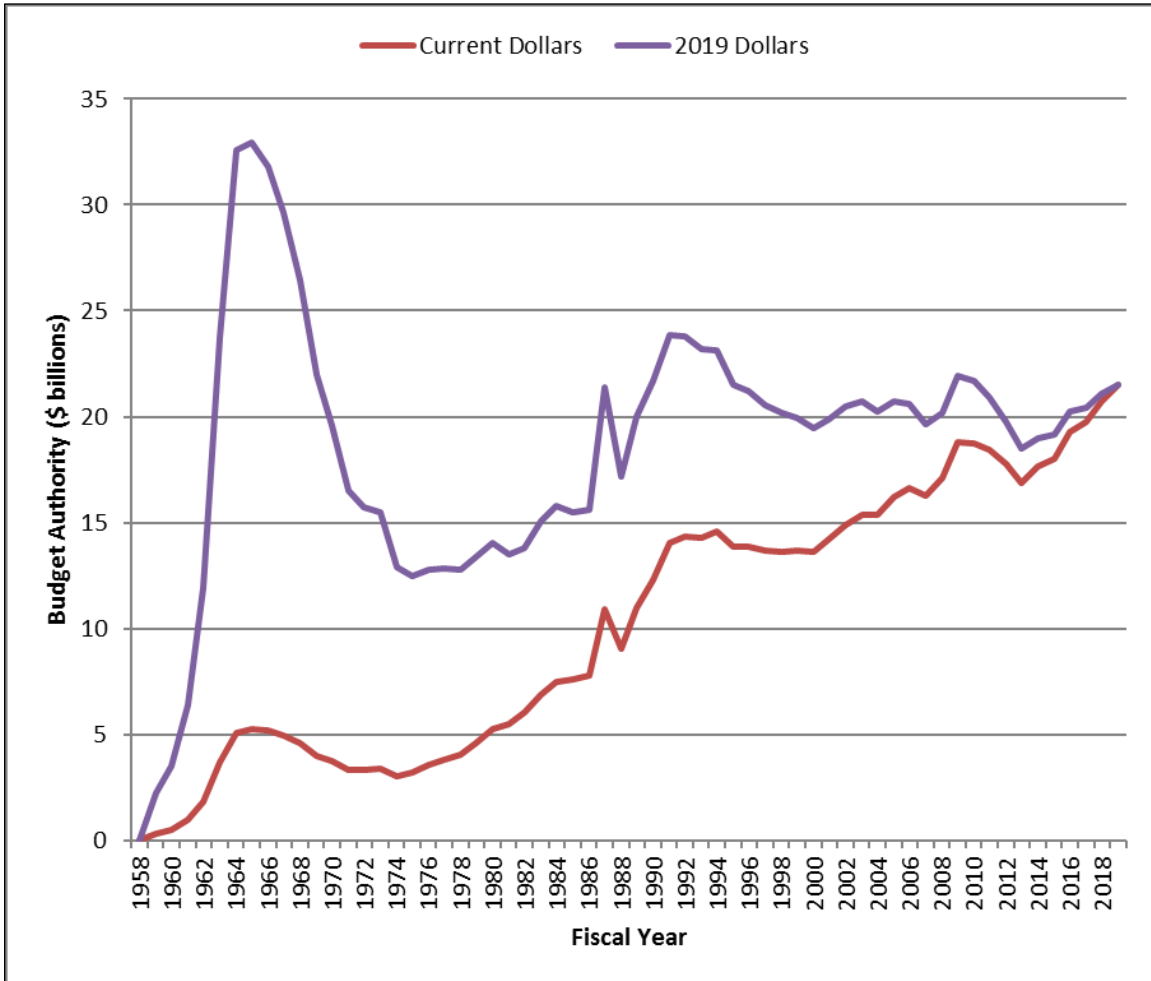
Table 3. NASA Appropriations, FY2020
(budget authority in \$ millions)

	FY2020 Appropriations					
	FY2019 Enacted	Original Request	Budget Amdmt.	House	Senate	Enacted
Science	\$6,906	\$6,304	+\$90	\$7,161		
Earth Science	1,931	1,780		2,023		
Planetary Science	2,759	2,622		2,713		
Astrophysics	1,192	845		1,368		
James Webb Space Telescope	305	353		353		
Heliophysics	720	705		705		
Aeronautics	725	667		700		
Space Tech. / Exploration Tech.	927	1,014	+132	1,292		
Exploration / Deep Sp. Exp. Sys.	5,051	5,022	+1,375	5,130		
Exploration Systems Development	4,093	3,442		4,168		
<i>Orion</i>	1,350	1,266		1,425		
<i>Space Launch System</i>	2,150	1,775		2,150		
<i>Exploration Ground Systems</i>	593	400		593		
Exploration R&D	958	1,580		962		
Space Ops. / LEO and Spflt. Ops.	4,639	4,286		4,286		
International Space Station	n/s	1,458		n/s		
Space Transportation	n/s	1,829		n/s		
Space and Flight Support	n/s	849		n/s		
Commercial LEO Development	40	150		n/s		
STEM Engagement	110	0		124		
Space Grant	44	0		49		
EPSCoR	21	0		25		
MUREP	33	0		37		
Other	12	0		13		
Safety, Security, & Mission Svcs.	2,755	3,085		3,085		
Construction and EC&R	348	600		497		
Inspector General	39	42		42		
Total	21,500	21,019	+1,597	22,316		

Sources: FY2019 enacted from P.L. 116-6 and H.Rept. 116-9. Original Request from FY2020 NASA congressional budget justification. Budget Amendment from Estimate #1, May 13, 2019, https://www.whitehouse.gov/wp-content/uploads/2019/05/FY20_Budget_Amendment_5-13-19.pdf. House from H.R. 3055 as passed by the House and H.Rept. 116-101. Other columns will be updated when information becomes available.

Notes: Some totals may not add because of rounding. R&D = Research and Development. LEO = Low Earth Orbit. EPSCoR = Established Program to Stimulate Competitive Research. MUREP = Minority University Research and Education Program. EC&R = Environmental Compliance and Remediation. n/s = not specified. See text for name changes and variations in program content. The budget amendment does not provide a further breakdown of the additional requested amounts.

Figure I. NASA Funding, FY1958-FY2019



Source: Compiled by CRS. FY1958-FY2008 from National Aeronautics and Space Administration, *Aeronautics and Space Report of the President: Fiscal Year 2008 Activities*, <http://history.nasa.gov/presrep2008.pdf>, Table D-1A. FY2009-FY2012 from NASA congressional budget justifications, FY2011-FY2014. FY2013-FY2019 as in **Table I**. Current dollars deflated to FY2019 dollars using GDP (chained) price index from President’s budget for FY2019, Historical Table 10.1, <https://www.whitehouse.gov/wp-content/uploads/2018/02/hist10z1-fy2019.xlsx>.

Note: Transition quarter between FY1976 and FY1977 not shown.

Author Contact Information

Daniel Morgan
 Specialist in Science and Technology Policy
redacted@crs.loc.gov, 7-....

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