

TABLE 9

Federal budget authority for Space flight, research, and supporting activities (252) R&D and R&D plant: FYs 2018–20

(Millions of dollars and percent change)

Budget function and agency	2018 actual	2019 preliminary ^a	2020 proposed ^b	2018–19 (% change)	2019–20 (% change)
R&D and R&D plant	10,552	10,128	10,686	-4.0	5.5
National Aeronautics and Space Administration ^c					
Safety, security, and mission services	273	272	242	-0.4	-11.0
Deep Space Exploration Systems	1,870	1,288	1,883	-31.1	46.3
Exploration R&D	370	766	723	107.0	-5.6
Exploration systems development	1,500	522	1,160	-65.2	122.3
Science	5,490	6,145	5,954	11.9	-3.1
Astrophysics ^d	641	964	1,152	50.5	19.4
Earth science	1,711	1,919	1,761	12.1	-8.3
Heliophysics	586	681	705	16.2	3.5
James Webb Space Telescope ^d	510	375	na	-26.5	--
Planetary science	2,042	2,206	2,337	8.0	6.0
LEO (low earth orbit) and spaceflight operations	2,153	1,586	1,611	-26.3	1.6
International Space Station	1,413	1,480	1,448	4.7	-2.2
Space flight and support	11	5	na	-48.7	--
Space transportation	730	101	13	-86.2	-86.9
Commercial LEO development	na	na	150	--	--
Exploration Technology ^e	669	721	909	7.8	26.0
Construction, environmental compliance, and restoration	97	117	87	20.4	-25.6
R&D	10,455	10,011	10,599	-4.2	5.9
National Aeronautics and Space Administration ^c					
Safety, security, and mission services	273	272	242	-0.4	-11.0
Deep Space Exploration Systems	1,870	1,288	1,883	-31.1	46.3
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Space flight and support	11	5	na	-48.7	--
Space transportation	730	101	13	-86.2	-86.9
Commercial LEO development	na	na	150	--	--
Exploration Technology ^e	669	721	909	7.8	26.0
Construction, environmental compliance, and restoration	0	0	0	--	--

na = not applicable.

^a The FY 2019 data are official estimates reflecting continuing resolution funding for FY 2019 and not the enacted omnibus spending bill for that year (Consolidated Appropriations Act, 2019, signed 15 February 2019). Most federal agencies included in this omnibus did not prepare R&D estimates based on the final spending figures for FY 2019.

^b Along with the regular budget request, the Administration issued a supplement adding \$1.6 billion to the NASA budget request for FY 2020, primarily for Deep Space Exploration Systems, but with some for Science and Exploration Technology as well. This supplemental request likely includes

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substantial R&D funding, but these additional sums for R&D are not reflected in the data presented here.

^c Although not reflected in the data presented here, NASA received an increase of 3.7% in the FY 2019 omnibus.

^d James Webb Space Telescope is included as part of Astrophysics in FY 2020.

^e Renamed from "Exploration Research and Technology" in FY 2019 and "Space Technology" in FY 2018.

Note(s)

Detail may not add to total because of rounding. Percent change is calculated on unrounded data.

Source(s)

Agencies' submissions to the Office of Management and Budget per MAX Schedule C, agencies' budget justification documents, and supplemental data obtained from agencies' budget offices.