

TABLE 9

**Federal budget authority for Space flight, research, and supporting activities (252) R&D and R&D plant: FYs 2019–21**

(Millions of dollars and percent change)

Budget function and agency	2019 actual	2020 preliminary <sup>a</sup>	2021 proposed	2019–20 (% change)	2020–21 (% change)
R&D and R&D plant	10,133	13,482	12,704	33.1	-5.8
National Aeronautics and Space Administration	10,133	13,482	12,704	33.1	-5.8
Safety, security, and mission services	272	237	245	-12.9	3.4
Deep Space Exploration Systems	1,288	3,576	3,139	177.6	-12.2
Exploration R&D	NA	NA	NA	--	--
Exploration systems development	NA	NA	NA	--	--
Science	6,154	7,019	6,261	14.1	-10.8
Astrophysics	NA	NA	NA	--	--
Earth science	NA	NA	NA	--	--
Heliophysics	NA	NA	NA	--	--
James Webb Space Telescope	NA	NA	NA	--	--
Planetary science	NA	NA	NA	--	--
LEO (low earth orbit) and space flight operations	1,586	1,551	1,496	-2.2	-3.5
International Space Station	NA	NA	NA	--	--
Space flight and support	NA	NA	NA	--	--
Space transportation	NA	NA	NA	--	--
Commercial LEO development	NA	NA	NA	--	--
Exploration technology	716	1,045	1,515	45.9	45.0
Construction, environmental compliance, and restoration	117	54	48	-53.8	-11.1
R&D	10,016	13,428	12,656	34.1	-5.7
National Aeronautics and Space Administration	10,016	13,428	12,656	34.1	-5.7
Safety, security, and mission services	272	237	245	-12.9	3.4
Deep Space Exploration Systems	1,288	3,576	3,139	177.6	-12.2
Exploration R&D	NA	NA	NA	--	--
Exploration systems development	NA	NA	NA	--	--
Science	6,154	7,019	6,261	14.1	-10.8
Astrophysics	NA	NA	NA	--	--
Earth science	NA	NA	NA	--	--
Heliophysics	NA	NA	NA	--	--
James Webb Space Telescope	NA	NA	NA	--	--
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LEO (low earth orbit) and space flight operations	1,586	1,551	1,496	-2.2	-3.5
International Space Station	NA	NA	NA	--	--
Space flight and support	NA	NA	NA	--	--
Space transportation	NA	NA	NA	--	--
Commercial LEO development	NA	NA	NA	--	--
Exploration technology	716	1,045	1,515	45.9	45.0
Construction, environmental compliance, and restoration	0	0	0	--	--

NA = not available.

<sup>a</sup> Does not include any R&D funded as part of emergency coronavirus (COVID-19) response legislation in the 2020 calendar year.**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.