National Aeronautics and Space Administration

FY 2025 President's Budget Request

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Exploration Systems Development Mission Directorate (ESDMD)

NASA Headquarters | Washington, D.C.

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NASA's FY 2025 Budget Request

Budget Authority ($M)	FY 2023 Operating Plan[1/]	FY 2024 CR[2/]	FY 2025 Request	FY 2025 Request			
				FY 2026	FY 2027	FY 2028	FY 2029
Deep Space Exploration Systems	7,447.6	7,468.9	**7,618.2**	7,803.7	7,959.8	8,119.0	8,281.4
Moon to Mars Transportation System	4,716.6		4,213.0	4,254.0	4,267.3	3,880.9	3,713.6
Moon To Mars Lunar Systems Development	2,630.5		3,288.1	3,285.7	3,389.5	3,868.8	3,712.3
Human Exploration Requirements & Architecture	100.5		117.1	264.1	303.0	369.3	855.5
Space Operations	4,266.7	4,250.0	**4,389.7**	4,497.6	4,587.6	4,679.4	4,773.0
International Space Station	1,286.2		1,269.6	1,267.8	1,262.8	1,259.4	1,259.4
Space Transportation	1,759.6		1,862.1	1,876.2	1,840.9	1,895.7	1,804.1
Space and Flight Support	983.4		1,088.4	1,051.3	1,048.7	1,059.0	1,080.2
Commercial LEO Development	224.3		169.6	302.3	435.2	465.2	629.3
Exploration Operations	13.2		0.0	0.0	0.0	0.0	0.0
Space Technology	1,193.0	1,200.0	**1,181.8**	1,205.4	1,229.5	1,254.1	1,279.2
Science	7,791.5	7,795.0	**7,565.7**	7,717.0	7,871.3	8,028.7	8,189.3
Earth Science	2,175.0		2,378.7	2,396.3	2,446.1	2,489.7	2,543.4
Planetary Science	3,216.5		2,731.5	2,850.5	2,911.6	2,976.8	3,042.5
Astrophysics	1,510.0		1,578.1	1,587.0	1,613.6	1,647.1	1,673.4
Heliophysics	805.0		786.7	791.9	807.0	820.3	833.4
Biological and Physical Sciences	85.0		90.8	91.3	93.0	94.8	96.6
Aeronautics	935.0	935.0	**965.8**	985.1	1,004.8	1,024.9	1,045.4
STEM Engagement	143.5	143.5	**143.5**	146.4	149.3	152.3	155.3
Safety, Security, and Mission Services	3,136.5	3,129.5	**3,044.4**	3,105.3	3,167.4	3,230.7	3,295.3
Mission Services & Capabilities	2,067.4		2,058.1	2,099.2	2,141.3	2,184.1	2,227.6
Engineering, Safety, & Operations	1,069.1		986.3	1,006.1	1,026.1	1,046.6	1,067.7
Construction and Environmental Compliance & Restoration	422.4	414.3	**424.1**	379.3	386.9	394.6	402.5
Construction of Facilities	346.2		344.7	298.3	304.3	310.4	316.6
Environmental Compliance and Restoration	76.2		79.4	81.0	82.6	84.2	85.9
Inspector General	47.6	47.6	**50.5**	51.5	52.5	53.6	54.7
NASA Total	25,383.7	25,383.7	25,383.7	25,891.3	26,409.1	26,937.3	27,476.1

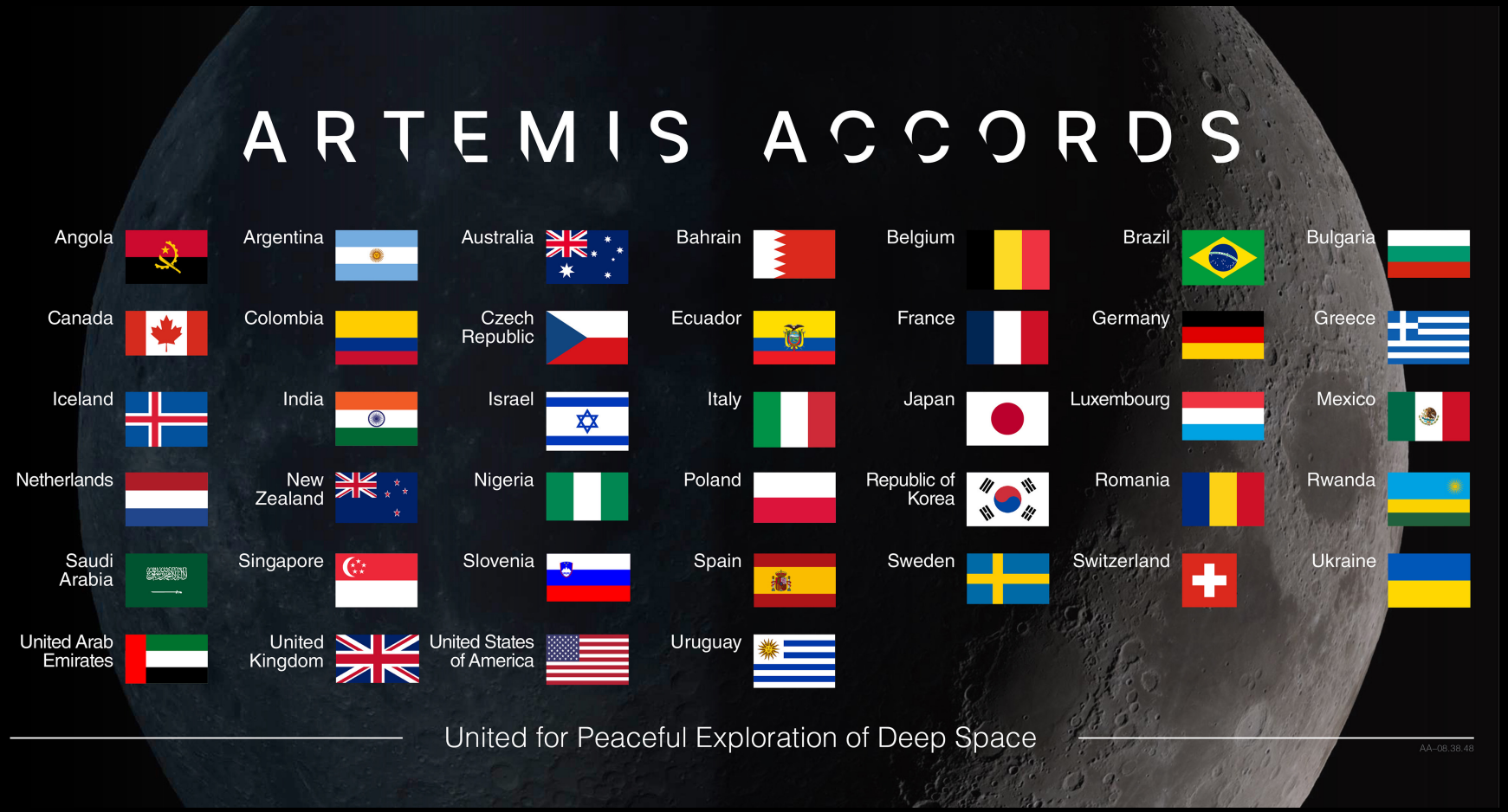
1/ - FY 2023 reflects amounts in Public Law 117-328, Consolidated Appropriations Act, 2023, adjusted by NASA's September 2023 Operating Plan, plus $8M for IT Modernization Working Capital Fund.

2/ - FY 2024 reflects annualized funding amounts based on funding specified in Public Law 117-328, Consolidated Appropriations Act, 2023.

A Global Community with Shared Exploration Goals

International partnerships are critical to the next era of human exploration and expansion into the Solar System.

- Artemis Accords
- Crews
- Hardware
- MOUs
- Scientific collaborations



ESDMD Financial Plan

FY 2025 President's Budget provides **$7.6B** for Deep Space Exploration Systems account to continue pursuit of the nation's exploration goals, consistent with National Space Policy

Budget Authority ($ in millions)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Deep Space Exploration Systems	**7,447.6**	***7,662.2***	**7,618.2**	**7,803.7**	**7,959.8**	**8,119.0**	**8,281.4**
Moon to Mars Transportation System	**4,716.6**		**4,213.0**	**4,254.0**	**4,267.3**	**3,880.9**	**3,713.6**
Orion Program	1,315.1	*1,338.7*	1,031.0	1,176.9	1,288.5	1,266.4	1,166.4
Space Launch System	2,566.8	*2,600.0*	2,423.2	2,379.0	2,402.9	2,072.3	2,026.8
Exploration Ground Systems	834.8		758.8	698.1	576.0	542.3	520.4
Moon to Mars Lunar Systems Development	**2,630.5**		**3,288.1**	**3,285.7**	**3,389.5**	**3,868.8**	**3,712.3**
Gateway	779.2		817.7	627.9	586.8	746.0	635.4
xEVA and Human Surface Mobility Program	324.9	*379.9*	434.2	483.9	644.7	673.6	571.2
Human Landing System	1,386.1	*1,880.5*	1,896.1	2,050.9	1,994.9	2,278.3	2,334.7
Advanced Exploration Systems	140.3		140.2	123.0	163.1	170.9	171.0
Human Exp Requirements & Architecture	**100.5**		**117.1**	**264.1**	**303.0**	**369.3**	**855.5**
Strategy & Architecture	48.3		71.2	137.4	64.1	65.5	66.7
Future Systems	52.2		45.9	126.7	238.8	303.8	788.8
Construction of Facilities	**94.3**	***10.5***	**32.5**	**-**	**-**	**-**	**-**
Exploration CoF	94.3	*10.5*	32.5	-	-	-	-

Priorities maintained for this budget position:

- Holds near term mission dates (Artemis II, Artemis III)
- Holds no more than 2-year gap between Artemis III and Artemis IV
- Holds no more than an 18-month gap between Artemis IV and Artemis V
- Holds Artemis IV development schedules as early as possible (Block 1B, Mobile Launcher 2 (ML-2), Gateway Logistics Services)
- Maintains an annual cadence after Artemis V

Deep Space Exploration Systems:
Moon to Mars Transportation System

Budget Authority ($M)	FY 2023 Operating Plan[1/]	FY 2024 CR[2/]	FY 2025 Request	FY 2025 Request			
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Moon to Mars Transportation System	4,716.6		4,213.0	4,254.0	4,267.3	3,880.9	3,713.6

1/ - FY 2023 reflects funding amounts specified in Public Law 117-328, Consolidated Appropriations Act, 2023, as adjusted by NASA's FY 2023 Operating Plan, September 2023.
2/ - FY 2024 reflects annualized funding amounts based on funding specified in Public Law 117-328, Consolidated Appropriations Act, 2023.

- Enables the Artemis goal of exploring the Moon for scientific discovery, technology advancement, and to learn how to live and work on another world as we prepare for human missions to Mars
- $2,423M for Space Launch System, including successful completion of Artemis II and preparation for Artemis III and IV, and the Block 1B configuration
- $1,031M for the Orion program to finalize assembling and testing the Artemis II crew vehicle, and to continue preparation for Artemis III and IV
- $759M for Exploration Ground Systems to complete preparations for Artemis II; and develop the ground systems, such as the Mobile Launcher 2, required for assembly, test, and launch of SLS Block 1B on Artemis IV

Strategic Objective(s) Supported: Explore
2.1 Explore the surface of the moon and deep space
2.3 Develop capabilities and perform research to safeguard explorers
2.4 Enhance space access and services

Deep Space Exploration Systems:
Moon to Mars Lunar Systems Development

Budget Authority ($M)	FY 2023 Operating Plan[1/]	FY 2024 CR[2/]	FY 2025 Request	FY 2025 Request			
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- $1,896M for the Human Landing System program to develop and deploy landing systems that will transport US and partner nation astronauts to the Moon to conduct lunar science, technology demonstrations, and logistics to enable an enduring presence
- $818M for Gateway development to establish a multi-purpose outpost orbiting the moon to support deep space presence, human lunar landings, and surface activities
- $434M for xEVA and Human Surface Mobility Program to develop the surface suits, pressurized rover, lunar terrain vehicle, and other systems for lunar exploration
- $140M for Advanced Exploration Systems to develop technologies for long duration mission that have common needs for both lunar and Mars missions

Strategic Objective(s) Supported: Explore

2.1 Explore the surface of the moon and deep space
2.2 Develop a space economy enabled by a commercial market
2.3 Develop capabilities and perform research to safeguard explorers
2.4 Enhance space access and services

Deep Space Exploration Systems:
Human Exploration Requirements & Architecture

Budget Authority ($M)	FY 2023 Operating Plan[1/]	FY 2024 CR[2/]	FY 2025 Request	FY 2025 Request			
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Human Exploration Requirements & Architecture	100.5		117.1	264.1	303.0	369.3	855.5

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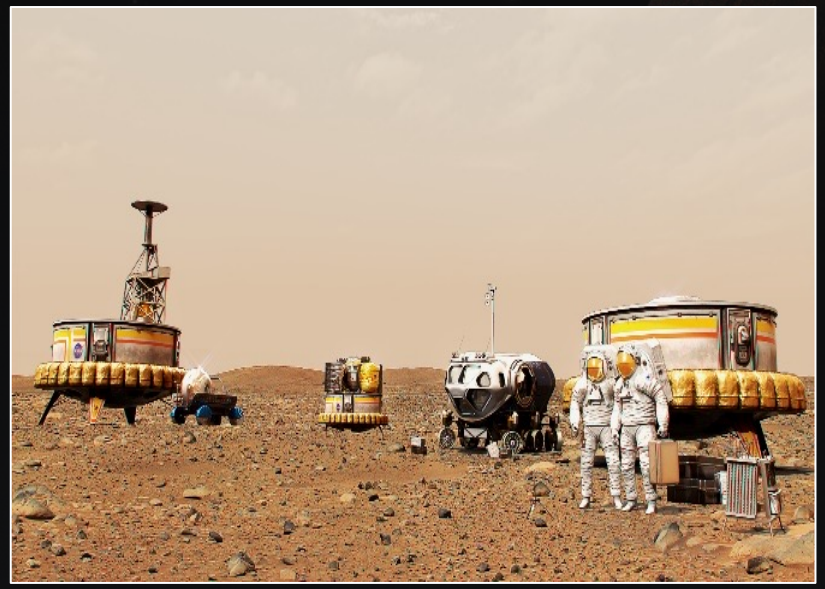

- $71M to collaborate with programs across NASA to design the roadmap for future long-term human exploration
- $46M to conduct trade studies to reduce risk and identify required technologies to be utilized as part of the Artemis Campaign and act as precursor systems for future missions to Mars

Strategic Objective(s) Supported: Explore
2.3 Develop capabilities and perform research to safeguard explorers