## America to the Moon by 2024 NASA's FY 2020 Budget Amendment Summary



The President challenged NASA to land the first American woman and next American man at the South Pole of the Moon by 2024, followed by a sustained presence on the Moon by 2028.

This FY 2020 budget amendment provides an increase of **\$1.6 billion** above the President's initial **\$21 billion** budget request to accelerate our return to the lunar surface. This additional investment is a down payment on NASA's efforts to land humans on the Moon by 2024, and is required to achieve that bold objective. It's the boost NASA needs to move forward with design, development and exploration.

For 60 years, American investment in NASA has yielded innumerable returns through advances in science, technology, medicine, education and industry. Exploring the Moon helps us create a vibrant future:

- Establishes American leadership and strategic presence
- Proves technologies, capabilities and new business approaches for future missions to Mars
- Leads groundbreaking science about the Moon and the solar system
- Inspires a new generation, and encourages careers in STEM
- Drives development of technologies of the future
- Expands U.S. global economic impact; and
- Grows U.S. industry and international partnerships.

## **Budget Amendment Breakdown**

This is a good budget amendment for NASA, on top of a strong initial budget request. It adds funding for deep space exploration, science and technology. Outside of descoping Gateway capabilities, no NASA programs were cut:

- Human Lunar Landing System: This budget includes \$1 billion to enable NASA to begin supporting the development of
  commercial human lunar landing systems three years earlier than previously envisioned to bring humans to the Moon's
  surface by 2024.
  - O This acquisition strategy will allow NASA to purchase an integrated commercial lunar lander that will transport astronauts from lunar orbit to the lunar surface and back.
  - Focusing Gateway development on capabilities needed to support a lunar landing of 2024 allowed a scope reduction of \$321 million. This budget amendment shifts potential development of additional Gateway capabilities into the future.
- Space Launch System Rocket and Orion Spacecraft: With an additional \$651 million for SLS and Orion, this budget supports the most powerful rocket in the world and our new spacecraft to ultimately take the astronauts to the staging point for reaching the lunar surface, the Gateway in lunar orbit.
- **Exploration Technology:** An additional **\$132 million** for technologies that will support NASA to advance key precursor capabilities on the lunar surface. This includes various exploration technologies like solar electric propulsion and a demonstration converting polar ice to water.
- **Science:** An augmentation of **\$90 million** to enable increased robotic exploration of the Moon's polar regions in advance of a human mission.

## We Are Going Together

To land American astronauts on the Moon by 2024, we are working through the acquisition approach for the various projects. Our efforts will include new work at NASA centers to provide the key technologies and scientific payloads needed for the lunar surface, adding to efforts already underway across the country.

To achieve our goals, we will not go forward alone. Strong commercial partnerships will accelerate our human exploration plans. International partners also remain a vital part of our lunar plan and will contribute to the goal of creating a sustained lunar presence by 2028.

Going forward, additional funds will be required in the 2020s, and a refined estimate will be submitted as part of the FY 2021 President's budget request.