

## NASA FY 2017 BUDGET REQUEST

<u>Actuals</u>	<u>FY 2016</u>	<u>FY 2017<sup>1</sup></u>	<u>FY 2018<sup>2</sup></u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
<u>FY 2015</u>	<u>Enacted</u>					
\$18.0B	\$19.3B	\$19.0B	\$18.8B	\$19.4B	\$19.9B	\$20.4B

### *The President's Fiscal Year 2017 Budget*

**Carries out an ambitious deep space exploration program and continues the Nation's Journey to Mars.**

NASA's budget advances the Nation's space exploration plan and ensures our nation remains the world's leader in space exploration and technology, aeronautics research and discovery in space and Earth science. The budget supports developing the technologies that will make future space missions more cabable and affordable, partnering with the private sector to transport crew and cargo to the International Space Station, continuing the development of the Orion crew vehicle, Space Launch System and Exploration Ground Systems that will one day send astronauts beyond low Earth orbit. The budget also keeps the Webb Telescope on track for a 2018; builds on our scientific discoveries and achievements in space; and supports the Administration's commitment to serve as a catalyst for the growth of a vibrant American commercial space industry.

#### **Science - \$5,601 million**

- \$2,032 million for Earth Science, including a plan to continue the 43-year Landsat record of global land-imaging measurements.
- \$1,519 million for Planetary Science, keeping on track the Mars 2020 rover and the next selection for the New Frontiers program and including formulation of a mission to Jupiter's moon Europa.
- \$782 million for Astrophysics, continuing support for the Hubble Space Telescope, the Explorers Program, and the Wide-Field Infrared Survey Telescope (WFIRST).
- \$569 million for the James Webb Space Telescope, maintaining its 2018 launch date.
- \$699 million for Heliophysics, supporting the launches of two Explorer missions this decade as well as research to improve space weather modeling.
- Continues development of 30 missions toward launch and operation of 60 missions producing leading edge science.
- Funds over 10,000 U.S. scientists in universities, industry, and government labs through over 3,000 openly competed research awards.

#### **Human Exploration Operations - \$8,413 million**

- Includes \$3,337 million for Exploration and \$5,076 million for Space Operations.
- Continues commercial development of US crew transportation systems to be certified to support the ISS by the end of 2017, ending the need to pay Russia for crew transport services.
- Enables use of ISS as a platform for scientists to identify and quantify risks to human health and performance, develop countermeasures, and develop and test technologies that protect astronauts during extended human exploration missions.
- Continues development of the Space Launch System rocket and Orion crew vehicle to send astronauts on deep space missions.
- Furthers Advanced Exploration Systems development of foundational technologies – often through public-private partnerships – for future exploration missions, including deep space habitation.
- Continues mission-critical space communications and navigation services for customer missions, including human, science, and commercial crew and cargo missions.

#### **Space Technology - \$827 million**

- Enables the U.S. aerospace community to find technologies at the "tipping point" and make them viable for use by industry, NASA, and other government agencies in order to accelerate the transfer and commercialization of these technologies.
- Cultivates small businesses as the central home for NASA SBIR/STTR and engages with academia through early stage research.
- Continues formulation activities for a full-scale in-space demonstration of on-orbit robotic satellite servicing.
- Continues development of high-powered solar electric propulsion to meet demands by U.S. aerospace industry, and for NASA exploration missions.
- Support fast transit in-space propulsion and high-bandwidth deep space communication to support future exploration missions.

#### **Aeronautics Research - \$790 million**

- Advances aeronautics research bringing transformational advances in the safety, capacity, and efficiency of the air transportation system while minimizing impacts on the environment.
- Develops transformative capabilities that enable the U.S. aviation industry to maintain and advance its global leadership and contributes to the nation's economic growth and job creation
- Establishes a major new experimental flight initiative to demonstrate and validate new technologies that dramatically reduce fuel consumption, emissions, and noise, and open new markets for U.S. Industry
- Supports research and development for revolutionary low carbon emission aircraft, including associated transportation systems, as part of a multiagency effort to enable a 21st century clean transportation system.

#### **Education - \$100 million**

- Continues to provide opportunities for educators, learners and institutions that are consistent with the goals, objectives, and strategies of the Five-Year Federal Strategic Plan on STEM Education.
- Continues the Agency's investment in the Space Grant, EPSCOR, and MUREP Programs.

#### **Safety, Security and Mission Services and Construction & Environmental Compliance and Restoration - \$3,257 million**

- Funds Agency-wide mission support operations, including facilities and environmental activities.
- Ensures NASA infrastructure and assets are safe, secure, environmentally sound, and operate efficiently.

<sup>1</sup> FY 2017 reflects discretionary and mandatory funding. Additional details on the mandatory funding can be found in the Congressional Justification.

<sup>2</sup> FY2018 – FY2021 include Mandatory Funding in the Aeronautics account supporting the Clean Transportation Initiative.