### NASA FY 2016 BUDGET REQUEST

Actuals FY 2015

FY 2014 **Enacted** FY 2016 FY 2018 FY 2017 FY 2020 \$17.6B \$18.0B \$18.5B \$19.0B

## The President's Fiscal Year 2016 budget

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

NASA's budget advances the Nation's bipartisan 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. NASA will continue the development of the Orion crew vehicle, Space Launch System and Exploration Ground Systems that will one day send astronauts beyond low Earth orbit. NASA continues to work toward a 2018 launch of the James Webb Space Telescope; 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 - \$5,289 million

- \$1,947 million for Earth Science including a plan to continue the 42-year Landsat record of global land-imaging measurements.
- \$1,361 million for Planetary Science including formulation of a mission to Jupiter's moon Europa.
- \$709 million for Astrophysics including the Stratospheric Observatory for Infrared Astronomy (SOFIA).
- \$620 million to keep the James Webb Space Telescope on track for launch in 2018.
- \$651 million for Heliophysics including keeping Solar Probe Plus on track for launch in 2018.
- Continues development of 35 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

## **Human Exploration Operations - \$8,510 million**

- Includes \$4,506 million for Exploration and \$4,004 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 for future exploration missions.
- Continues mission-critical space communications and navigation services for customer missions, including human, science, and commercial crew and cargo missions.

#### Space Technology - \$725 million

- Works with U.S. aerospace community to find technologies at the "tipping point" and make them viable for use by industry, NASA, and other government agencies.
- Cultivates small businesses as the central home for NASA SBIR/STTR and engages with academia through early stage research
- Continues development of high-powered solar electric propulsion to meet demands by U.S. aerospace industry, and for NASA exploration missions.
- Conducts 6 in-space demonstrations: deep space atomic clock for advanced navigation and outer planetary science investigations, green propellant alternative to hydrazine, and four small spacecraft demos; and continues development of space-to-ground laser communications.
- Initiates development of foundational technologies to support future outer planets icy moons missions.
- Support future upgrades of SLS and Orion with advance composite structures, thermal management, and thermal protection systems.
- Transfers and commercializes technology.

#### Aeronautics Research - \$571 million

- Advances aeronautics research bringing transformational advances in the safety, capacity, and efficiency of the air transportation system while minimizing impacts on the environment.
- Pioneers fundamental research, and the most promising technologies and concepts in partnership with academia and industry, for transition to the FAA and the aviation industry to meet evolving user needs.

#### **Education - \$89 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 and Environmental Remediation - \$3,308 million

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