

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Funding Highlights:

- Provides \$17.7 billion, a decrease of 0.3 percent, or \$59 million, below the 2012 enacted level.
 While making difficult choices, the Budget builds on our existing space infrastructure, continues efforts to streamline agency operations, and preserves innovative capabilities and technologies to sustain American leadership in space.
- Implements a lower cost program of robotic exploration of Mars that will advance science and will also help lay the foundation for future human exploration.
- Invests in new space technologies, such as laser communications and zero-gravity propellant transfer, which can improve America's ability to access and operate in space and enhance the competitiveness of the U.S. space industry.
- Leverages a Federal investment of \$830 million and private sector investment and ingenuity to develop a U.S. capability to transport crews into space, thereby eliminating our dependence on foreign capabilities in this area.
- Provides continued robust funding for the development of a new heavy-lift rocket and crew
 capsule that will take America deeper into space than ever before, create American jobs,
 ensure continued U.S. leadership in space exploration, and inspire people around the world.
- Provides \$1.8 billion for research and a robust fleet of Earth observation spacecraft to strengthen U.S. leadership in the field, better understand climate change, improve future disaster predictions, and provide vital environmental data to Federal, State, and local policymakers.
- Funds the highest priority astronomical observatories and robotic solar system explorers, including a successor to the Hubble telescope and a mission to return samples from an asteroid, while delaying unaffordable new missions.
- Continues the effort to turn NASA's former Space Shuttle launch facilities at the Kennedy Space Center in Florida into a 21st Century launch complex so that they can efficiently support programs like the Space Launch System and commercial operators.
- Streamlines agency operations, resulting in over \$200 million in savings.

The President's 2013 Budget provides \$17.7 billion to support the National Aeronautics and Space Administration (NASA) in its mission to drive advances in science, technology, and exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of the Earth. Key investments are made in programs that will ensure American leadership in space science and exploration, support the development of new space capabilities, make air travel safer and more affordable, and answer important scientific questions about the Earth, the solar system, and the universe.

Invests in American Innovation

Expands Human Exploration of the Solar System. After three decades of learning how to live and work in orbit, including the ongoing operation and use of the International Space Station national laboratory, NASA is now investing almost \$3 billion in 2013 to continue development of new systems for deep space crewed missions: the Space Launch System (SLS) heavy-lift rocket and the Multi-Purpose Crew Vehicle crew capsule. These programs will leverage NASA's skilled workforce and contractor teams to expand human exploration into the solar system, with a key initial goal of visiting an asteroid next decade.

Supports U.S. Jobs and Industry Growth. Recognizing the need to find a more efficient means to transport people and cargo to locations like the International Space Station, NASA is working with American industry to develop innovative, lower-cost, and safe approaches to human spaceflight through a combination of Government and industry investment. This program reduces America's reliance on Russian capabilities for supporting the International Space Station, keeps jobs here in the United States, and also accelerates the growth of the American commercial spaceflight industry.

Promotes Innovation and Advances Our Understanding of the Universe. NASA operates satellites and aircraft to better understand the Earth and improve our ability to forecast climate change and natural disasters.

NASA's science program also supports telescopes and space probes to advance our understanding of the cosmos. The Administration's proposal supports research grants and operating satellites, telescopes, and space probes to study the solar system as well as projects in development and important new efforts. Following a thorough management and technical review, the Budget funds the James Webb Space Telescope, the successor to the Hubble, to enable a launch later this decade. This decade also will see the launch of a new robotic mission to visit an asteroid and return with samples—helping us understand how our solar system formed and how life began—and paving the way for human missions to an asteroid. Some important, but currently unaffordable missions are deferred, such as large-scale missions to study the expansion of the universe and to return samples from Mars.

Fosters R&D Breakthroughs in Innovative **Technologies.** From ongoing demonstrations of human-robotic systems on the International Space Station to supporting the early-stage ideas that will revolutionize the technologies used in next decades' missions, NASA continues to expand the limits of the Nation's activities in space. For example, development of in-space propellant transfer and storage technologies could decrease the number of rocket launches needed for future exploration missions, and might have valuable application to other commercial and Government space activities. The Budget supports a broad spectrum of space and aviation technology research grants and demonstrations of high-priority technologies, from laser space communications to unmanned aerial systems to in-space transportation. The Administration's commitment to enhance NASA's role in aerospace technology development aims to create the innovations necessary to keep the Aerospace Industry—one of the largest net export industries in the United States—on the cutting edge for years to come.

Maximizes Resources

Boosts Efficiency of NASA Facilities and Property. NASA owns or leases more than 45 million square feet of property. Consistent with Administration waste-cutting efforts, the Budget supports a number of initiatives to help NASA operate more efficiently. Today, over 80 percent of NASA buildings are beyond their design life. The Budget continues to enable NASA to replace or modernize inefficient buildings, providing jobs to the local communities and leading to increasingly efficient use of taxpayer dollars. In addition, the Budget moves aggressively to dispose of NASA's excess properties and make more efficient and effective use of remaining

assets. NASA's 21st Century Launch Complex and Exploration Ground Systems programs, for example, are upgrading NASA's former Shuttle launch facilities to support programs like the SLS and commercial operators.

Cuts Costs by Streamlining Operations. The President's 2013 Budget saves over \$200 million in administrative costs by streamlining NASA's operations in areas such as travel, printing, information technology devices, and support contracts.

National Aeronautics and Space Administration (In millions of dollars)

	Actual — 2011	Estimate	
		2012	2013
Spending			
Discretionary Budget Authority:			
Science	4,919	5,074	4,911
Exploration	3,928	3,721	3,933
Aeronautics	534	569	552
Space Operations	5,321	4,196	4,013
Space Technology	_	548	699
Education	146	136	100
Cross Agency Support	3,130	3,003	2,848
Construction and Environmental Compliance and Restoration	433	486	619
Inspector General	36	38	37
Mission Support	_	_	_
Subtotal, Discretionary budget authority	18,447	17,770	17,712
Total, Discretionary outlays	17,633	17,656	17,825
Total, Mandatory outlays	-15	-19	-19
Total, Outlays	17,618	17,637	17,806