The FY 2014 Science and Technology R&D Budget

Strategic investments to boost research, fuel innovation, and grow the economy

The President’s fiscal year (FY) 2014 Budget calls for significant, targeted investments in the U.S. research and development (R&D) enterprise and in science, technology, engineering, and mathematics (STEM) education—core elements of the Administration’s strategy for ensuring continued economic expansion built on the foundation of a thriving middle class.

The FY 2014 Budget demonstrates the President’s firm commitment to expanding the frontiers of human knowledge; cultivating a home-grown, clean-energy future; improving healthcare outcomes for all Americans at lower cost; addressing the mounting challenges of global climate change; managing competing demands on environmental resources; and reinforcing national and homeland security.

At the same time, in keeping with the spending caps imposed by the Budget Control Act of 2011, the President’s R&D Budget includes strategic cuts in selected areas to help reduce the deficit, even as it provides increases for science and engineering research with the greatest potential to pay off for the Nation.

“The President’s FY 2014 budget reflects the wise recognition that investing today in science, innovation, and STEM education is the best way to maintain America’s edge in the development of transformative technologies, the industries of future, and breakthrough solutions to national and global challenges,” said Dr. John P. Holdren, President Obama’s science and technology advisor and Director of the White House Office of Science and Technology Policy. “We have seen time and again that fueling the American R&D engine not only results in new tools to solve our toughest problems but also opens new doors to jobs and opportunities for all Americans.”

All told, the President’s FY 2014 Budget proposes $142.8 billion for Federal R&D, an increase of $1.9 billion or 1.3 percent over the FY 2012 enacted level. (All comparisons noted here are in current, not-adjusted-for-inflation dollars and use FY 2012 appropriations as baseline because the FY 2013 Budget was so recently enacted.) The Federal research portfolio—comprising basic and applied research—would total $68.1 billion, up $4.8 billion or 7.5 percent, and non-defense R&D would rise 9.2 percent to $69.6 billion.

These increases are offset in part by reductions in defense R&D (in the Departments of Defense and Energy combined), down 5.2 percent or $4.0 billion to $73.2 billion, and in the Nation's development budget overall, down 5.0 percent or $3.8 billion to $71.5 billion. Both of those
reductions primarily reflect Department of Defense (DOD) weapons-systems development programs that have matured and are transitioning to the production phase.

In addition, the President’s FY 2014 science and technology budget:

- **Sustains a World-Leading Commitment to Science & Research** for three science agencies crucial to our Nation’s future competitiveness—the National Science Foundation (NSF), the Department of Energy’s (DOE’s) Office of Science, and the National Institute of Standards and Technology (NIST) laboratories, providing a total of $13.5 billion—an increase of 8 percent above FY 2012 funding levels.

- **Makes America a Magnet for Manufacturing and Jobs** by providing $2.9 billion for advanced manufacturing R&D—including expanded support for innovative manufacturing processes, advanced industrial materials, and robotics. This figure includes the Administration’s proposed investment of $1 billion to launch a network of up to 15 manufacturing innovation institutes in a National Network for Manufacturing Innovation.

- **Advances Clean, American Energy** by providing $379 million for transformational energy R&D in DOE’s Advanced Research Projects Agency-Energy (ARPA-E); $2.8 billion for DOE’s Energy Efficiency and Renewable Energy office, with a focus on clean-vehicle technologies; and $200 million in FY 2014 and $2 billion over ten years from revenue generated by Federal oil and gas development for the establishment of an Energy Security Trust to support research focused on a range of cost-effective energy technologies.

- **Prepares the Nation’s Future Innovators** by providing $3.1 billion for STEM education to ensure the next generation is prepared for challenging 21st century careers. In addition, the Budget includes a reorganization of STEM education programs to make Federal investments in this domain more efficient and effective.

Other R&D highlights in the President’s FY 2014 Budget (compared to FY 2012 enacted) include:

- $31.3 billion (up 1.5%) for the National Institutes of Health (NIH) budget
- $12.7 billion (up 18%) for DOE R&D
- $11.6 billion (up 2.6%) for National Aeronautics and Space Administration R&D
- $7.6 billion (up 8.4%) for the NSF budget
- $2.7 billion (up 6.0%) for the U.S. Global Change Research Program
- $1.4 billion (up 186%) for Department of Homeland Security R&D
- $1.2 billion (up 9%) for the U.S. Geological Survey budget
- $754 million (up 21.0%) for NIST’s intramural laboratories
- $733 million (up 28%) for NOAA’s R&D programs.

Decreases not already mentioned above include reductions in R&D within the Department of Defense (to $68.3 billion, down 6.3%), the Environmental Protection Agency (to $560 million, down 1.4%), and the multi-agency National Nanotechnology Initiative (to $1.7 billion, down 9%).

Additional details can be found on fact sheets and other FY 2014 budget resources at [http://www.whitehouse.gov/ostp/rdbudgets](http://www.whitehouse.gov/ostp/rdbudgets).

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