

Highlights

President Bush's proposed budget for fiscal year (FY) 2007 offers the same themes as in previous years: big increases for defense and homeland security, proposed extensions of expiring tax cuts, and a promise to reduce the budget deficit by cutting domestic discretionary spending. As in previous budgets, the federal research and development (R&D) budget in FY 2007 would grow less than inflation, and the entire increase and more would go toward the development of new weapons and spacecraft. But in a new theme, the President responds to increasing concern about the state of U.S. innovation by proposing an American Competitiveness Initiative (ACI) to boost federal investments in physical sciences research for three key agencies (see Chapter 3). Increases for the ACI agencies, however, would be more than offset by cuts in other areas.

- The proposed federal R&D portfolio in FY 2007 is \$136.9 billion, 1.8 percent or \$2.4 billion above this year (see Chapter 1 and Table II-1). In real terms, the total federal R&D portfolio would decline for the first time since 1996. Development would be the clear winner: increases for space vehicles development in the National Aeronautics and Space Administration (NASA; up \$907 million) and weapons development in the Department of Defense (DOD; up \$4.2 billion) would far exceed the overall increase, leaving all other R&D programs with less money.

- The three American Competitiveness Initiative agencies would do well. There would be significant increases for R&D in the Department of Energy's (DOE) Office of Science (up 14.4 percent to \$3.8 billion; see Table II-11 and Chapter 9), the National Science Foundation (NSF; up 8.3 percent to \$4.5 billion; see Table II-7 and Chapter 7), and the National Institute of Standards and Technology's intramural research (up 21 percent to \$382 million; see Table II-14 and Chapter 13).

- But other R&D funding agencies would see flat funding or cuts. The National Institutes of Health (NIH) budget, after declining slightly in 2006 for the first time in 36 years, would remain flat at \$28.6 billion (see Chapter 8 and Table II-9). The U.S. Department of Agriculture (USDA) would see its R&D funding fall 16.5 percent to \$2.0 billion (see Table II-13 and Chapter 11). Even the Department of Homeland Security (DHS), a past favorite, would see its R&D funding fall 10.3 percent to \$1.1 billion (see Table II-6 and Chapter 12).

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- **There would be tough budgetary choices even in agencies with increasing budgets.** At NASA, a \$907 million boost in R&D funding to \$12.2 billion would be far less than the \$1.3 billion boost for efforts to develop the next generation of space vehicles, leaving NASA research funding in aeronautics, life sciences, environmental sciences, and other disciplines in free fall (see Table II-12 and Chapter 10). Substantial increases in DOD development would be offset by steep cuts in DOD research (see Table II-2 and Chapter 6.) Although DOE Science would increase, DOE energy R&D funding would fall 4.8 percent to \$1.3 billion (see Table II-11 and Chapter 9).
- The federal (basic and applied) research investment would continue to decline in the 2007 budget, even for the physical sciences (see Table II-1 and Chapter 2). The 2007 budget would leave the federal research portfolio 8 percent below the 2004 level in inflation-adjusted dollars.
- The AAAS analysis of the outyear projections to 2011 shows that NASA and the three ACI agencies would continue to receive increases in future years. All other R&D funding agencies would see steep cuts over the next five years (see Table I-10 and Chapter 4).
- The FY 2007 budget would make significant cuts to education, including the proposed termination of 42 Department of Education (ED) programs for the smallest department budget since 2003 (see Chapter 5).
- Good news would be mixed with bad even for the physical sciences. In FY 2007, the ACI agencies would boost funding for physics (see Chapter 14), astronomy (see Chapter 15), and chemistry (see Chapter 19), but other agencies would reduce their funding. Among other disciplines, only computing would receive substantial increases (see Chapter 23).
- The federal government continues to invest billions of dollars in multi-agency R&D initiatives (see Table I-9). After an increase in 2006, funding for the **National Nanotechnology Initiative** (NNI) would fall 1.8 percent to \$1.3 billion (see Chapter 24). Funding for the **Networking and Information Technology R&D** (NITRD) initiative would surge 7.7 percent to \$3.1 billion due to funding boosts for the three ACI agencies (see Chapter 23). The **Climate Change Science Program** (CCSP) would barely increase 0.2 percent to \$1.7 billion (see Chapter 16).