

R&D for all national missions increases, with especially large boosts for defence and health. In defence, DOD R&D will increase by \$7.4 billion (or 17.3%) to reach \$50.1 billion, thanks to dramatic increases for missile defence development and other DOD investments, to respond to US military needs. The DOD S&T component exceeds \$10 billion for the first time, to reach \$10.5 billion (up 11.8%), while missile defence development funding nearly doubles. In health, the NIH budget remains on track to double between FY 1998 and FY 2003, with a \$3.1 billion increase in R&D to \$22.8 billion, but NIH and the Centres for Disease Control and Prevention (CDC) also receive substantial emergency funds for bioterrorism R&D and improved laboratory facilities. The National Science Foundation (NSF) R&D funding, which excludes the NSF education and training activities and overhead costs, totals \$3.5 billion (up 7.6%). Counter-terrorism R&D funds are responsible for large increases for other missions. Agriculture research will rise to \$1.9 billion (up 9.4%), in part to address food safety issues and to improve security at agricultural laboratories that handle pathogens. Research in natural resources and the environment will rise to \$2.5 billion (up 11.2%), in part for research on securing drinking water supplies. Transportation research climbs to \$1.8 billion (up 6.7%), partially because of a large infusion of emergency funds for the aviation security R&D programs. Details are available at: <http://www.aaas.org/spp/dspp/rd/capre02tb.htm>

The Basic and Applied Research Component of the R&D Budget

Based on enacted FY 2002 congressional R&D funding appropriations, the AAAS analyses the basic and applied research funding in FY 2002 (note: although some funding is retained by the federal departments and agencies, much will be passed on to universities and research organizations). The NIH remains the largest single sponsor of basic and applied research and will fund 46% of all federally supported research in FY 2002. The AAAS estimates the basic and applied research component will be \$48.2 billion, an increase of \$4.8 billion (or 11.0%) over FY 2001. All federal agencies will receive increases for their research portfolios, particularly those with counter-terrorism research programs. <http://www.aaas.org/spp/dspp/rd/capre02tb.htm#tb2>

Non-Defence R&D reaches another all-time high in FY 2002

For the sixth year in a row, non-defence R&D has increased in inflation-adjusted terms. A large part of the recent increases has been due to steady growth in the NIH budget, including increases of approximately 15% for the last four years in a row. As a result, NIH R&D has become nearly as large as all other non-defence agencies' R&D funding combined. Funding for non-defence R&D excluding NIH has stagnated in recent years; after steady growth in the 1980s, funding peaked in FY 1994 and then declined sharply as a result of tight budget conditions in the mid-1990s. The FY 2002 increases for non-NIH agencies, while large, just barely brings these agencies back to the funding levels of the early 1990s, and some of these increases are due to emergency counter-terrorism funds that may be one-time appropriations.

Funding for Counter-Terrorism Research

As a reaction to the tragic events of September 11, Congress moved quickly to propose the *Emergency Supplemental Appropriations Act for Recovery from and Response to Terrorists Attacks on the United States*, where \$40 billion was quickly signed into law by President Bush. This included funds for federal, state and local preparedness for mitigating and responding to the terrorist attacks; efforts to counter, investigate and prosecute domestic and international terrorism; increased transportation security, and the repair of public facilities and transportation systems damaged in the attacks.

\$1.5 billion of the emergency appropriations fund was designated to terrorism-related R&D. These appropriations nearly tripled the FY 2001 funding level. Several agencies and departments benefited from increases in funding. The CDC receives \$1 billion emergency funds