



AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE

Federal R&D in FY 2003 and FY 2004

Kei Koizumi, AAAS

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AAU Council on Federal Relations

See <http://www.aaas.org/spp/rd> for more

(see the “What’s New” section for the latest AAAS R&D analyses; see “Seminars and Presentations” section for copies of these charts)

Science & Policy Programs

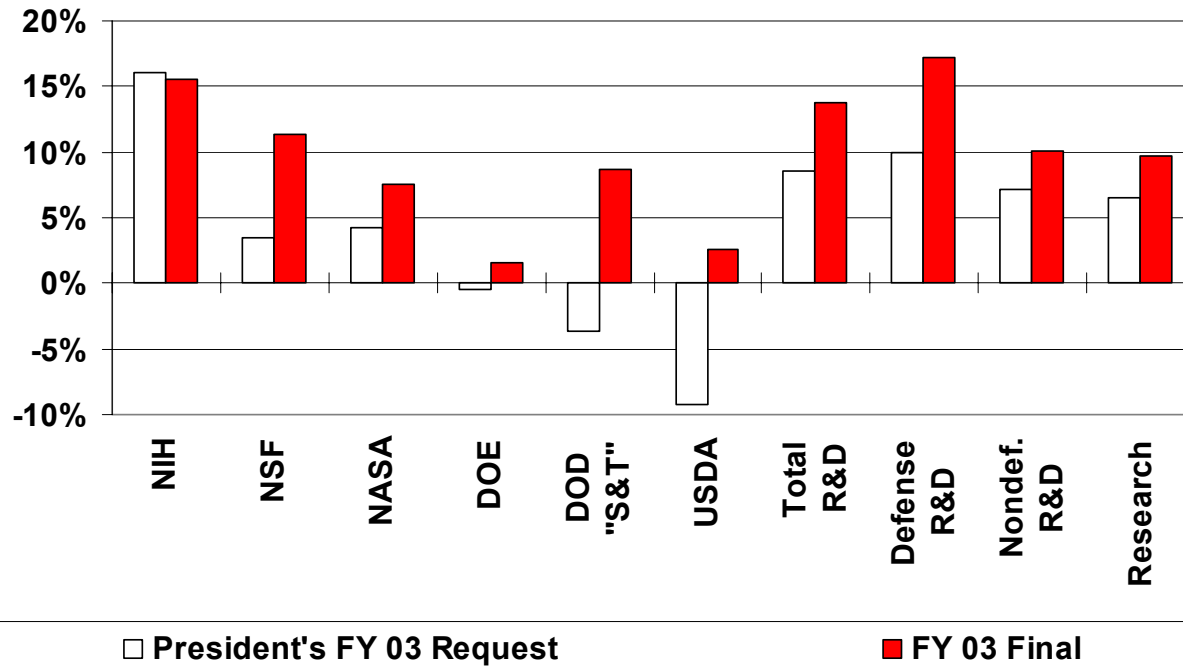


FY 2003: Better than Expected

- FY 2003 budget signed Feb. 20 (finally!)
- Record \$117 bil. Federal R&D portfolio (up 13.8% or \$14 bil.)
- Enormous increases for DOD development
- NIH doubling nearly complete
- R&D well above the request for everyone else, at least modest increases for nearly all R&D funding agencies
- NSF R&D up 11.4 percent; falls short of authorized level
- DOD S&T meets 3.0% goal, exceeds \$11 bil.
- Research funding hits \$53 bil. (up 9.8 %)



FY 2003 R&D Request and FY 2003 Final Appropriations Percent Change from FY 2002



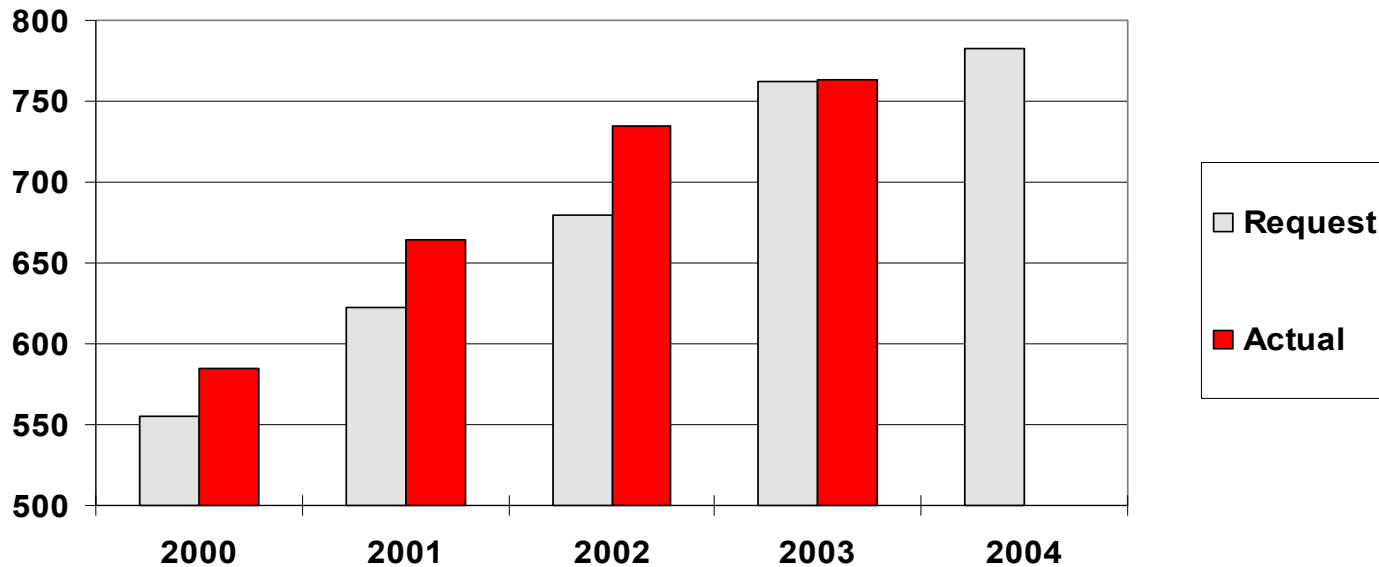
AAAS estimates of R&D based on OMB R&D budget data.
FY 2003 Final appropriations figures are AAAS estimates of R&D contained in
final FY 2003 appropriations bills. DOD S&T = DOD R&D in 6.1 through 6.3





Discretionary Spending

FY 2000 - FY 2004, in billions of dollars



Source: Budget of the U.S. Government FY 2004. FY 2000-2003 levels are enacted discretionary BA, including emergency appropriations. FY 2004 is





FY '04: More Deficits, More Tax Cuts, But More Defense and Homeland Security

- \$1.5 trillion in tax cuts over the next decade (larger than \$1.35 trillion 2001 tax cuts)
- Record budget deficits, with no return to surpluses in sight
- Budget doesn't include costs of war with Iraq
- \$400 billion over 10 years for Medicare drug benefits
- Proposed increases for defense and homeland security
- Restraint for domestic discretionary spending



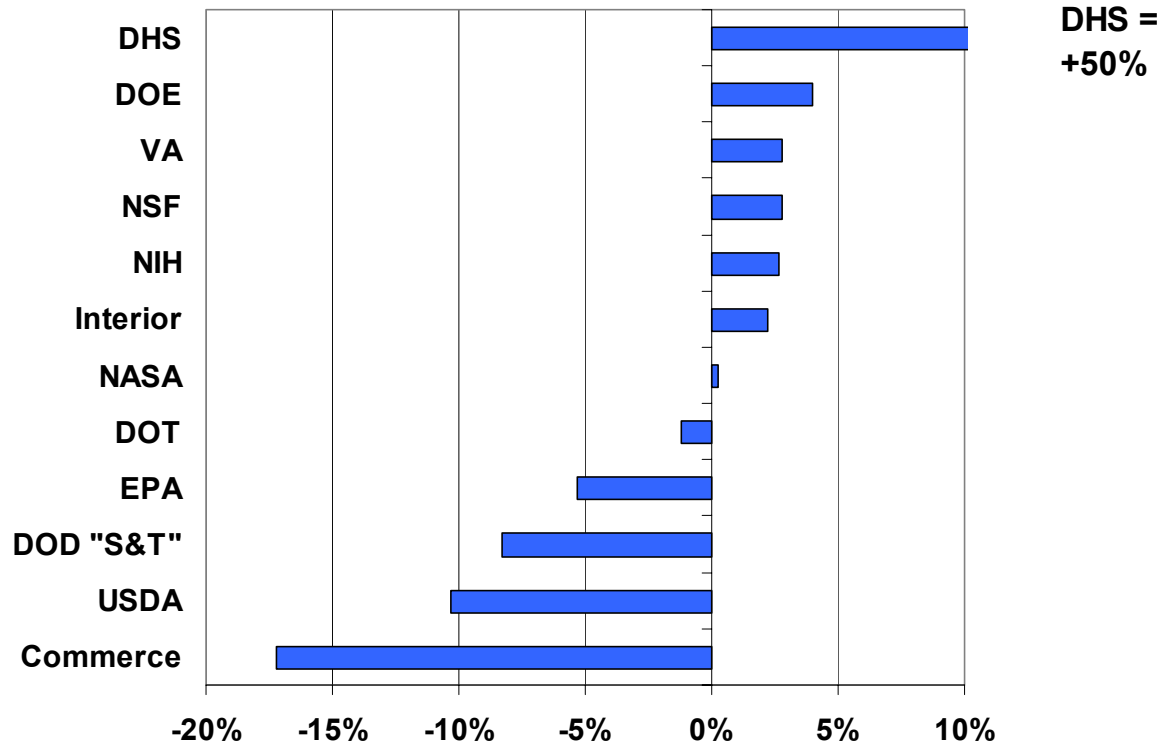
R&D in the FY 2004 Budget

- FY '04 trends don't look so good compared to FY 03 final
- R&D up 4.4 % to \$122 bil. in '04
- Large proposed increases for DOD development and homeland security R&D
- Modest increases for basic and applied research (+1.3%)
- NIH budget growth slows to 2.7 percent
- NSF request falls \$900 million short of 'doubling' track
- DOE Office of Science flat for fourth year in a row
- Flat (NASA, DOE Office of Science) to declining (DOD research, Commerce) for most other R&D programs



FY 2004 R&D Request

Percent Change from FY 2003 FINAL



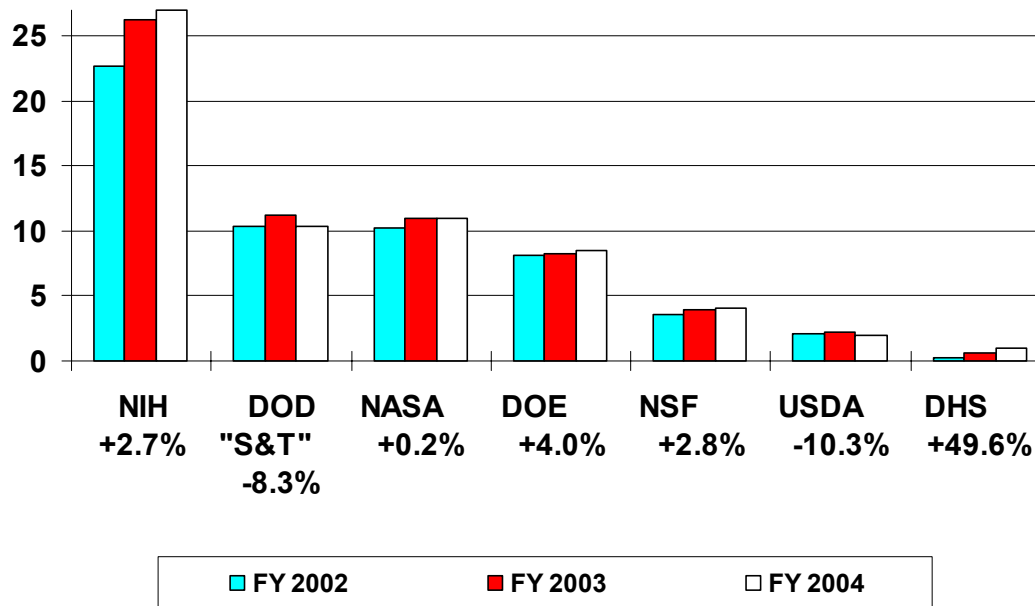
Source: AAAS, based on OMB R&D Budget Data and agency estimates for FY 2004. FY 2003 estimates based on final FY 2003 appropriations.
DOD "S&T" = DOD R&D in "6.1" through "6.3" categories plus medical research.
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R&D in the "Big Six" Agencies plus DHS, FY 2002 - FY 2004

budget authority in billions of dollars
percentage changes '02-'04



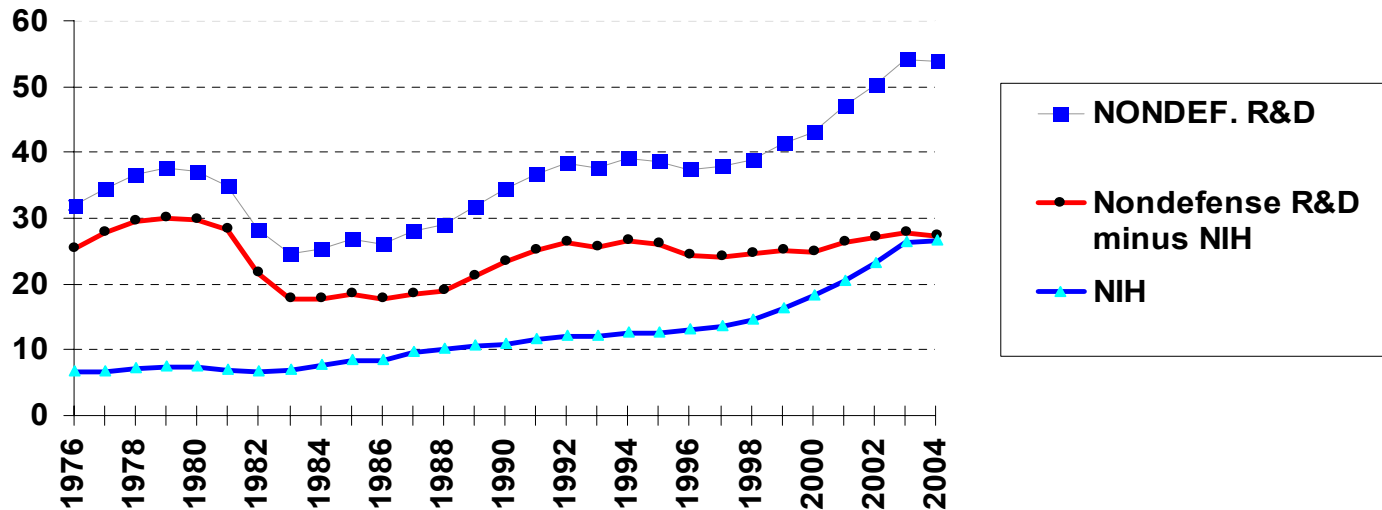
Source: AAAS, based on OMB R&D Budget Data and agency estimates for FY 2004. DOD "S&T" = DOD R&D in "6.1" through "6.3" categories plus





Selected Trends in Nondefense R&D, FY 1976-2004

in billions of constant FY 2003 dollars



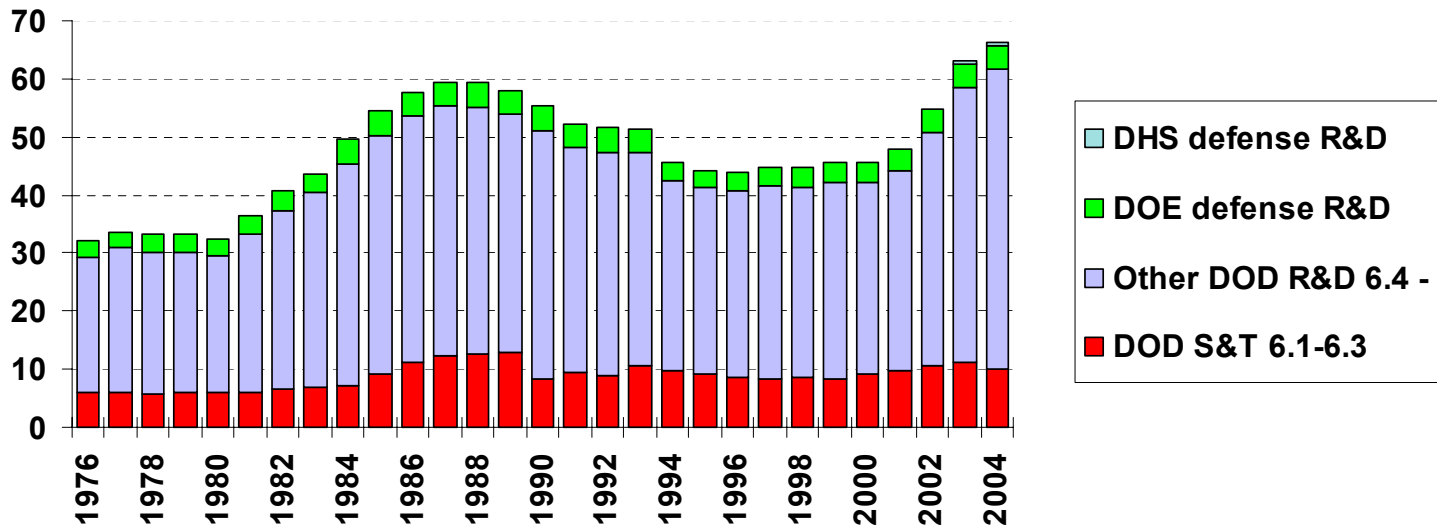
Source: AAAS analyses of R&D in AAAS *Reports VIII-XXVIII*. FY 2004 figures are President's request; FY 2003 figures are AAAS estimates of final FY 2003 appropriations. FEB. '03 REVISED © 2003 AAAS





Trends in Defense R&D, FY 1976-2004

in billions of constant FY 2003 dollars



Source: AAAS analyses of R&D in AAAS Reports I-XXVIII. FY 2004 figures are President's request; FY 2003 figures are latest estimates. DOD S&T figures are not strictly comparable for all years because of changing definitions. Includes conduct of R&D and R&D facilities. FEB. '03 REVISED © 2003 AAAS





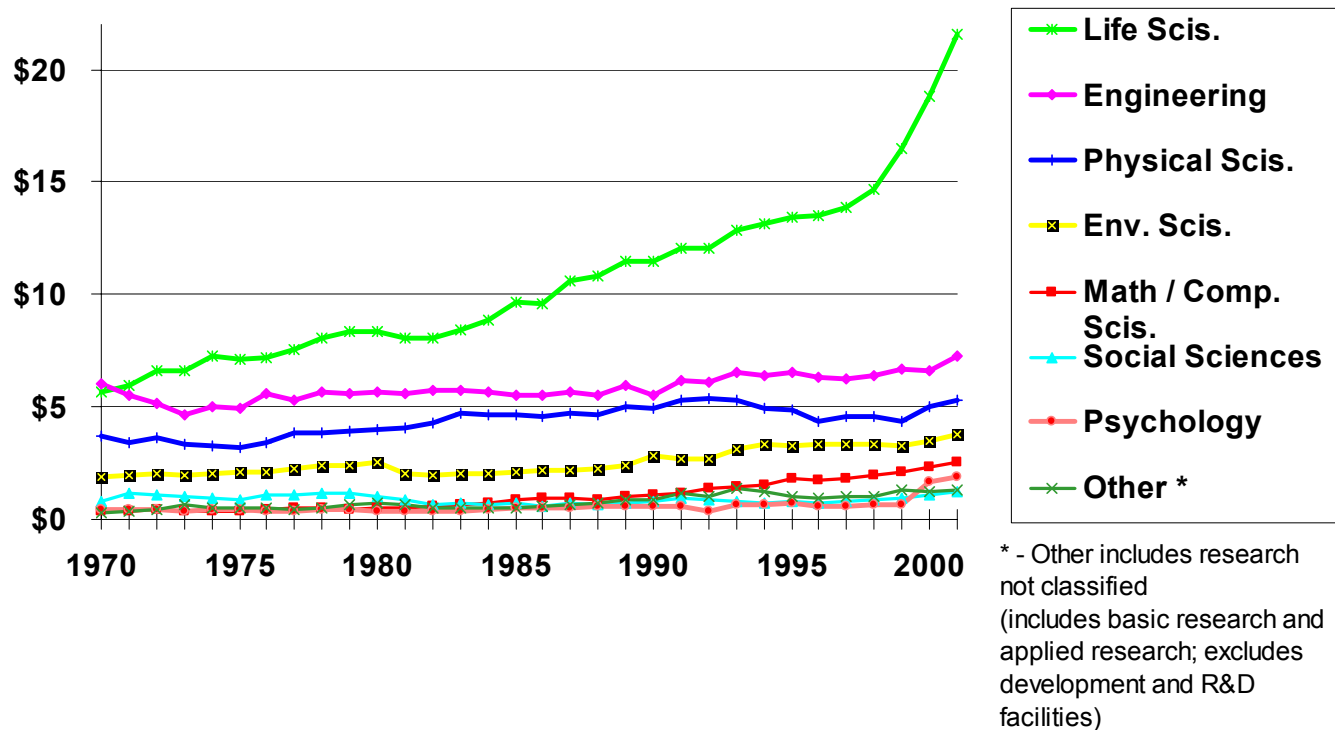
Dept. of Homeland Security

- DHS began operations in January, consolidated existing programs this week
- \$669 million in R&D in FY '03, proposed to climb 50 percent to \$1.0 billion in FY '04
- In '03, mostly transfers of existing DOD, DOE, DOT, and USDA programs; very little in '03 for universities
- Bioterrorism R&D portfolio stays in NIH; DHS will have priority-setting role
- New Homeland Security Advanced Research Projects Agency (HSARPA) will be created in DHS on the DARPA model; funding priorities and levels unclear



Trends in Federal Research by Discipline, FY 1970-2001

obligations in billions of constant FY 2002 dollars



Source: National Science Foundation, *Federal Funds for Research and Development FY 2000, 2001, and 2002, 2002*. FY 2001 data are preliminary. Constant-dollar conversions based on OMB's GDP deflators.
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