

Update on Research and Development in the FY 2010 U.S. Federal Budget

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for the AAAS Board of Directors

AAAS R&D Budget and Policy Program

<http://www.aaas.org/spp/rd>

See the “Seminars and Presentations” section for
copies of this presentation.

ARRA Spending Update

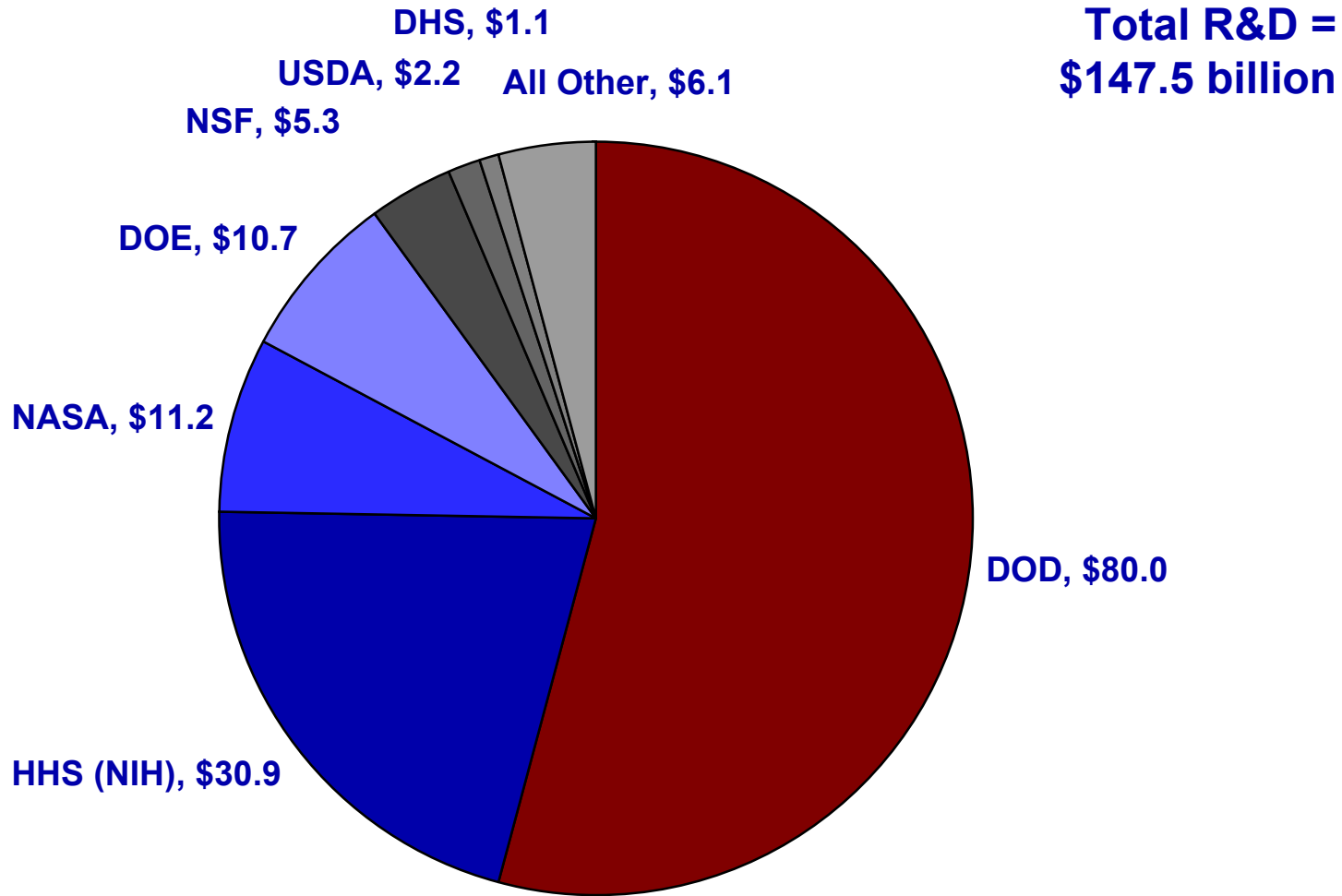
- Department of Energy (\$36.7 billion)
 - Office of Science – 86.3%
 - ARPA-E – 1.1%
 - Electric Grid – 3.3%
 - Total – 50.2%
- National Institutes of Health (\$10.4 billion)
 - Grants – 53.6%
- National Science Foundation (\$3.0 billion)
 - Conduct of R&D – 91.8%
 - Total – 73.2%

The FY 2010 Federal R&D Investment

- \$147.5 billion, 0.3% increase from FY 2009
 - Basic Research – \$30.8 billion, 3.4% increase
 - Applied Research – \$28.5 billion, 3.1% decrease
 - Development – \$83.7 billion, 0.4% increase
 - Equipment and Facilities – \$4.5 billion, 0.2% increase
- 0.7% decrease in real dollars from FY 2009
 - 1.5% increase in R&D investment since FY 2004
 - 6.8% decrease in research investment since FY 2004

Total R&D by Agency, FY 2010

budget authority in billions of dollars



Source: AAAS Report XXXIV: Research and Development FY 2010.

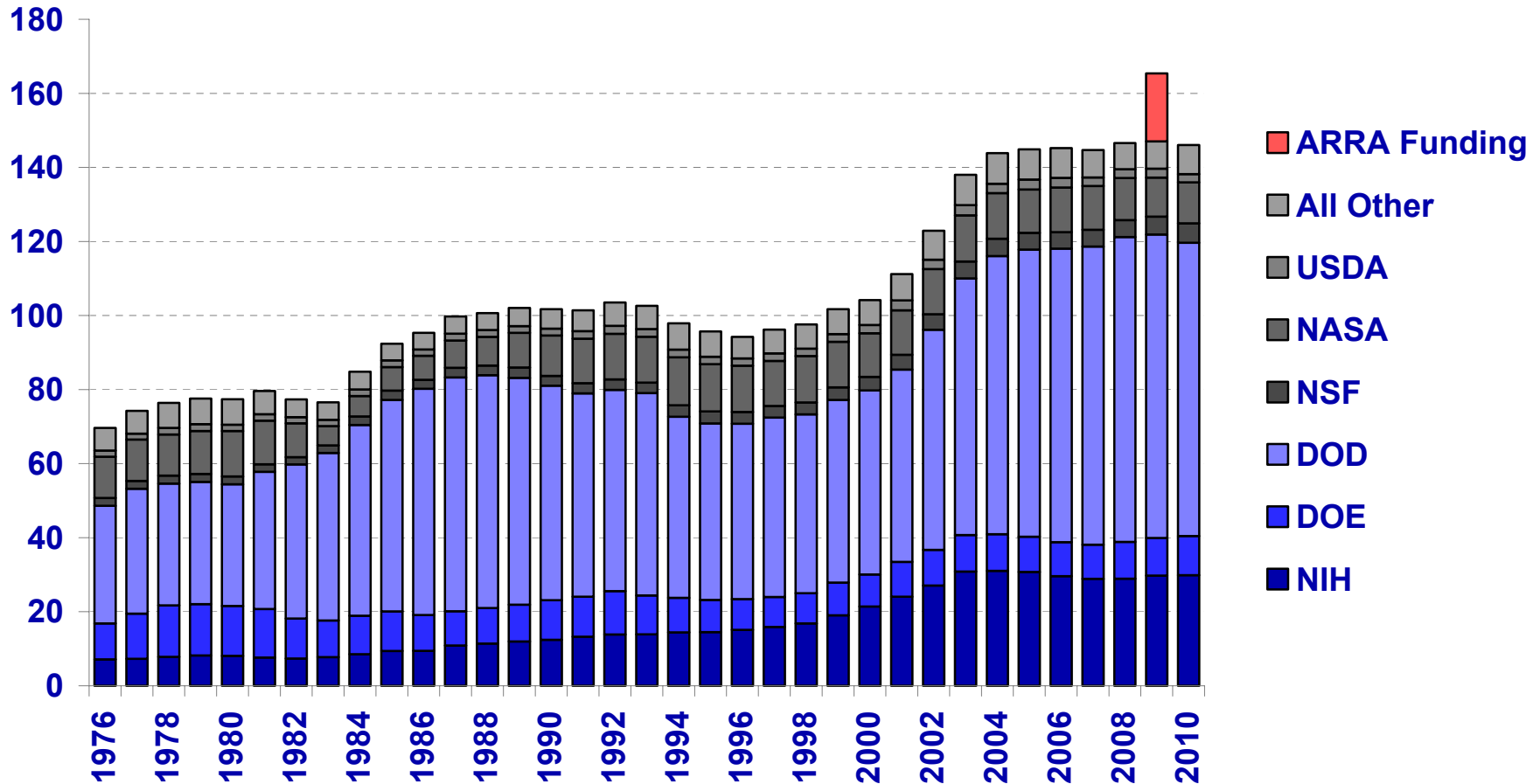
R&D includes conduct of R&D and R&D facilities.

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Trends in R&D by Agency, FY 1976-2010

in billions of constant FY 2009 dollars

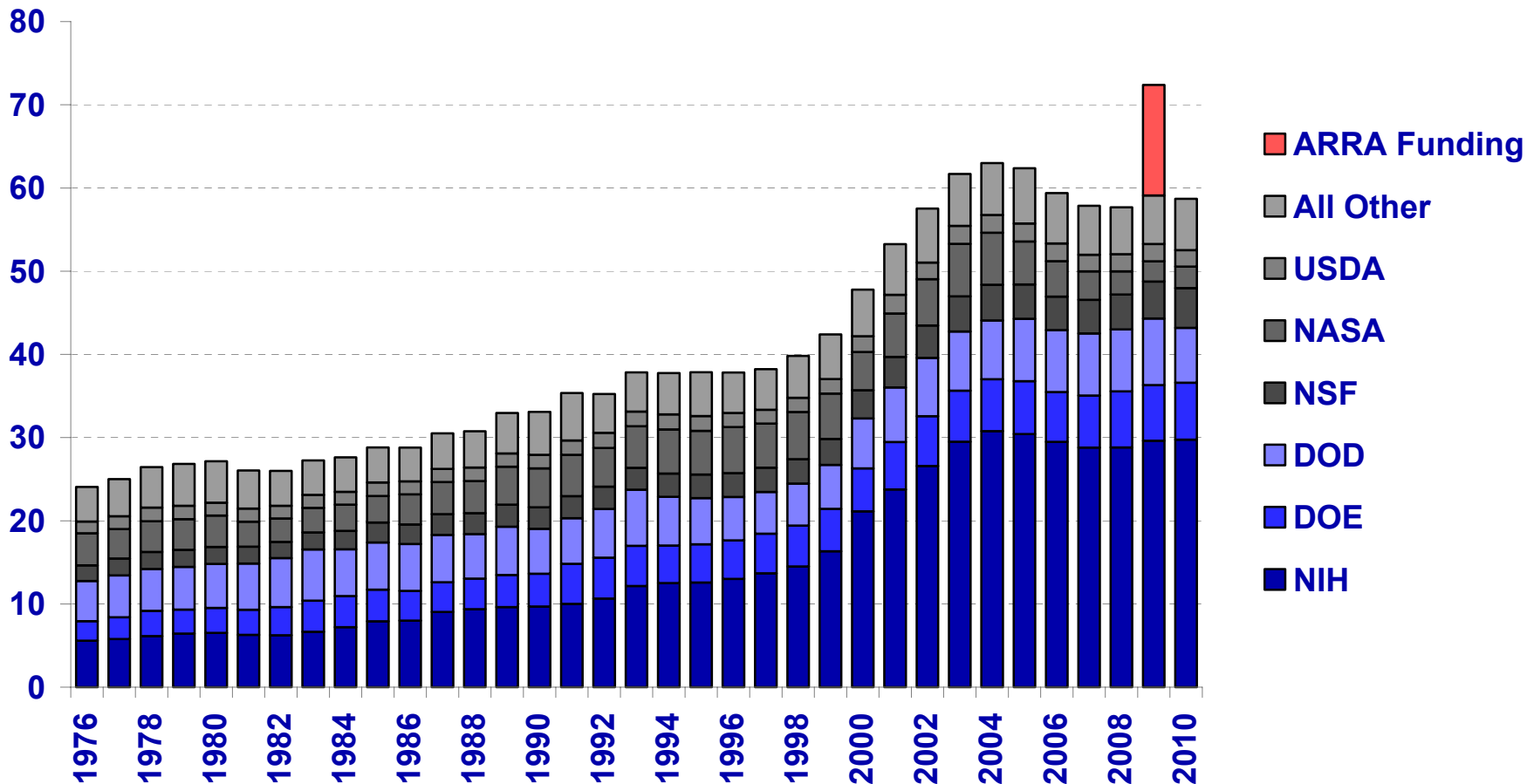


Source: AAAS Report: Research & Development series.
 FY 2009 and FY 2010 figures are latest estimates.
 1976-1994 figures are NSF data on obligations in the Federal Funds survey.
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Trends in Research by Agency, FY 1976-2010

in billions of constant FY 2009 dollars



Source: AAAS Report: Research & Development series.
 FY 2009 and FY 2010 figures are latest estimates.
 Research includes basic research and applied research.
 1976-1994 figures are NSF data on obligations in the Federal Funds survey.
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Department of Defense

- FY 2009 – \$80.0 billion for RDT&E
- Request – \$78.6 billion for RDT&E
- House – \$80.2 billion for RDT&E
- Senate – \$78.5 billion for RDT&E
- Authorization - \$79.3 billion for RDT&E
- VH-71A Executive Helicopter
 - House – Yes, Senate – No, Authorization – No
- Alternative Engine for Joint Strike Fighter
 - House – Yes, Senate – No, Authorization - Yes

National Institutes of Health

- FY 2009 – \$30.3 billion
- Request – \$30.8 billion
- House – \$31.3 billion
- Senate – \$30.8 billion
- House Action
 - Issa (R-CA) amendment to defund 3 international AIDS/HIV proposals passed
 - Eliminates \$99 million in teen abstinence programs
 - Renews restrictions on use of funds for abortion and research that creates or destroys human embryos

National Aeronautics and Space Administration

- FY 2009 - \$17.8 billion
- Request - \$18.6 billion
- House - \$18.2 billion
- Senate - \$18.6 billion
- Augustine Report on manned space travel
- Space Station
 - 10.0% increase in House and Senate
- Constellation Systems
 - 3.8% decrease in House, 18.0% increase in Senate

Department of Energy

- FY 2009 - \$26.8 billion (\$10.2 billion R&D)
- Request - \$28.4 billion (\$10.7 billion R&D)
- Enacted - \$27.1 billion (\$10.7 billion R&D)
- 3 of 8 Energy Innovation Hubs Funded
 - Fuels from Sunlight (EERE)
 - Energy Efficient Building Systems Design (EERE)
 - Modeling and Simulation (Nuclear Energy)
- Office of Science
 - 2.7% increase to \$4.9 billion (\$4.5 billion R&D)
- Energy R&D Refocus
 - Nuclear and Fossil down, Renewable and Reliability up

National Science Foundation

- FY 2009 – \$6.5 billion
- Request – \$7.0 billion
- House – \$6.9 billion
- Senate – \$6.9 billion
- Administration issued a statement expressing concern over Senate funding levels for NIST and NSF
- Sen. Coburn (R-OK) amendment to eliminate Political Science funding failed (36 votes in favor)

Doubling Funding for Basic Research Agencies

- National Science Foundation
 - Request – 8.5% increase to \$7.0 billion
 - House – 6.9% increase to \$6.9 billion
 - Senate – 6.6% increase to \$6.9 billion
- DOE Office of Science
 - Request – 3.5% increase to \$4.9 billion
 - Enacted – 2.7% increase to \$4.9 billion
- National Institute of Standards and Technology
 - Request – 3.3% increase to \$846 million
 - House – 4.6% decrease to \$781 million
 - Senate – 7.3% increase to \$879 million

R&D Investment Priorities

- Investing in the Sciences for a Prosperous America
 - NSF, DOE, NIST and NIH increases are all holding
- A Clean Energy Future
 - Refocus of Energy R&D to renewable and reliable energy
- Healthy Lives for All Americans
 - National Institutes of Health increases in both House and Senate
- A Safe and Secure America
 - Department of Defense down, while Homeland Security funding increasing

Next Steps

- FY 2010
 - Continuing Resolution through December 18
 - Four bills (of twelve) waiting for conference after passing the House and Senate
 - The Senate needs to pass their version of three others
- FY 2011
 - S&T guidance given by August 4 OMB/OSTP memo
 - Agencies submitted their FY 2011 budgets to OMB by the September 14 deadline
 - Agencies given passbacks on November 30

For More Information...

The AAAS R&D web site is
<http://www.aaas.org/spp/rd>

The AAAS Forum on
Science and Technology
Policy is
May 13–14, 2010 in
Washington, DC

