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

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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

DOD, $80.0
HHS (NIH), $30.9
NASA, $11.2
DOE, $10.7
NSF, $5.3
USDA, $2.2
DHS, $1.1
All Other, $6.1

Total R&D = $147.5 billion

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

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

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