Federal R&D Funding in the 2009 Budget

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AAAS R&D Budget and Policy Program
http://www.aaas.org/spp/rd

See the “What’s New” section for the latest updates; see the “Seminars and Presentations” section for copies of this presentation.
The President has proposed a $3.1 trillion budget for FY 2009.

To help control the deficit, the President proposes to keep domestic appropriations flat, and leaves most 2009 war funding out of the budget.

Most federal support to universities comes from domestic appropriations.
Composition of the Proposed FY 2009 Budget
Total Outlays = $3.1 trillion

Note: Projected Unified deficit is $407 billion.
Figures exclude most Iraq and Afghanistan military costs.
Source: AAAS, based on Budget of the United States Government FY 2009.
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Trends in Discretionary Spending, FY 1976-2013
in billions of constant FY 2008 dollars

FY 2008 data are estimates. FY 2009-2013 data are budget projections. FY 2009-
2013 figures exclude Iraq and Afghanistan military costs.
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THE 2009 BUDGET FOR R&D

- The American Competitiveness Initiative (ACI) continues for a third year, with large increases for NSF, DOE Science, and the NIST labs to catch up to a 10-year doubling track.

- There would be large increases for DOD weapons and NASA spacecraft development, but also increases for most R&D programs.

- But the NIH budget would be flat, agricultural and environmental R&D agencies would decline.
Total R&D by Agency: FY 2009 Proposed
Budget Authority in billions of dollars

DOD, $80.7
HHS (NIH), $30.0
NASA, $12.8
DOE, $10.5
All Other, $5.2
NSF, $5.2
USDA, $2.0
DHS, $1.0

Total R&D = $147.4 billion (revised)

Source: AAAS, based on OMB R&D Budget Data and agency estimates for FY 2009.
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Source: AAAS, based on OMB R&D data and agency estimates for FY 2009.
DOD "S&T" = DOD R&D in "6.1" through "6.3" categories plus medical research.
DOD weapons = DOD R&D in "6.4" and higher categories.
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Trends in Federal R&D, FY 1976-2009 *

in billions of constant FY 2008 dollars

Source: AAAS analyses of R&D in annual AAAS R&D reports. * FY 2009 figures are latest AAAS estimates of FY 2009 request. R&D includes conduct of R&D and R&D facilities. Data to 1984 are obligations from the NSF Federal Funds survey. GDP figures are from OMB, Budget of the U.S. Government FY 2009.

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Trends in Research by Agency, FY 1976-2009 *
in billions of constant FY 2008 dollars

Source: AAAS analyses of R&D in annual AAAS R&D reports.
* FY 2009 figures are latest AAAS estimates of FY 2009 request. Research includes basic research and applied research. 1976-1994 figures are NSF data on obligations in the Federal Funds survey.
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National Institutes of Health Budget by Institute, 1998-2009 *
(budget authority in billions of constant FY 2008 dollars)

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National Institutes of Health
Research Project Grants

Source: NIH agency budget justification for FY 2009. Average proposed award size $408,800 in FY 2008. Other years adjusted for inflation.
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National Science Foundation Budget, FY 2000-2009
(budget authority in billions of constant FY 2008 dollars)

Source: National Science Foundation, and latest AAAS estimates of FY 2009 budget. FY 2009 is budget request.
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THE FY 2009 BUDGET AND VANDERBILT

- The 2009 proposed increases do not change the overall trends of declining federal support for research, especially health research.
- Vanderbilt ranks #23 in federal R&D to universities ($281 million in '05).
- Vanderbilt is especially dependent on federal funds: 80% of Vanderbilt R&D is funded by the federal government, compared to 63% nationally.
- 90% of Vanderbilt’s federal R&D comes from NIH; 5% from NSF, so Vanderbilt is especially vulnerable to NIH funding trends.
obligations in billions of constant FY 2008 dollars

Life sciences - split into NIH support for biomedical research and all other agencies' support for life sciences.
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Federal R&D Funding to Colleges and Universities FY 1963-2005
Obligations by agency in billions of constant FY 2008 $

R&D includes research, development, and R&D facilities support. Constant-dollar conversions based on OMB's GDP deflators.
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WHAT’S NEXT?

- Congress is considering the FY 2009 budget resolution, which could boost domestic appropriations by up to $24 billion over the President’s request. But the President has threatened to veto any appropriations that exceed his request.

- If Congress is forced to stay with the President’s total, then ACI and other increases will be trimmed to shore up funding for other domestic programs, as in 2008.

- Many of these proposed R&D increases are authorized in the America COMPETES Act and other legislation, but the problem is in finding the resources.

- The Appropriations Committees will try to write and pass 12 2009 appropriations bills. But Congress is already considering delaying appropriations until the next President is in office.
FOR MORE INFORMATION…

The AAAS R&D web site is
www.aaas.org/spp/rd

The AAAS Forum on
Science and Technology
Policy is 8-9 May 2008
in Washington, DC