R&D Funding in the New Administration and Congress

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For the Council on Government Relations
AAAS R&D Budget and Policy Program
http://www.aaas.org/program/rd-budget-and-policy-program
S&T Agency Budgets in the Obama Years

Percent change from FY 2008 levels, constant dollars

*Includes nuclear, fossil, efficiency and renewables, grid research, and ARPA-E.
FY 2009 includes Recovery Act funding. Based on AAAS analyses of historical agency data. © 2017 AAAS
Federal Spending Since FY 2010
Percent change from FY10 levels, constant dollars

Based on AAAS analyses of historical OMB, agency, and appropriations data and the President's FY 2017 request. © 2016 AAAS
Science & Tech Agencies and Offices in the FY 2017 Omnibus

Estimated percentage change from FY 2016 levels, nominal dollars

- Includes renewables and efficiency, nuclear, fossil, grid research. Based on first look at the FY 2017 omnibus package posted May 1. | AAAS
R&D Funding in the Obama Years

- While the President’s requests were regularly unfulfilled, appropriators still found ways to fund research...when there was fiscal room
  - “All politics is local”
  - Competitiveness, health, energy independence, national security; individual legislator priorities

- However, still areas of particular disagreement, i.e.:
  - Climate science
  - Social science
  - Applied tech: energy, manufacturing
  - Duplication, role of government, waste, accountability, transparency
Limits on **NONDEFENSE** Spending

Estimated percent change from current year, inflation adjusted

- Pre-Sequester Baseline (Budget Control Act)
- Sequester Baseline (Budget Control Act)
- Actual Spending Caps
- Sequester Level (Current Law)*
- President's FY 2018 Budget

*Current caps last through 2021; spending is projected beyond.

Based on past budget resolutions, the Budget Control Act and subsequent legislation, and the FY 2018 OMB summary tables. © AAAS 2017
Limits on **DEFENSE** Spending

Estimated percent change from **current year**, inflation adjusted

- Pre-Sequester Baseline (Budget Control Act)
- Sequester Baseline (Budget Control Act)
- Actual Spending Caps
- Sequester Level (Current Law)*
- President's FY 2018 Budget

*Current caps last through 2021; spending is projected beyond.

Based on past budget resolutions, the Budget Control Act and subsequent legislation, and the FY 2018 OMB summary tables. © AAAS 2017
# UPDATED R&D in the FY 2018 Budget

(budget authority in millions of dollars)

<table>
<thead>
<tr>
<th></th>
<th>FY 2016 Actual</th>
<th>FY 2017 Estimate*</th>
<th>FY 2018 Budget</th>
<th>Change FY 17-18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total R&amp;D</strong></td>
<td>149,479</td>
<td>156,751</td>
<td>149,579</td>
<td>-7,173</td>
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<tr>
<td>Basic Research</td>
<td>32,885</td>
<td>34,747</td>
<td>28,935</td>
<td>-5,812</td>
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<tr>
<td>Development**</td>
<td>75,449</td>
<td>79,031</td>
<td>83,583</td>
<td>4,552</td>
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<tr>
<td>Facilities &amp; Equipment</td>
<td>2,581</td>
<td>2,514</td>
<td>2,171</td>
<td>-344</td>
</tr>
</tbody>
</table>

**Defense R&D**

|                     | 79,109         | 83,752            | 92,477         | 8,725           | 10.4%           |

**Nondefense R&D**

|                     | 70,371         | 73,000            | 57,102         | -15,898         | -21.8%          |

*AAAS estimates based on the FY 2017 omnibus. Other years based on OMB data revised with agency R&D data.

**Using old definition, continuing to count DOD 6.7 as R&D.
Select Science & Tech Agencies and Programs in the FY 2018 Budget

Estimated percentage change from FY 2017 enacted levels, nominal dollars

*Includes renewables and efficiency, nuclear, fossil, grid research, ARPA-E. Based on the FY 2018 budget request and the FY 2017 omnibus. | AAAS
Trump '18 vs. Reagan '82 and '83

Proposed two-year percentage change in total budgets, inflation-adjusted

*FY82 and FY83 figures are estimates.

Based on FY 2018 budget figures and historical budget documents, analyses, and reports. May 2017 | AAAS
Reception and Questions...

- Some initial *Republican* responses:
  - “draconian, careless, and counterproductive”
  - “cannot pass”
  - “does not work”
  - “you’ll see some changes”
  - “ridiculous”

- FY18 budget resolution: Where do the caps end up?
  - Remember: 60 votes required to change!

- FY18 appropriations: does support continue? How does the basic/applied dichotomy shake out?
For more info...

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