

# The Federal Research and Development Investment

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for the ASEE Engineering Deans Council

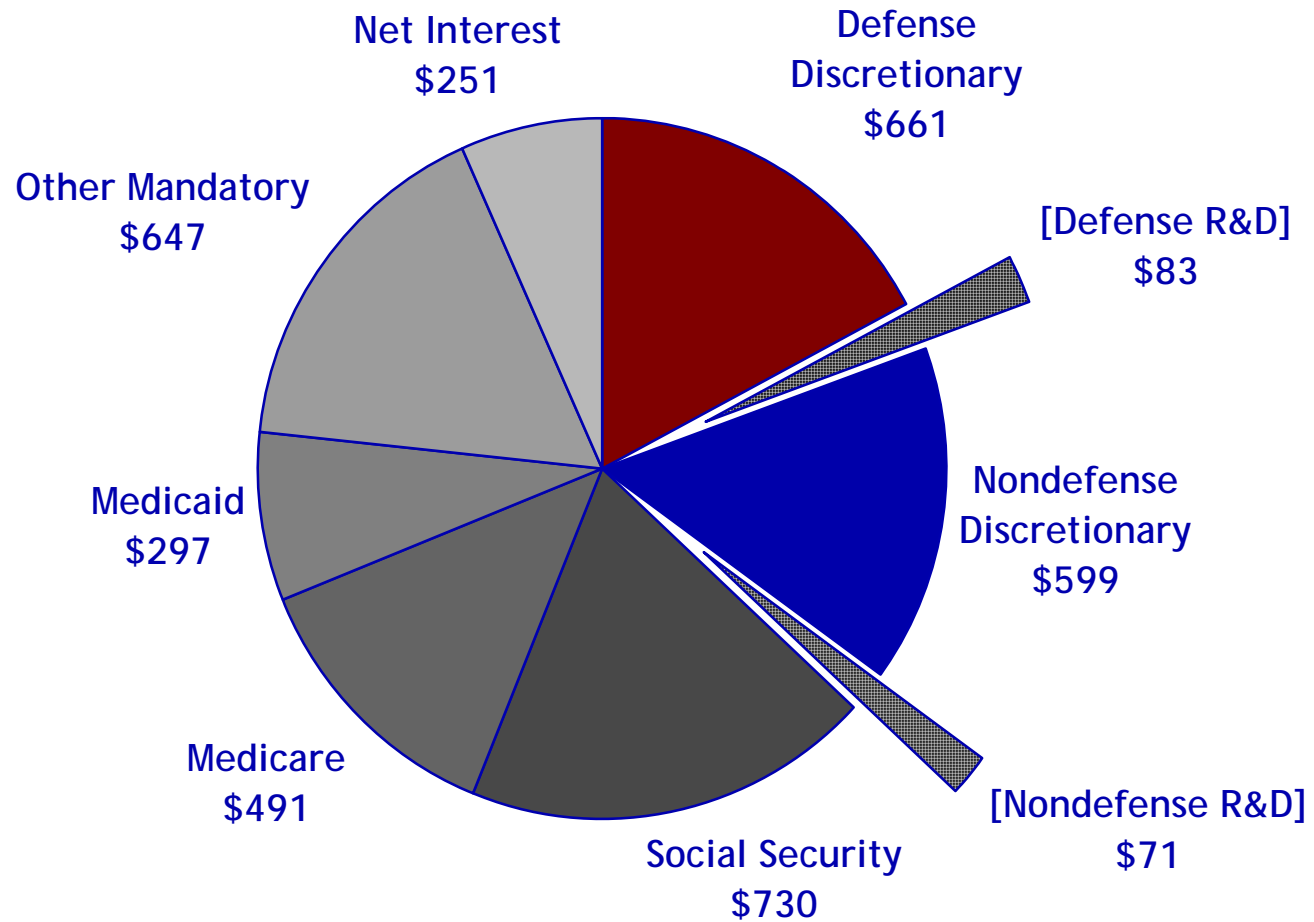
AAAS R&D Budget and Policy Program

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

# Composition of the Proposed FY 2011 Budget

## Total Outlays = \$3.8 trillion

outlays in billions of dollars



Source: *Budget of the United States Government FY 2011*.

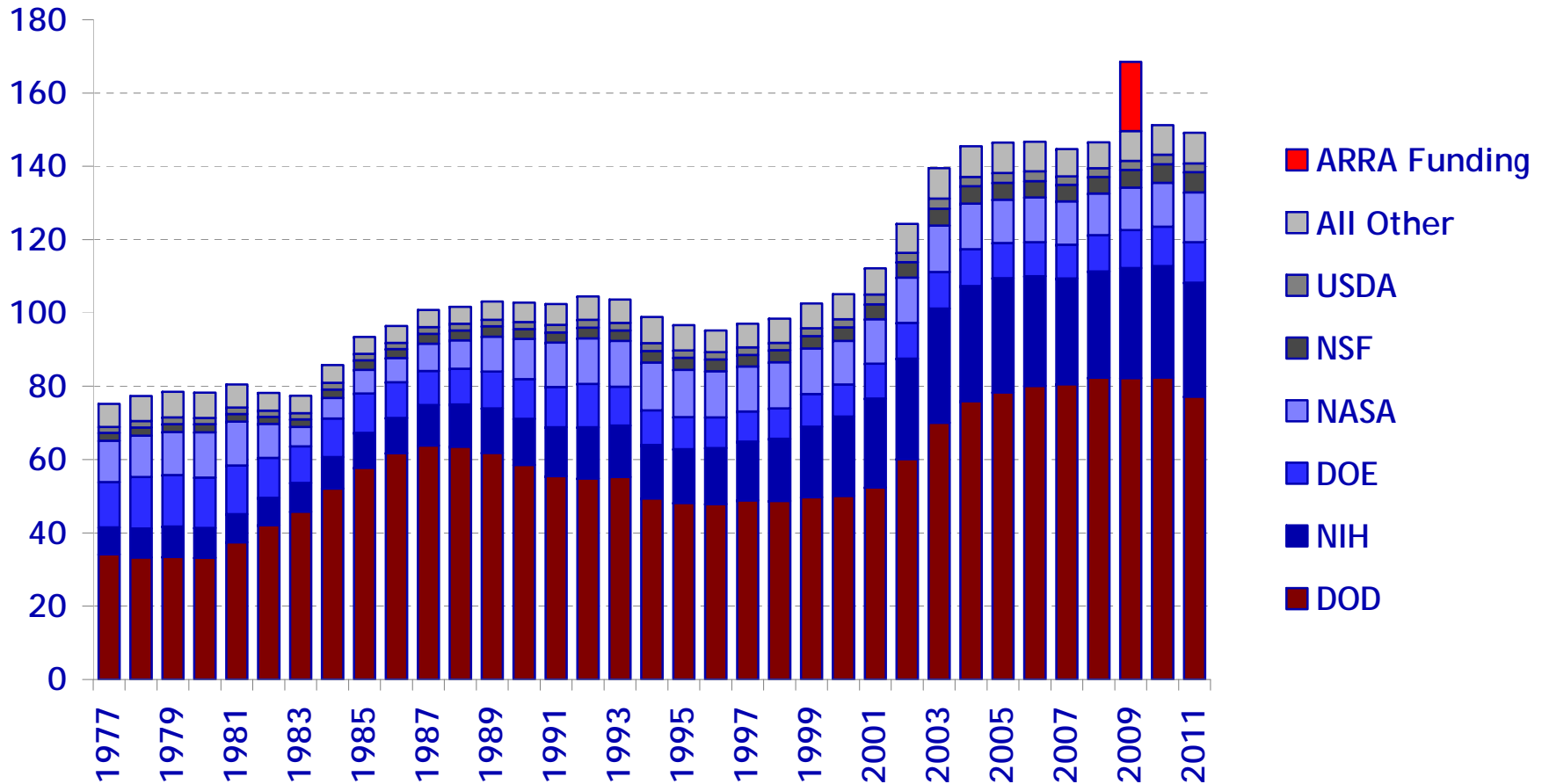
Projected unified deficit is \$1.3 trillion.

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# Trends in R&D by Agency

in billions of constant FY 2010 dollars

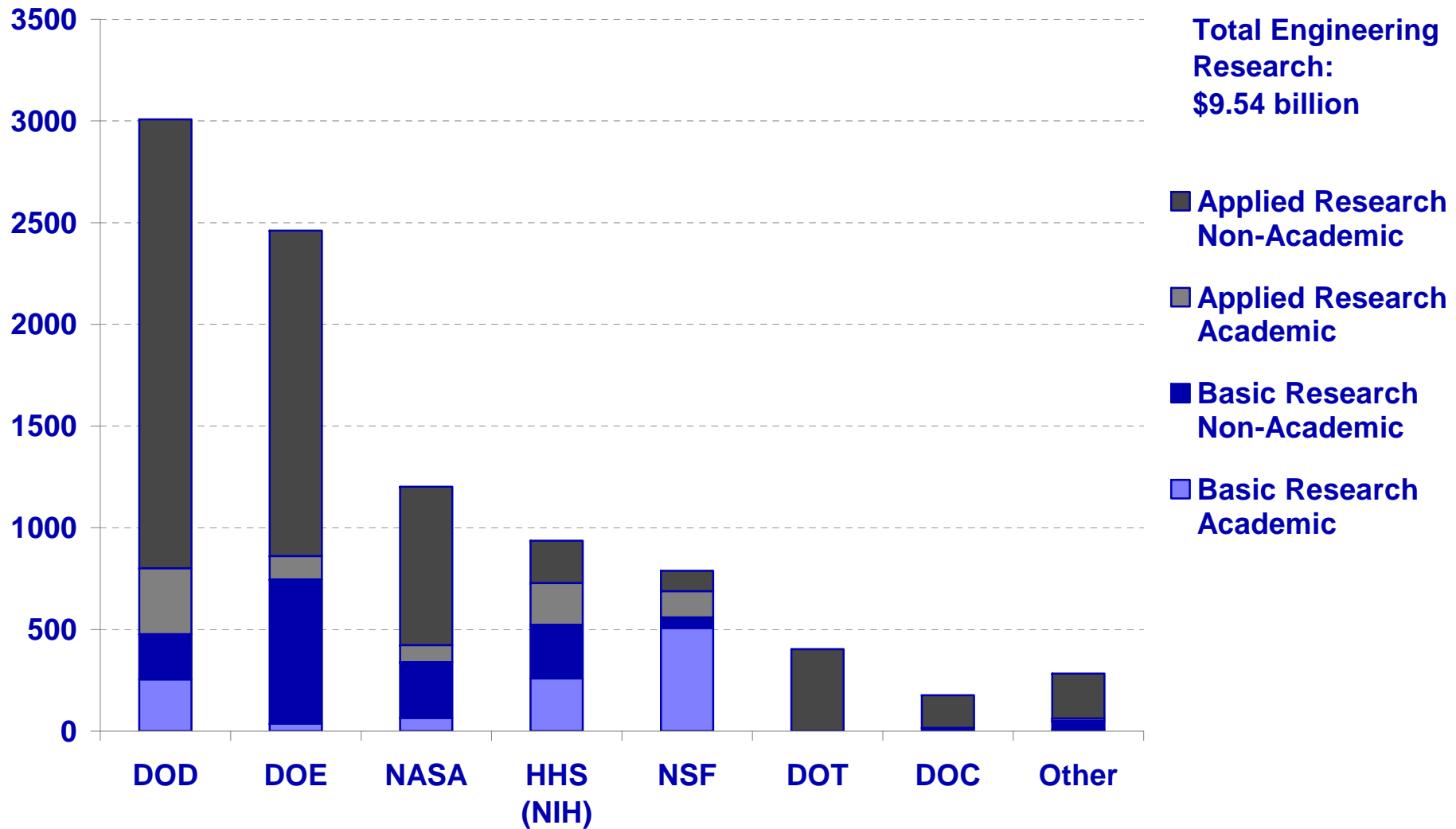


Source: AAAS Report: Research & Development series.  
 FY 2010 and FY 2011 figures are latest estimates.  
 1976-1994 figures are NSF data on obligations in the Federal Funds survey.  
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# Federally Funded Engineering Research: FY 2008

obligations in millions of dollars



Source: National Science Foundation, *Federal Funds for Research and Development*.

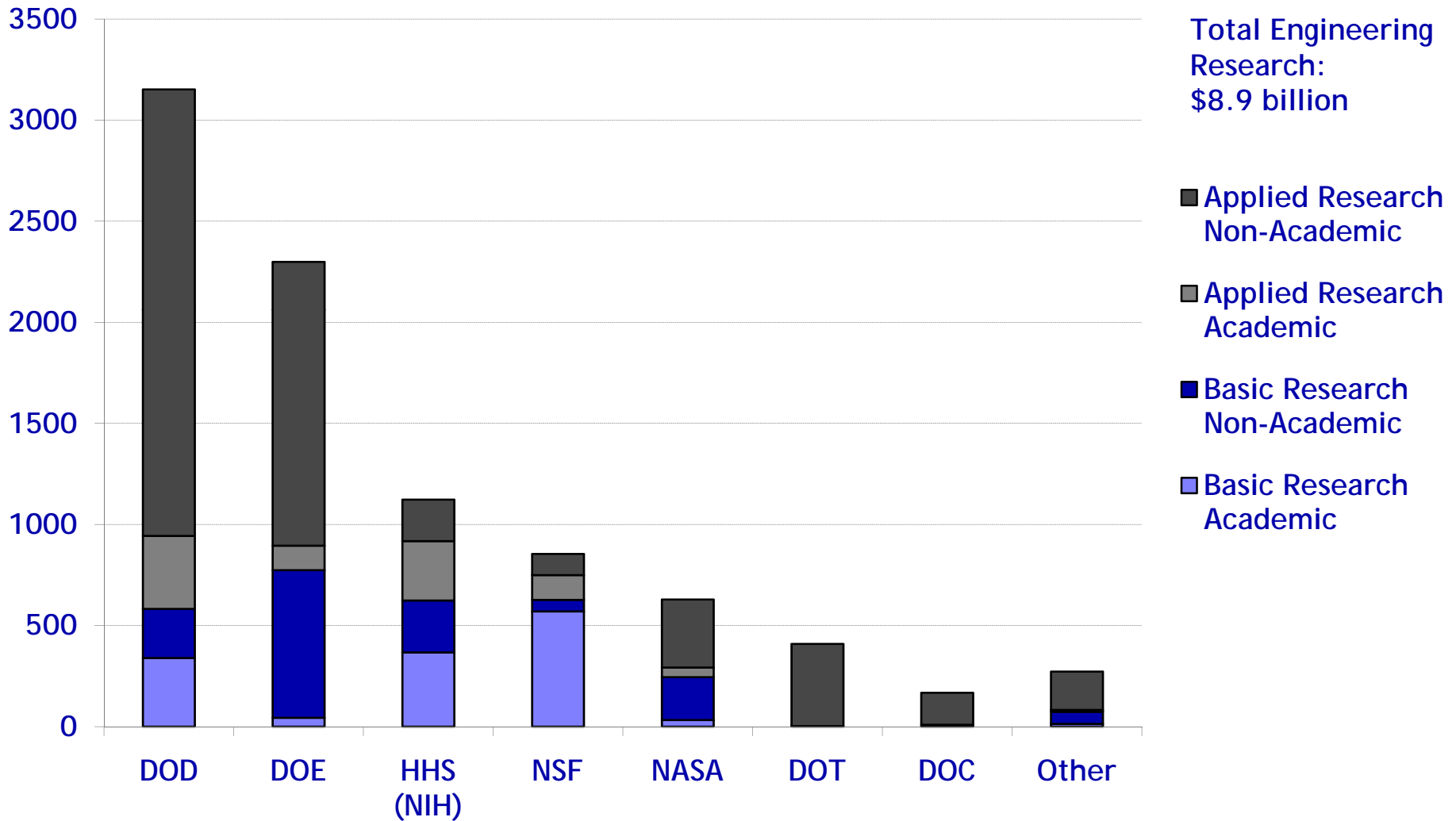
FY 2008 figures are preliminary.

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# Federally Funded Engineering Research: FY 2009

obligations in millions of dollars



Source: National Science Foundation, *Federal Funds for Research and Development*.

FY 2009 figures are preliminary.

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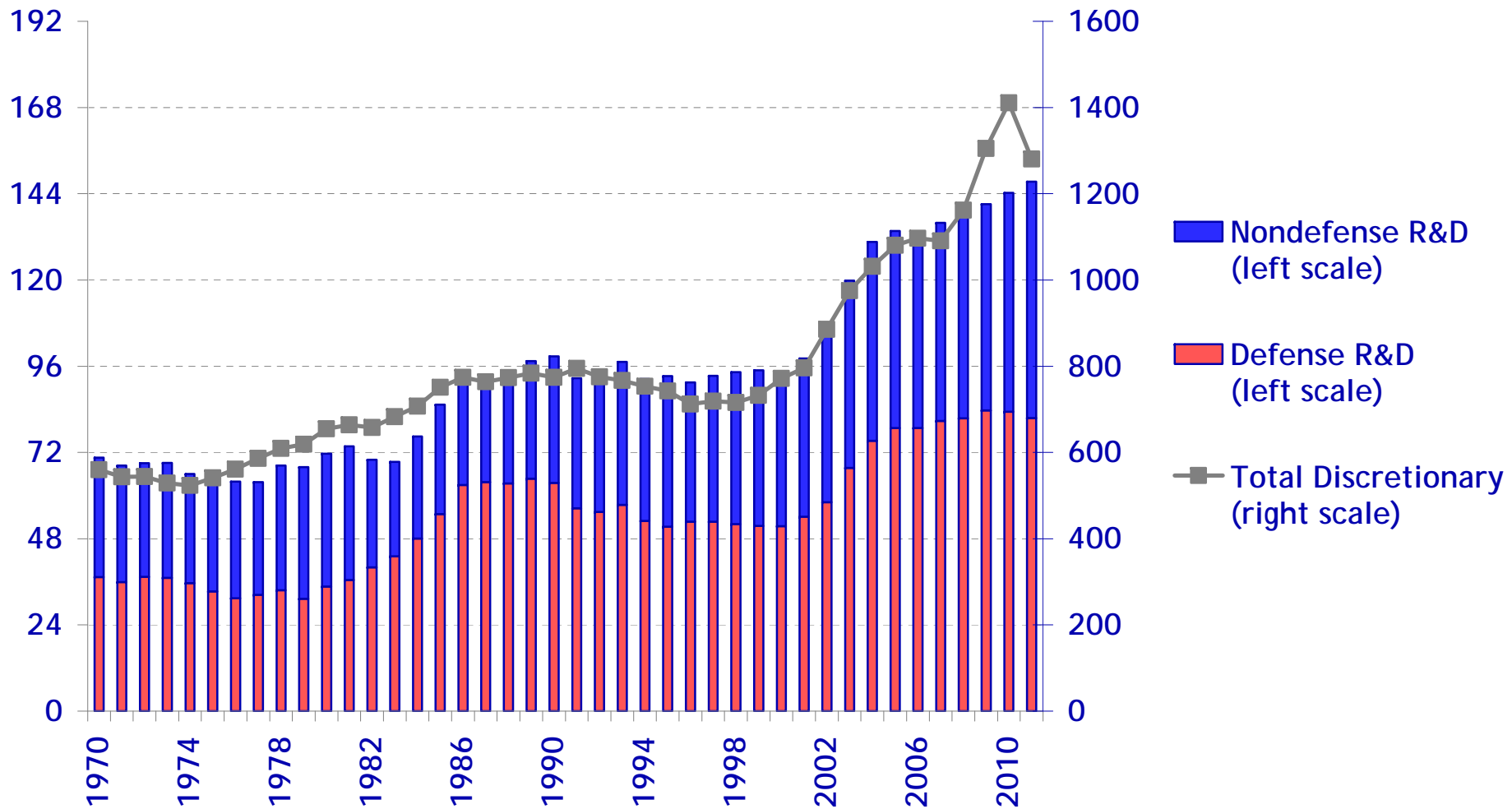


# FY 2011 Outlook

- Current continuing resolution (CR) expires March 4.
- Congress
  - FY 2011 funding levels are likely to be between the \$1.128 trillion in the failed Senate omnibus and \$1.055 trillion, the revised House 302(b) allocation total.
  - R&D Programs on Cut Lists
    - NIST - Tech Innov Program and Manu Extension Program (\$195m)
    - DoE - Applied research, especially Fossil R&D (\$0.9b - \$1.3b)
    - NASA - Commercial spaceflight development (\$1.2b)
    - DoD - RDT&E Cuts (up to \$7b)

# Trends in R&D and Discretionary Spending

outlays in billions of constant FY 2010 dollars



Source: *Budget of the United States Government, FY 2011*.  
 R&D totals do not include construction of facilities and equipment.  
 FY 2010-2011 data are budget projections.  
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# FY 2012 Outlook

- Fiscal Commission
  - "... we must invest in education, infrastructure, and high-value research and development..."
  - Long-term: Revenue and spending balance at 21% GDP
  - Inflation-adjusted FY 2008 levels in 2013, limit annual increase to half of the inflation rate through 2020.
  - No biennial budget recommendation
  - Notable R&D in \$200 billion illustrative savings options
    - 10% decrease in DOD RDT&E, eliminate new funding for DOE Fossil R&D, eliminate private sector funding for spaceflight developments



# FY 2012 Outlook

- Administration

- OMB Memos

- 5% reduction in overall discretionary budget

- Include list of low-impact programs totaling 5% of discretionary budget

- State of the Union - Pres. Obama

- "We'll invest in biomedical research, information technology, and especially clean energy technology..."

- Increase investment in clean energy tech by 1/3
      - Expand ARPA-E and 3 new Energy Innovation Hubs

# R&D Priorities

- Jobs / Innovation / Economy
  - Health
  - National Security
  - Energy
- 
- Democrats
    - Clean Energy
    - Action on Global Climate Change
  - Republicans
    - Energy Security
    - Resource Management

# Innovation / Entrepreneurship

- ARPA-E Conventions
- Sec. Locke - Catalyzing University Research for a Stronger Economy forum (Feb 2010)
- DOC Innovation Forums (4 in June/July 2010)
- SBIR/STTR Extended through May 31, 2011
  - Keeps same percentages (SBIR: 2.5%, STTR: 0.3%)
- R&D Tax Credit Proposals
  - Make the tax credit permanent
  - Increase simple formula credit from 14 to 17 percent
  - Tie credit percentage to domestic production
- ARRA Report: \$100 billion in innovation
  - \$18.7 billion in R&D

## For More Information...

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

Twitter: @AAAS\_RDBudget

The FY 2012 AAAS Forum on  
Science and Technology Policy  
is May 5-6, 2011  
in Washington, DC

### AAAS REPORT XXXV Research & Development FY 2011

Intersociety Working Group

