

Document Downloaded: Wednesday September 16, 2015

#### October 2013 COGR Meeting Thursday Afternoon Presentation - Hourihan

Author: Matt Hourihan

Published Date: 10/28/2013

# Federal R&D: Overview, Update and Outlook

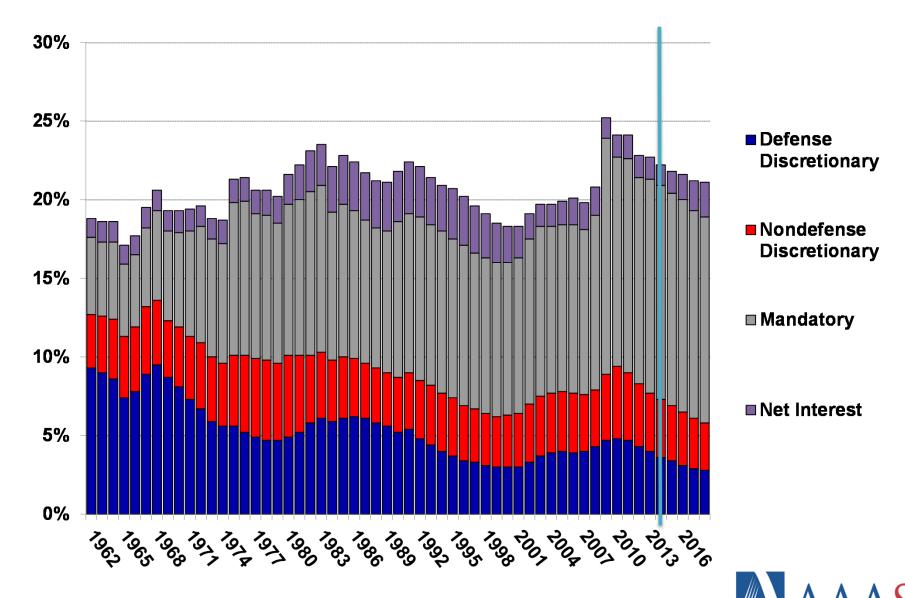
Matt Hourihan October 24, 2013

for the Council on Government Relations



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

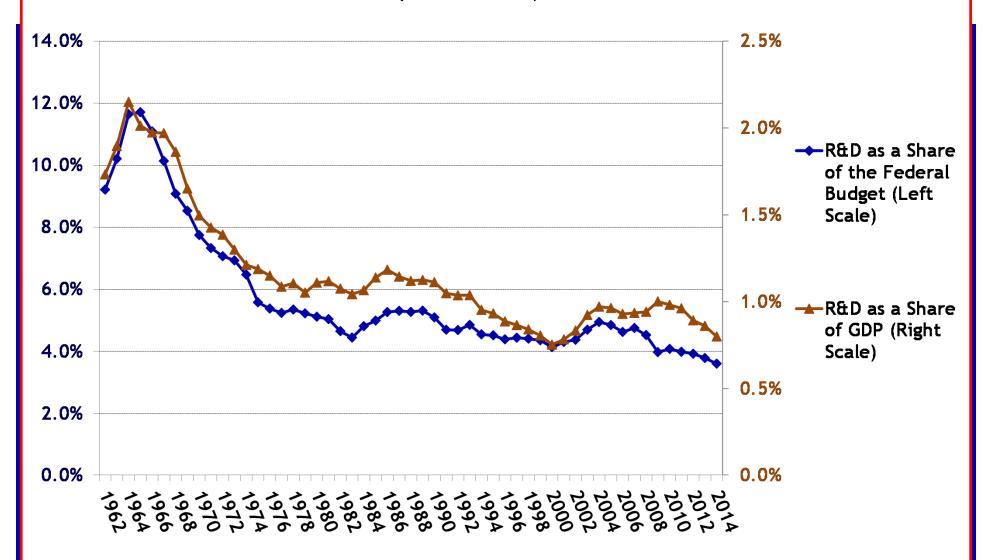
#### Federal Spending as a Percent of GDP, 1962 - 2018



Source: Budget of the U.S. Government FY 2014. © 2013 AAAS

#### Federal R&D in the Budget and the Economy

Outlays as share of total, 1962 - 2014



Source: *Budget of the United States Government, FY 2014.* FY 2013 data do not reflect sequestration. FY 2014 is the President's request.

© 2013 AAAS



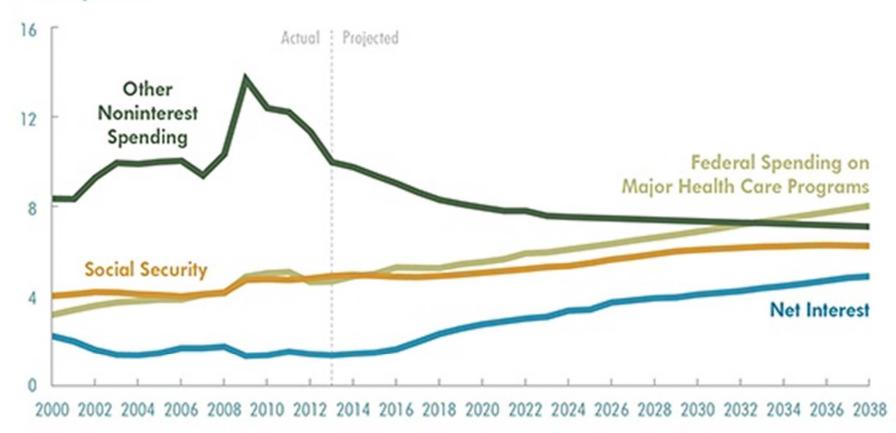


## \*Keep in mind...

 Department of Defense technology development activities have declined a little more than everything else

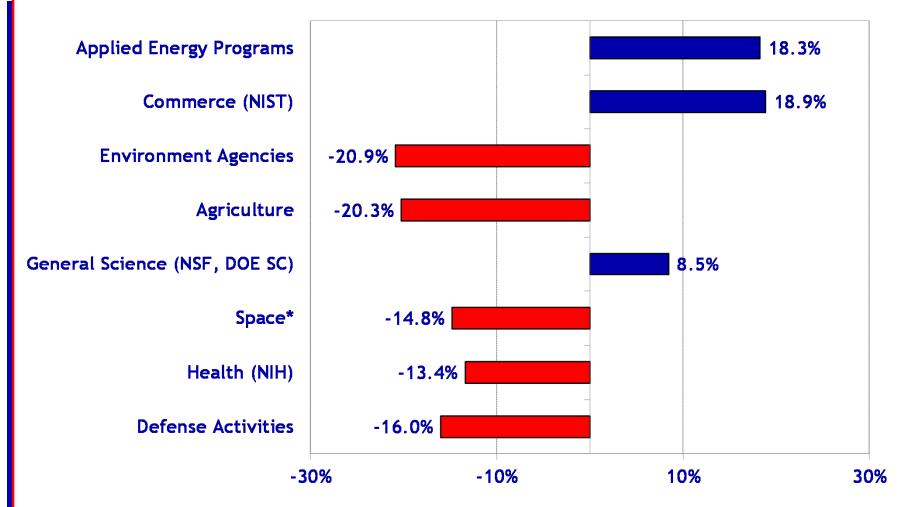
### Components of Total Spending Under CBO's Extended Baseline

Percentage of GDP



#### **R&D Change by Budget Function, 2004-2013**

Percent change from FY 2004 in constant dollars, post-sequestration



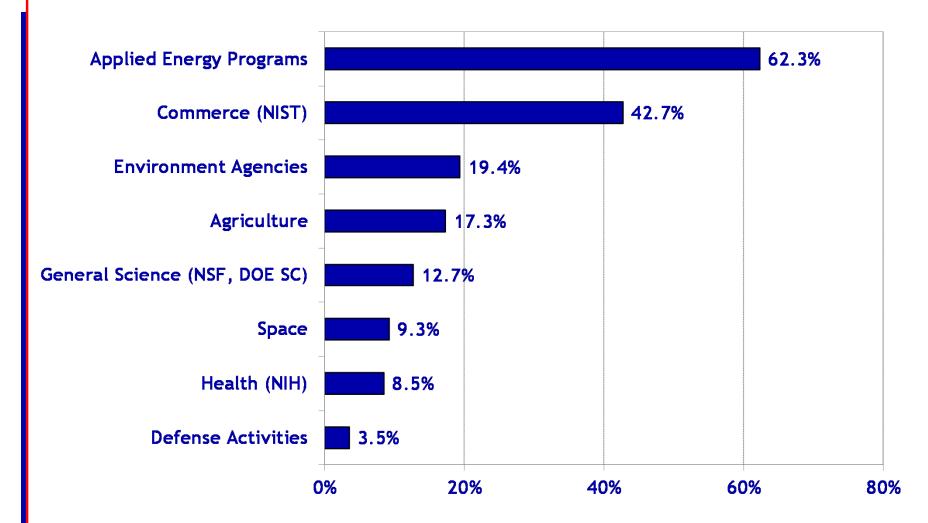
<sup>\*</sup> To avoid comparability challenges, "Space" refers to total NASA budget authority rather than R&D spending. It does not include Aeronautics, which is in the "Transportation" function, not shown. Source: AAAS analysis of historical data and current R&D data, agency budget justifications and other budget documents. Select DHS programs were categorized in Defense and General Science in prior years; the above data have been adjusted for comparability.



© 2013 AAAS

#### **FY 2014 R&D Budget Request by Function**

percent change from FY 2013, nominal dollars



Source: OMB R&D data, agency budget justifications, and agency budget documents. Environment includes natural resources R&D.





## Approps: What Have We Learned?

- Everybody still mostly likes science and innovation funding...
  - Though to varying degrees

But fiscal politics trumps all





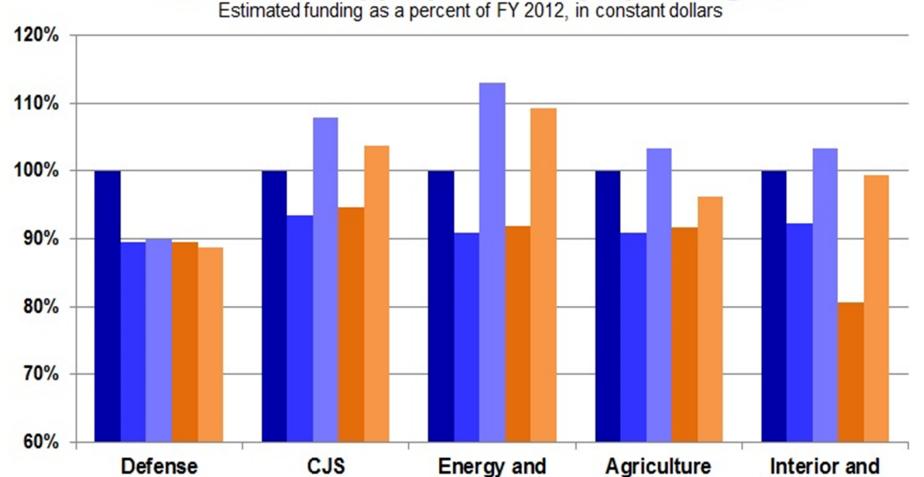
## Congress So Far

- Areas of (rough) agreement: Defense, DHS, Veterans, USDA, STEM reorganization
- Rough agreement in priorities but divergent funding anyway: NSF, some NASA, DOE Science, NIST
- Areas of complete divergence: clean energy, environment



Unknown: NIH





CJS = Commerce, Justice, Science bill (includes NSF, NASA, Dept. of Commerce). FY 2012 = 100%. Source: AAAS analyses of agency budget documents and appropriations bills and reports. FY 2013 figures are current estimates. R&D includes conduct of R&D and R&D facilities.

FY14 Request

Water

FY14 House

Environment

FY14 Senate

© 2013 AAAS

**2012** 

**2013** 



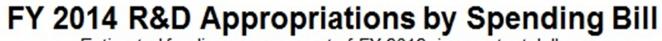
## Agency Appropriations Notes

- NSF: Many priorities embraced, except social sciences
- NASA: Big divergence for science (except planetary)
- DOE Science: divergence in BER, fusion, computing priorities
- Environment R&D: main targets EPA, Forest Service
- NIH: No House numbers yet; translational medicine?

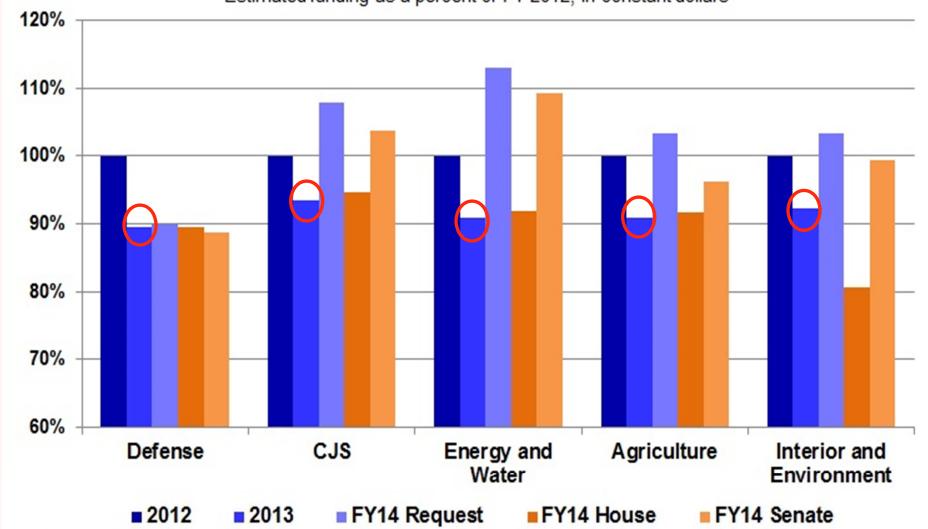


## Does any of this matter?

- Budget conference has until December
- Moving parts and hardline politics: sequester, entitlements, tax reform
- Sequester has <u>already happened</u> on the nondefense side
- Might get a full-year CR with anomalies...or a mixed appropriations/CR result...
- Was the shutdown backlash enough? Is "Hastert rule" done?



Estimated funding as a percent of FY 2012, in constant dollars

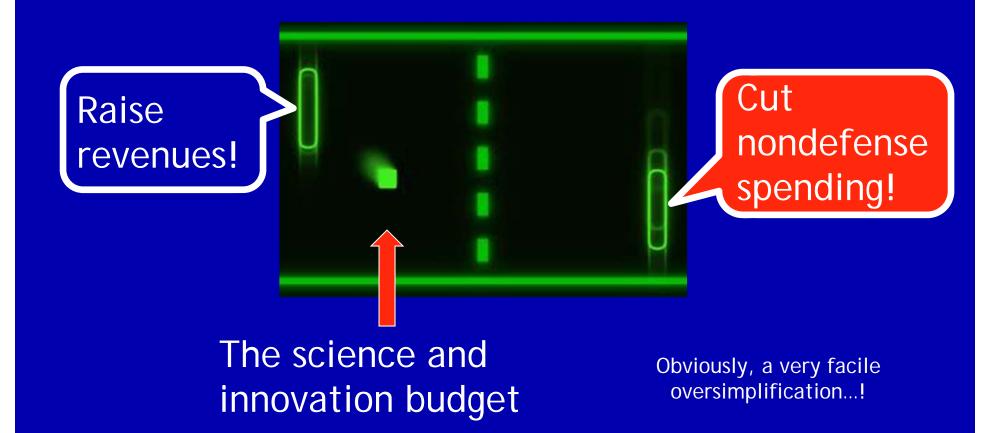


CJS = Commerce, Justice, Science bill (includes NSF, NASA, Dept. of Commerce). FY 2012 = 100%. Source: AAAS analyses of agency budget documents and appropriations bills and reports. FY 2013 figures are current estimates. R&D includes conduct of R&D and R&D facilities.

© 2013 AAAS



## Current Politics: The "Pong" Model?





For more info...

mhouriha@aaas.org

202-326-6607

www.aaas.org/spp/rd/

## AAAS REPORT XXXVIII Research & Development FY 2014

Intersociety Working Group

