

# Science and Policy in the U.S. Congress\*

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## Abstract

Recently Congress seems to be waging war on science. However, attacking science may be a surrogate for opposition to federal regulations that are appearing at a faster rate than in the past. In addition, cutting federal research seems a politically benign, if ineffective, way to reign in federal spending.

Congress only has a few scientists, but dozens of scientific associations host policy offices that provide scientific information to Congress and assist their members in communicating with Congress. In addition, AAAS administers a program funded by about 30 scientific and engineering societies to place about 150 scientists and engineers in congressional offices.

Some efforts to reduce scientific research are not new. Following a tradition established in 1975 by Senator William Proxmire's Golden Fleece award, some legislators are picking out grants with suspicious sounding titles to justify cuts to research agencies such as the National Science Foundation.

Many legislators support bills that would prevent regulatory agencies from using scientific information as a basis for implementing regulations. An added complication is that the bill titles are misleading. For example, the Secret Science Reform Act would prevent the Environmental Protection Agency from implementing regulations unless the scientific basis is publically available in a manner to allow reproduction of the research.

This would mean that health studies where patient names are confidential could not be used to justify emissions restrictions.

### **Reference Cited**

Battelle, 2014, 2014 Global R&D Funding Forecast: Battelle, The business of Innovation, 36 p.



# AAPG

*Advancing the World of Petroleum Geosciences.*

## Science & Policy in the U.S. Congress

**2015 Eastern Section AAPG Meeting**

**September 21, 2015**

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# Outline

Is Congress waging a war on science?

- Congress and science
- Congress and environmental regulations
- Congress and research funding
- View from the science community
- Opportunities to get involved

# Congress and Science

- Few legislators are scientists
- However legislators have access to scientific information
  - AAAS Fellows
  - Associations with policy office—AAPG, GSA, AGU etc.
  - Non-governmental organizations like American Petroleum Institute and Environmental Defense Fund
  - Think tanks like Center for Strategic and International Studies, Bipartisan Policy Center and Carnegie Institution
  - Federal agencies like US Geological Survey and Energy Information Administration
- Congress reflects the electorate

# Americans' Views of Science

(Pew Research Poll July 2015)

- Americans are poorly informed about scientific issues:
  - A majority of Americans say vaccines are safe and GMO are unsafe regardless of party affiliation
  - Only half of voters know what fracking is (2013)
- Deep divide on climate change and energy issues
  - Half of US adults say the earth is getting warmer because of human activities—27% of Republicans and 71% of Democrats
  - 57% of Republicans and 30% of Democrats support increased use of hydraulic fracturing
- Strong generational, education and gender differences in views on science issues
  - Climate-change doubters are older
  - More men consider GMO safe
- Scientists and engineers are 5% of labor force

# The Regulatory Landscape

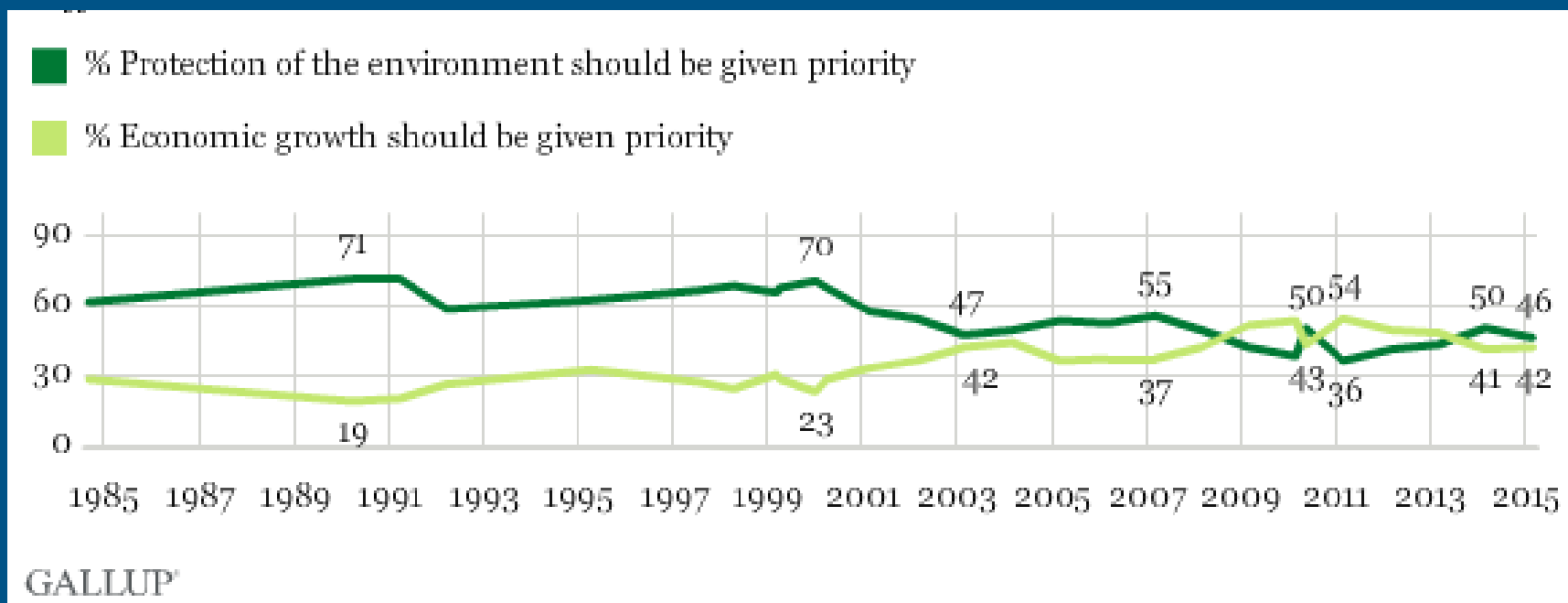
Federal regulations are directives or requirements with the force of law enacted by federal agencies necessary to enforce legislation passed by Congress.

- In 2014 Congress passed 224 laws.
- In 2014 Federal agencies issued over 3,000 regulations and rules.

All proposed regulations are published in the Federal Register and open for public comment for at least 30 days.

# Congress, the Public and Environmental Regulations

- The citizens disagree on the need for more regulation
- Republican-controlled Congress diametrically opposed to Democratic administration's push for emissions reductions





# Limited Congressional Options to Oppose Environmental Regulations

- Laws restricting the implementation of regulations:
  - E.g., Secret Science Reform Act, H.R. 1030 passed the House
- Oversight hearings, investigations
  - Inform voters
  - May signal budget cuts if an agency does not change
- Appropriation riders:
  - E.g., preclude Sage Grouse Endangered Species Act listing
- Congressional Review Act of 1996:
  - Congress has 60 days to review and vote to overrule a regulation.
  - A presidential can veto requires 2/3 vote by both chambers to override.

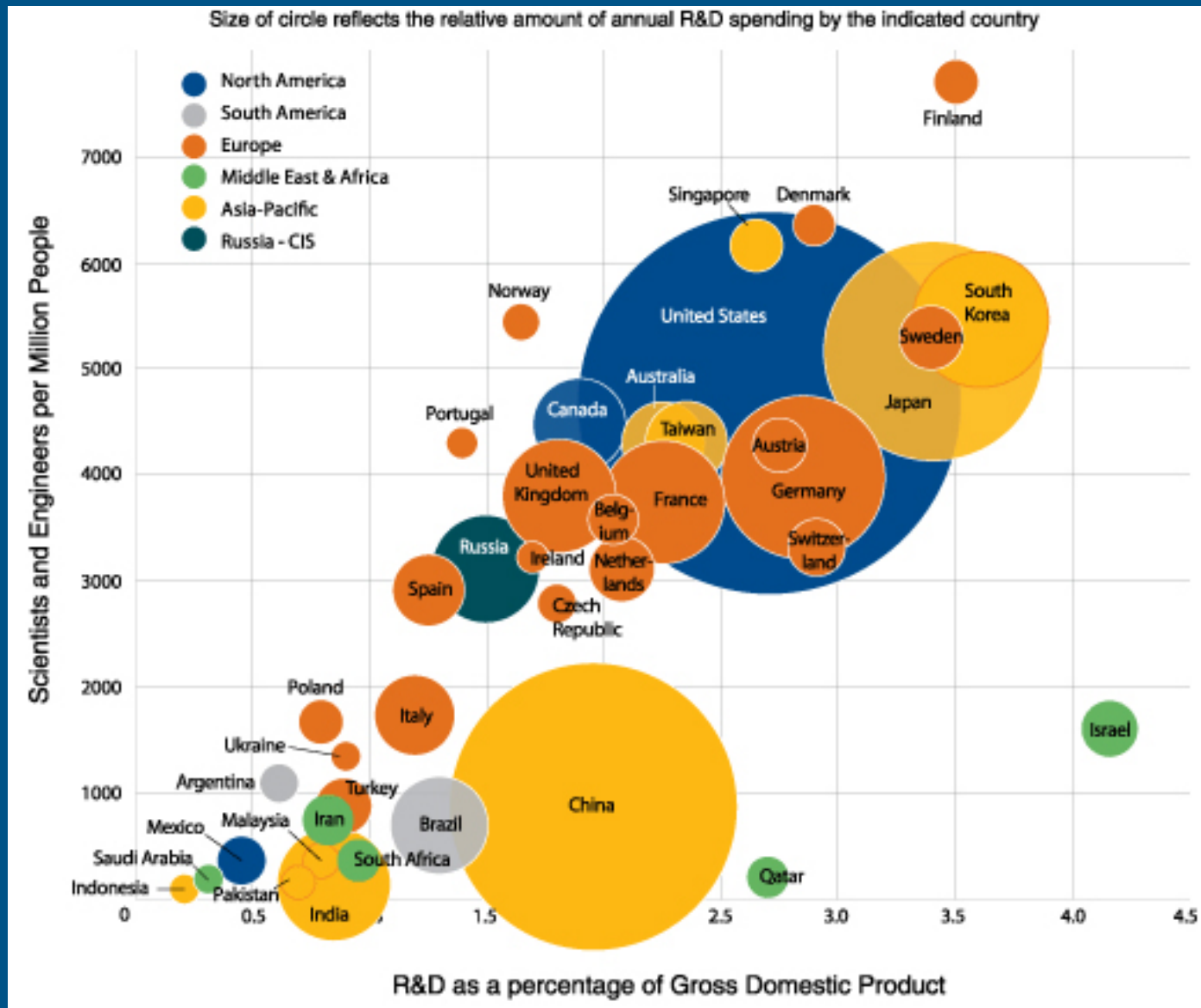
# Bipartisan, Comprehensive Energy Legislation Can Smooth the Way for Contentious Legislation

- Senate Energy and Natural Resources Committee, Sen. Murkowski, chair:
  - Future energy sources, infrastructure, workforce, regulation
- House Energy and Commerce Committee, Rep. Fred Upton, chair:
  - Infrastructure, future workforce, energy diplomacy, cut red tape, encourage private sector
- Many other ideas could be added to a comprehensive bill:
  - Sen. Tom Udall: 30% Federal Renewable Energy Standard
  - Frack Pack: remove hydraulic fracturing exemptions under Safe Drinking Water Act and Clean Water Act

# Research Funding Issues

- Both Republicans and Democrats value federal research
- Authorization bills give guidance on research focus and set annual appropriation limits
- In addition, mandatory budget cuts are reducing research funds
  - 2011 Budget Control Act, AKA Sequestration
- National Science Foundation would receive additional, targeted cuts

# Global Public and Private Research



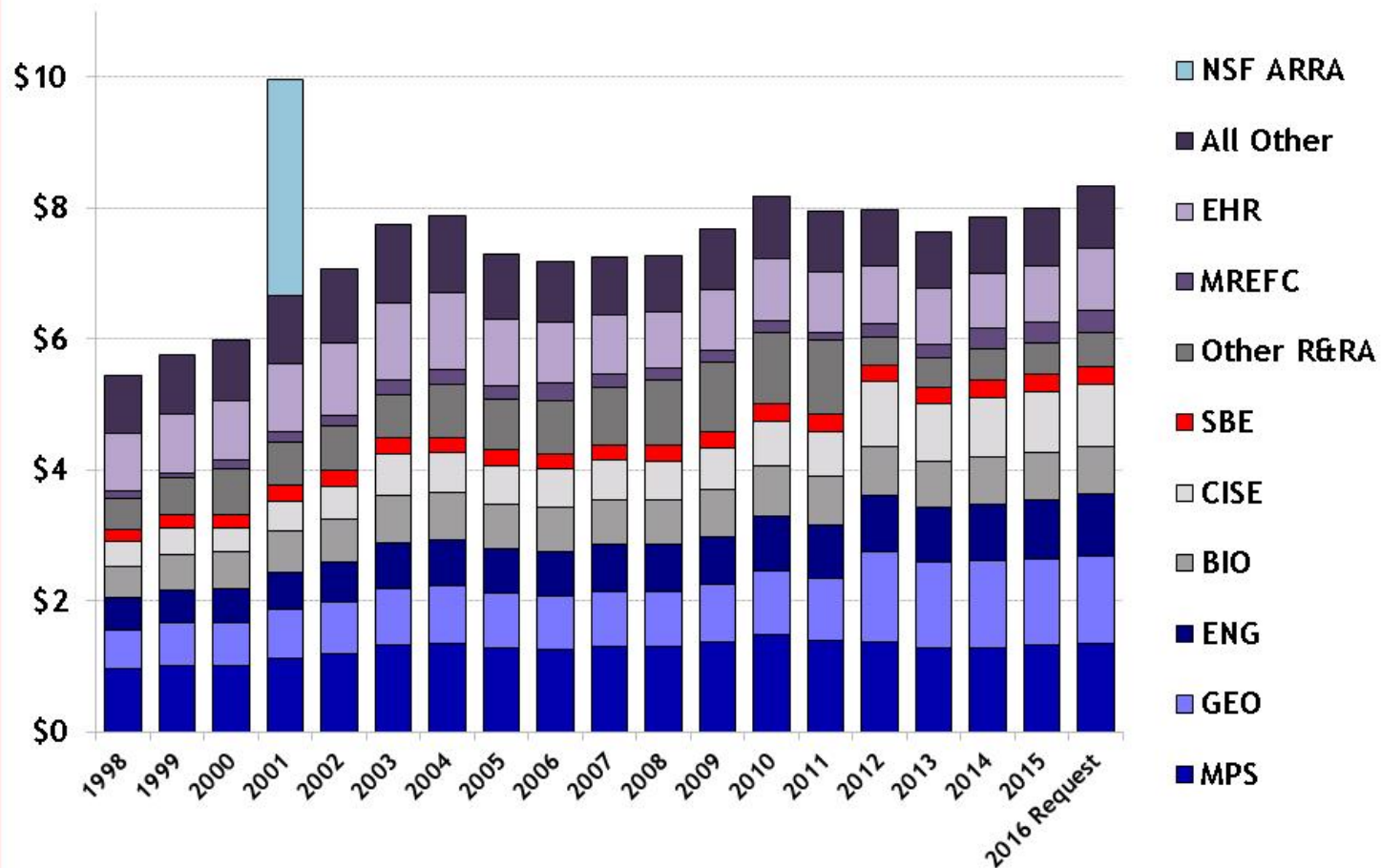
# H.R. 1806: America COMPETES Act of 2015

- 2007 and 2011 authorizations encouraged research to improve US competitiveness, with bipartisan support
  - Included NSF, Department of Energy and National Institute of Standards and Technology
- Current bill (HR 1806) is less about dollars than research topics
  - Requires NSF to publish a determination that each research grant is in the national interest
- Cuts geoscience and social science research, and international activities at NSF
  - Congressional mandates at this level of detail are highly unusual at NSF
  - Stated goal is to focus on core science
  - Assumed goal is to cut spending on climate change research

# NSF Budget

## National Science Foundation Budget

Budget Authority in billions of constant FY 2015 dollars

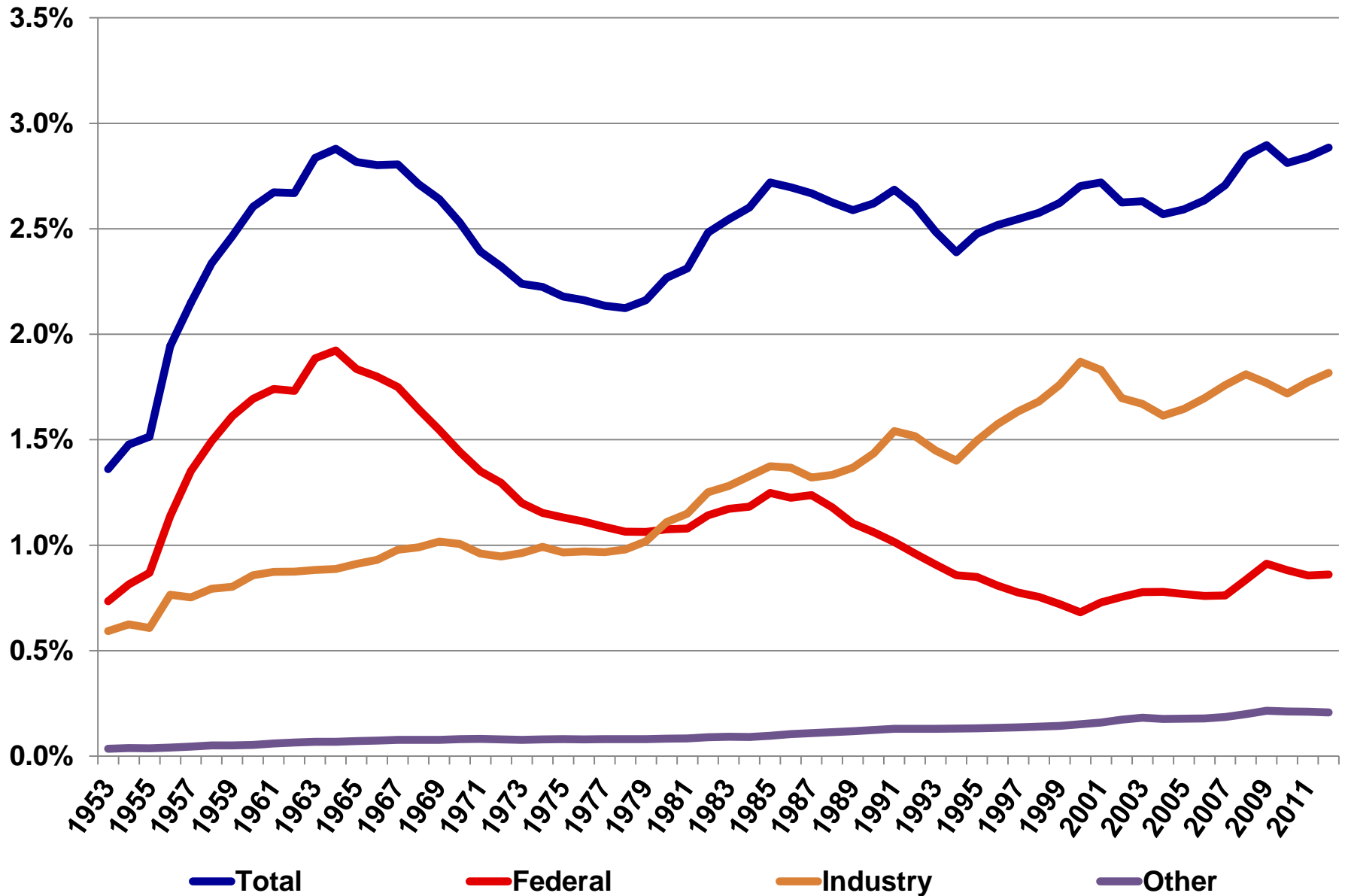


Source: NSF budget requests and AAAS R&D report series. FY 2015 figures are estimates. © 2015 AAAS

# Fiscal Year 2016 Appropriations

- President Obama requested \$146.4 billion in R&D, a 6.5% increase
- 2011 budget law would keep spending flat
- House proposed budgets for R&D are up 3.4%
- Senate proposed budgets for R&D are up 6.5%
- Much of the increase is for Defense R&D
- But House would cut NSF 16 % (social science and geological science directorates)
- A Continuing Resolution is likely (continues past year spending)
- Disagreements over funding Planned Parenthood could shut down the government on October 1

# R&D as a Share of GDP by Funder





# Science Community Views on Federal R&D Funding

- NSF research grants are considered essential for getting academic promotions, tenure
- Research grants support graduate students
- Research grants supplement faculty salaries
- Universities prefer departments with high levels of grant income
- Research leads to technological innovation

# Opportunities to Get Involved

- AAPG Congressional Visits Day (CVD) in March in Washington, DC
- Geoscience-CVD is in September in Washington, DC
- Visit your senator or representative when they are in their district
  - See AGU Science Policy web page for suggestions
- Contact AAPG Geoscience and Energy policy Office staff