



OSTP and the Obama Administration's Science and Technology Policy Agenda

White House Office of Science & Technology Policy
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Office of Science and Technology Policy (OSTP)

- OSTP provides S&T advice to the president and other White House offices, leads federal S&T policymaking, coordinates interagency S&T efforts and R&D spending, and consults with non-federal stakeholders on S&T matters.
- Director John Holdren is also President Obama's science advisor.
- OSTP manages the National Science and Technology Council (NSTC) interagency committees and subcommittees.
- OSTP supports the President's Council of Advisors on Science and Technology (PCAST).



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The Obama Administration's S&T Policy Agenda

S&T are central to meeting key challenges of

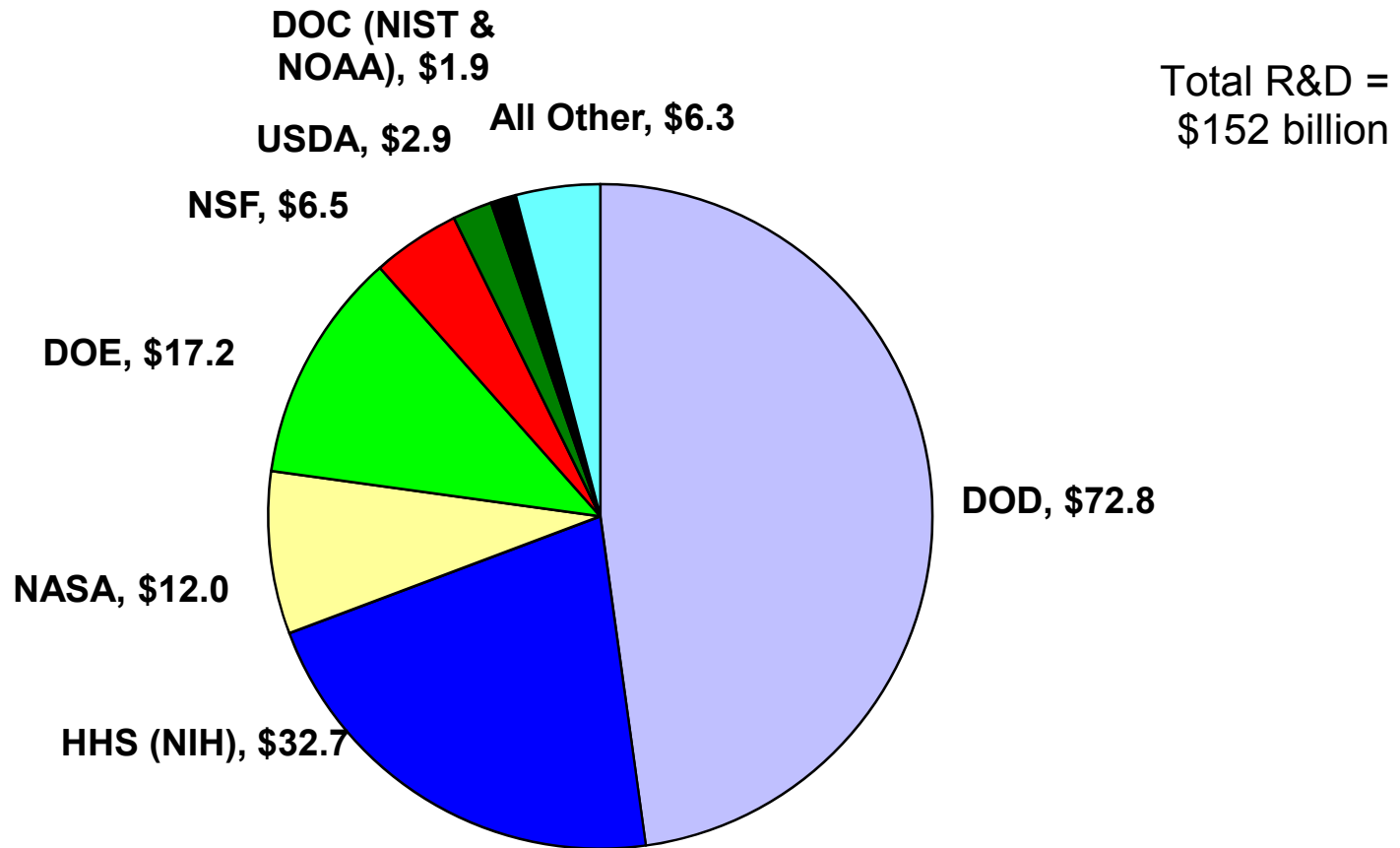
- economic recovery, growth, & development
- biomedicine & health-care delivery
- clean, safe, reliable, & affordable energy
- climate-change mitigation & adaptation
- competing uses of land & water
- the health & productivity of the oceans
- national & homeland security

as well as lifting the human spirit through discovery, invention, & expanded understanding.



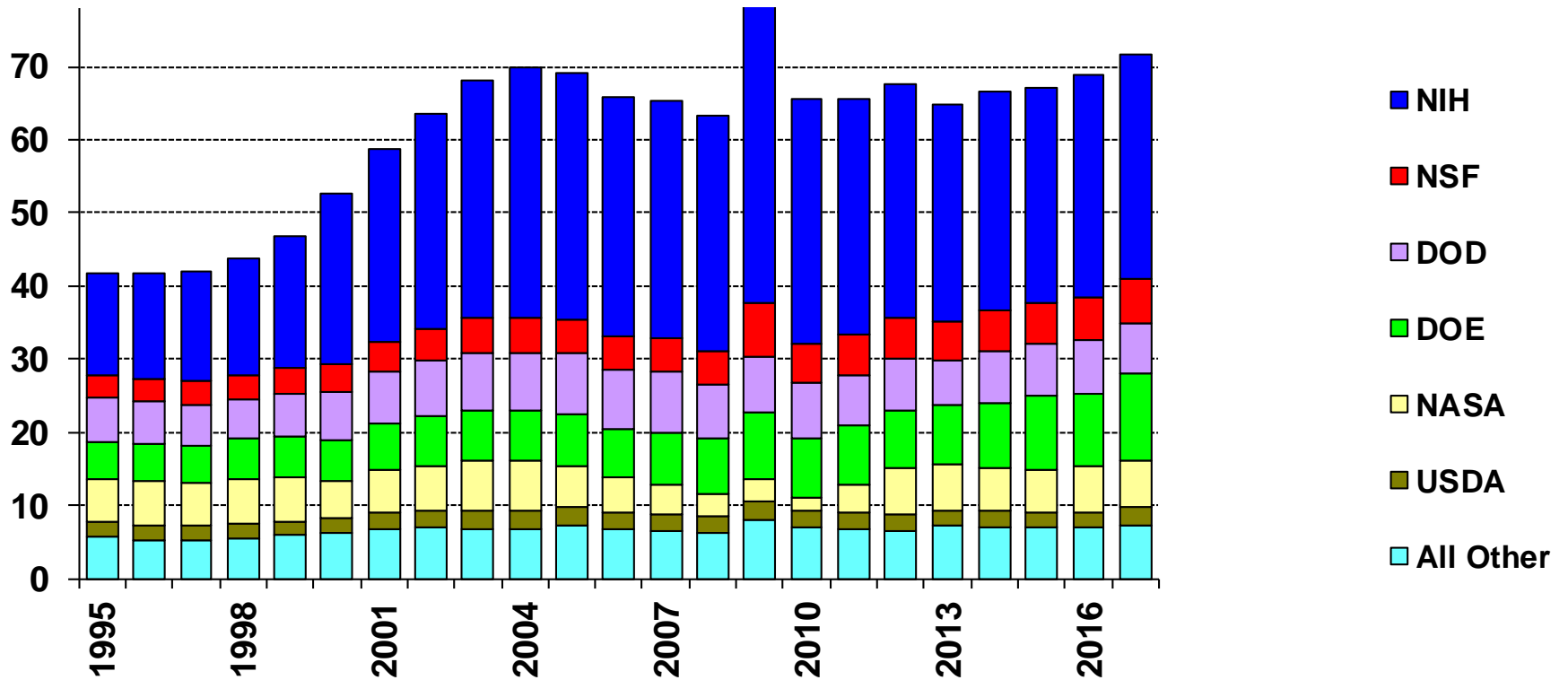
Total R&D by Agency: 2017 Budget

Budget Authority in billions of dollars



Federal Research by Agency, FY 1995-2017

in billions of constant FY 2016 dollars



FY 2009 figures include Recovery Act appropriations.
 Research includes basic research and applied research.
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Initiatives on nat'l & global challenges

STEM EDUCATION

- Educate to Innovate
- STEM Master Teacher Corps
- 100kin10
- STEM Inclusion Initiative
- Computer Science for All

INFOTECH / COMPUTING

- ConnectED
- Big Data Initiative
- Nat'l Strategic Computing Initiative

INNOVATION FOR THE ECONOMY

- American Innovation Strategy
- Startup America
- Data.gov
- Challenge.gov
- Advanced Mfg Partnership / Nat'l Network for Mfg Innovation

BIOMEDICINE & HEALTH

- Neuroscience / BRAIN Initiative
- Combating Antimicrobial Resistance
- Precision Medicine Initiative (PMI)
- Cancer Moonshot

ENERGY & ENVIRONMENT

- New fuel-economy/CO₂ standards
- ARPA-E, Energy Innovation Hubs
- National Ocean Policy
- Arctic Initiative / AESC
- Pollinator Initiative
- Climate Action Plan & COP21

NAT'L SECURITY / INTERNAT'L S&T

- Cybersecurity Initiative
- Space Weather Strategy
- Science Envoys
- Mission Innovation

Some persistent obstacles

- Inadequate funding for R&D (public & private)
- Slow translation of R&D advances into practical applications
- Under-representation of females & ethnic minorities in STEM fields
- Under-representation of ST&I talent in many Federal departments, agencies, and offices
- Poor public & policy-maker understanding of ST&I
 - the role of ST&I in meet societal challenges
 - the importance of basic research
 - the value of international cooperation

Some big opportunities on the path ahead

- Harness the full potential of partnerships (local/state/federal, public/private/academic/civil-society, international) to overcome many of the obstacles.
- Continue the “infiltration” across the gov’t of ST&I talent by aggressive recruiting, PIFs, AAAS fellows, etc.
- Apply research on “what works” in STEM inspiration, teaching, mentoring, training to increase participation in STEM careers and create a science-savvy citizenry.
- Exploit recent advances in biomedical sciences & “big data” to drastically improve healthcare.
- Build on the momentum of COP21 and the recent rapid growth of renewable-energy deployments worldwide to fashion a global revolution in clean energy.

THANK YOU
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