

2015 ENGINEERING DEANS

PUBLIC POLICY COLLOQUIUM



Legislative Update

ASEE Engineering Deans Council

Public Policy Colloquium

Gregory Washington,

University of California, Irvine

Joseph Helble,

Dartmouth



FY 2016 Budget Resolution

What's expected:

- A joint House-Senate resolution.
- Partisan divide over adhering to caps set by the 2011 Budget Control Act.
- Total allowed by BCA is \$1.1 trillion.
- GOP chairs will seek a trend toward a balanced budget in 10 years.

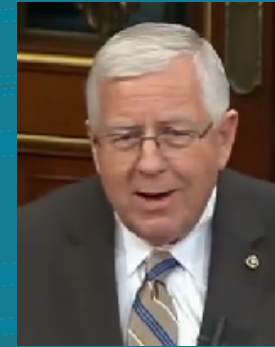


Budget Key Players

- Senate:

Mike Enzi (R-Wyo) – Chair

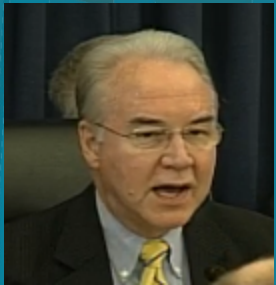
Bernie Sanders (D-Vt.) – Ranking



House:

Tom Price (R-Ga.) – Chair

Chris Van Hollen (D-Md.) - Ranking





Policy Debate

- Some in GOP press for DoD spending level exceeding caps.
- Does Congress shift money away from non-Defense discretionary budget? NIH, NSF, Agriculture could suffer.
- Do Republicans and the White House agree to end sequestration?



Appropriations

- 12 appropriations bills

Key questions for FY 2016:

Will bipartisan approach of 2014, 2015
continue?

If not – will the committees opt for a continuing
resolution (at 2015 levels)?



Key Appropriators-Senate

- Senate Chair – Thad Cochran (R-Miss.)
 - Ranking – Barbara Mikulski (D-Md.)
- Commerce, Justice, Science - Richard Shelby
(R-Ala.)
- Energy & Water - Lamar Alexander (R-Tenn.)
- Defense - Cochran
- Labor, HHS, Education - Roy Blunt (R-Mo.)
- Agriculture - Jerry Moran (R-Kan.)
- Homeland Security - John Hoeven (R-N.D.)





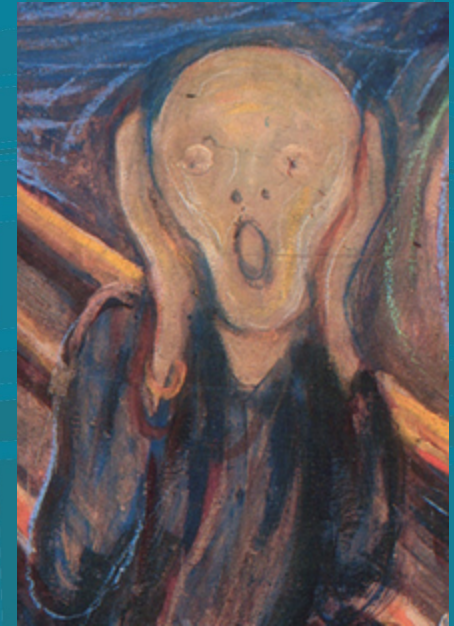
Key Appropriators-House

- Chair – Hal Rogers (R-Ky.)
 - Ranking - Nita Lowey (D-N.Y.)
- Commerce, Justice, Science - John Culberson (R-TX)
- Energy & Water - Mike Simpson (R-ID)
- Defense - Rodney Frelinghuysen (R-NJ)
- Labor, HHS, Education - Tom Cole (R-OK)
- Agriculture - Robert Aderholt (R-AL)
- Homeland Security - John Carter (R-TX)



Sequestration

- It could happen again.
- GOP fiscal hawks favor it as a form of discipline.
- Defense hawks, Democrats want to end it, but disagree on increasing domestic spending.





Legislation in the 114th Congress

In process now:

- Immigration
- Elementary and Secondary Education Act
- Higher Education Act
- Cybersecurity
- Manufacturing
- Precision Medicine

Under discussion:

- COMPETES Reauthorization?



Immigration

- **S.98** - STEM Jobs Act of 2015. Sponsor: David Vitter (R-La.) – Provides up to 55,000 visas a year to immigrants who have or are near completion of a STEM doctorate from a U.S. university.
- **S.153** - Immigration Innovation (I-Squared) Act of 2015. Sponsor: Orrin Hatch (R-Utah) – Raises the cap on H1-B visas from the current 65,000 to between 115,000 and 195,000.



Higher Education Act Reauthorization

- At Stake: \$150 billion in student financial aid and loans.

Issues

- Assessing the value of a degree or training based on 'gainful employment.'
- Simplifying regulations.
- Free community college (Obama's plan) modeled on Tennessee. Sen. Lamar Alexander (R-Tenn.) chairs HELP Committee.



Bills in the Mix

- **S. 85**, Repay Act of 2015 – Sponsor: Angus King (I-Maine), bipartisan cosponsors – simplifies repayment of direct student loans; bases repayment on annual income.
- **HR 565** – Sponsor: Michael Honda (D-Calif.) – To stimulate collaboration and coordination in the nation's STEM initiatives.



Bills in the Mix

- **S.191** - Educating Tomorrow's Workforce Act of 2015 – Sponsor: Tim Kaine (D-Va.) – Revises federal aid for career and technical education, requiring states to ensure that programs culminate in industry-recognized credentials.
- **H.Res.26** – Sponsor: Bob Goodlatte (R-Va.) Registers a “sense of the House” opposed to the Obama administration’s plan to rate post-secondary institutions.



Bills in the Mix

- **H.R. 73**, America Realizing the Informational Skills and Initiative of New Graduates Act of 2015 or the America RISING Act of 2015 – Sponsor: Sheila Jackson-Lee (D-Tex.): Establishes grants for working college graduates to pursue further education in STEM.



Elementary and Secondary Education Act (NCLB)

Issues

- Rigorous state standards and assessment for math and science.
- Alignment with career- or college-readiness.
- Common Core and Next-generation science standards.
- Federally sponsored competition.
- Emphasis on STEM in teacher preparation.



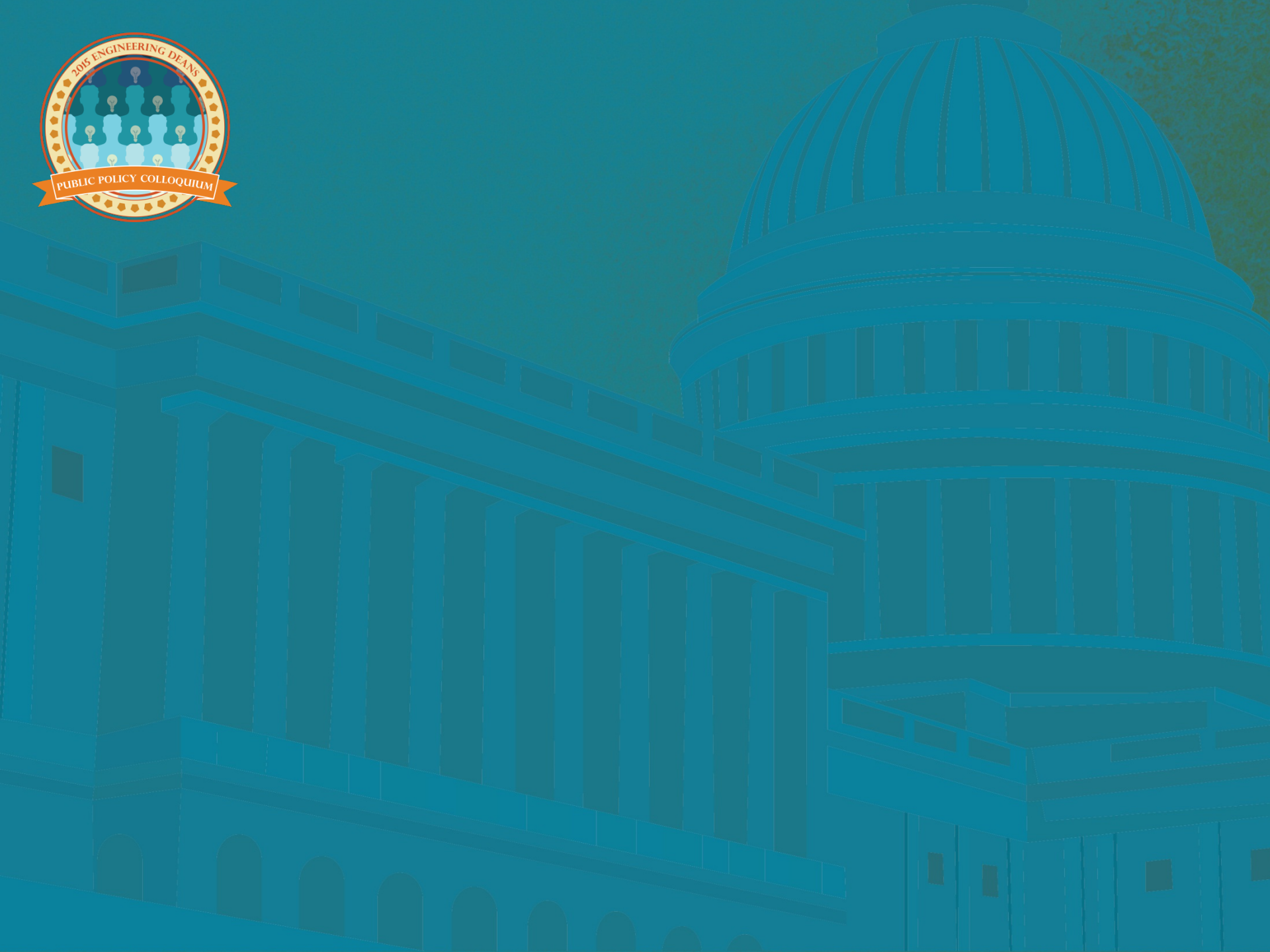
Manufacturing Hubs

- The National Network of Manufacturing Innovation institutes comprise industry, research institutions and government agencies. Each focuses on a distinct manufacturing challenge.
- Launched by the Obama administration; became law in the FY 2015 Omnibus Appropriations measure.
- Eight competitions have been announced. Five awards so far. White House budget envisions 45 total.



Manufacturing Hubs

- 3D Printing (additive manufacturing) – based in Youngstown, Ohio.
- Advanced Composites – based in Knoxville, Tenn.
- Digital Manufacturing & Design Innovation – based in Chicago.
- Lightweight Innovations for Tomorrow – based in Detroit.
- Next Generation Power Electronics – Research Triangle, N.C.
- Award expected soon for Integrated Photonics Institute.
- Likely in 2015: Flexible Hybrid Electronics.
- No date set: Clean Energy Manufacturing.





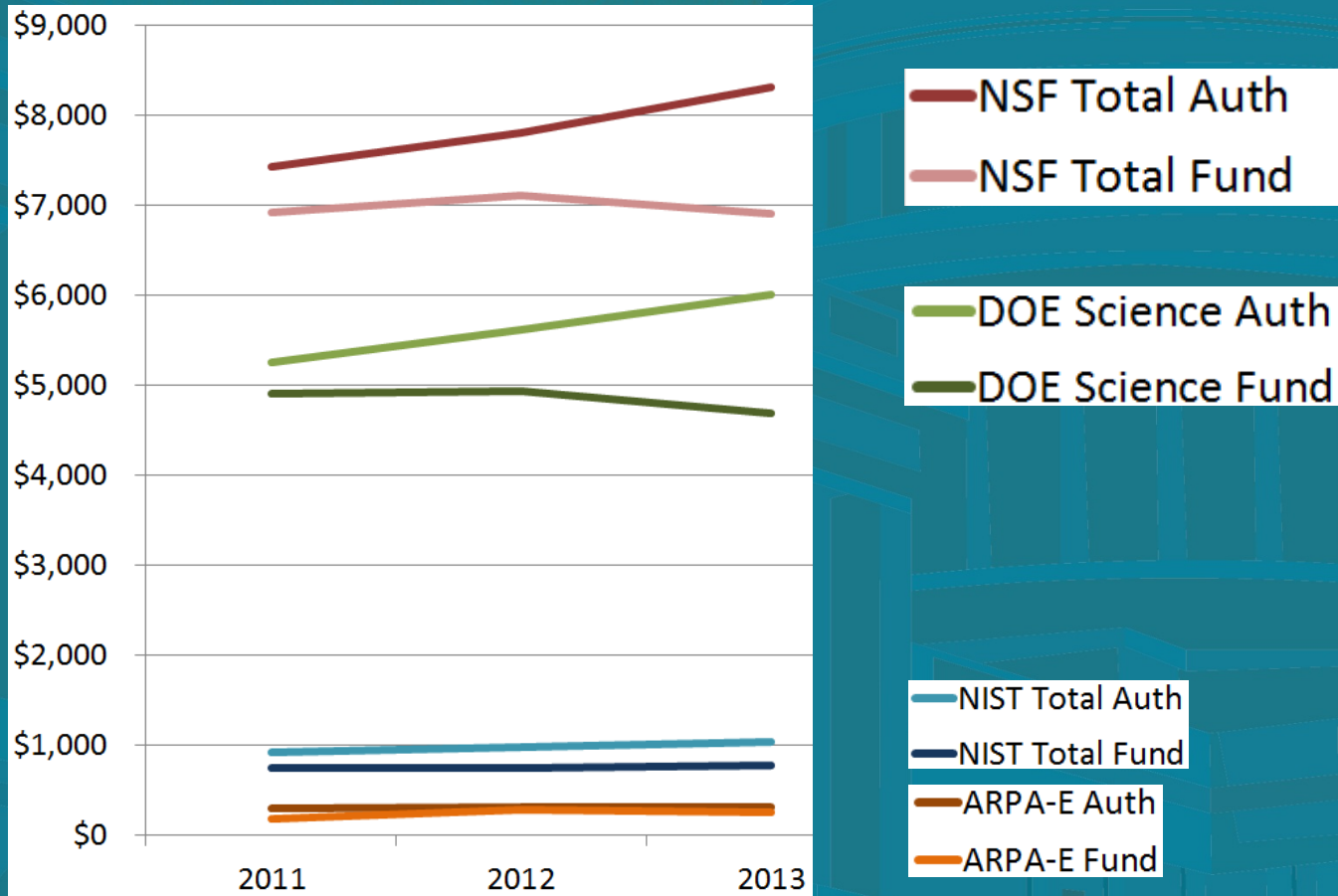
America COMPETES Act

- Authorized increased funding for science and engineering R&D and certain STEM education programs. Originally passed in 2007.
- Set a policy of doubling funding.
- Applied to NSF, NIST, DOE Office of Science; established ARPA-E.
- 2010 reauthorization called for doubling the funding over 11 years.
- Reauthorization expired at the end of FY 2013.
- Neither 2007 nor 2010 COMPETES was fully funded or implemented.
- Original COMPETES drew strong bipartisan support in both houses. GOP mostly supported reauthorization in the Senate but not in the House.



COMPETES Act

Authorization vs. Funding (millions)





COMPETES Act in 112th Congress (2011-12)

- Budget Control Act of 2011 slows down funding increases. 'Doubling path' would take 22 years.
- White House launches Co-STEM; conducts an inventory of STEM programs at federal agencies.
- White House proposes a consolidation of STEM programs, giving a stronger role to ED and NSF. STEM community, Congress work to block implementation.
- Administration expands use of competitions to spur innovation, drawing on authority in 2010 COMPETES.
- Partisan divide deepens in House Science, Space, and Technology Committee.



America COMPETES Act in 113th Congress (2013-14)

- In 2014, House Science Committee Chair Lamar Smith proposed dividing COMPETES into two bills: one covering NSF and NIST (H.R. 4186 - **the FIRST Act**) cleared committee but died at the end of the session. The other (H.R. 4869) focused on energy, never moved out of committee. Both would have authorized funding through 2015.
- House Democrats introduce **H.R. 4159 - Competes Reauthorization Act of 2014**
- Sen. Jay Rockefeller (D-W.Va.) introduced **S. 2757 -America COMPETES Reauthorization Act of 2014**
- Both Democratic bills called for a five-year COMPETES reauthorization. GOP and Democratic bills died in December. Rockefeller retired.



COMPETES Act in 114th Congress

- Will it be introduced and, if so, as one or more bills?
- How long will reauthorization last?
- Will it impose requirements that constrain research or interfere with merit review?
- Possible attempts to curb climate research.

Democrats: An underfunded, overly restrictive bill (eg FIRST) is worse than none at all.



Wrap Up

- Be positive, recognizing there are always budget constraints
- Talk about what is going on in your District/State-how ending sequestration could positively affect what you are doing
- R&D has traditionally had strong bipartisan support – remember let staff know it is appreciated.
- And that increases – like the 6.4% (\$949 M overall) for NSF ENG would make an enormous difference in tackling *applied* problems that generally interest both parties
- Finally – silence on COMPETES = not a priority. Is that our message?