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America COMPETES Acts: FY2008 to FY2013 Funding Tables

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October 31, 2014

Congressional Research Service

7-5700

www.crs.gov

R42779

Summary

Changing economic, social, and political conditions at home and abroad have led some analysts to question whether the United States will remain globally competitive in the coming decades. In response to these and closely related concerns, Congress enacted the 2007 America COMPETES Act (P.L. 110-69), as well as its successor, the America COMPETES Reauthorization Act of 2010 (P.L. 111-358). These acts were broadly designed to invest in innovation through research and development and to improve U.S. competitiveness. More specifically, the acts authorized increased funding for certain physical science and engineering research accounts and STEM (science, technology, engineering, and mathematics) education activities.

Congressional debate about the COMPETES Acts focuses closely on authorized and appropriated funding levels. To aid this debate, this CRS report tracks accounts and activities authorized by the 2007 and 2010 COMPETES Acts during each act's authorization period. It includes only those accounts and activities for which the acts provide a defined (i.e., specific) appropriations authorization. **Table 1** includes FY2008 to FY2010 authorizations and final funding for accounts in the 2007 COMPETES Act; **Table 2** includes FY2011 to FY2013 authorizations and final funding for accounts in the 2010 COMPETES Act.

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Introduction

Changing economic, social, and political conditions at home and abroad have led some analysts to question whether the United States will remain globally competitive in the coming decades. The possibility that the United States has lost or could lose its historical advantages in scientific and technological advancement—and the prosperity and security attributed to that advancement—has become a primary rationale for a portfolio of otherwise disparate federal programs, policies, and activities. Sometimes identified as “innovation” or “competitiveness” policy, these programs, policies, and activities address research and development, education, workforce development, tax, patent, immigration, economic development, telecommunications, or other policy issues perceived as critical to the U.S. scientific and technological enterprise.

The 2007 America COMPETES Act (P.L. 110-69) is an example of this type of policymaking. Designed to “invest in innovation through research and development, and to improve the competitiveness of the United States,” the law authorized \$32.7 billion in appropriations between FY2008 and FY2010 for programs and activities in physical sciences and engineering research and in science, technology, engineering, and mathematics (STEM) education. Congress reauthorized certain provisions of P.L. 110-69—including funding for physical sciences and engineering research and STEM education—when it passed the America COMPETES Reauthorization Act of 2010 (P.L. 111-358). The 2010 COMPETES Act authorized \$45.5 billion in appropriations between FY2011 and FY2013.

Given the pivotal role that funding levels played in the design, implementation, and congressional debate about the COMPETES Acts,¹ policymakers have paid close attention to trends in these accounts. This report, which was written to aid Congress in tracking these trends, includes two tables summarizing authorization levels and funding for selected COMPETES-related accounts across both authorization periods (i.e., FY2008 to FY2010 and FY2011 to FY2013). Readers interested in an analysis of the COMPETES Acts and related policy issues are referred to the following publications:

- CRS Report R41819, *Reauthorization of the America COMPETES Act: Selected Policy Provisions, Funding, and Implementation Issues*, by Heather B. Gonzalez.
- CRS Report R42642, *Science, Technology, Engineering, and Mathematics (STEM) Education: A Primer*, by Heather B. Gonzalez and Jeffrey J. Kuenzi.
- CRS Report R42470, *An Analysis of STEM Education Funding at the NSF: Trends and Policy Discussion*, by Heather B. Gonzalez.
- CRS Report R41951, *An Analysis of Efforts to Double Federal Funding for Physical Sciences and Engineering Research*, by John F. Sargent Jr.
- CRS Report R43061, *The U.S. Science and Engineering Workforce: Recent, Current, and Projected Employment, Wages, and Unemployment*, by John F. Sargent Jr.

This report has been updated to reflect FY2009 to FY2013 final funding for COMPETES-related accounts.

¹ This report refers to the 2007 America COMPETES Act and the America COMPETES Reauthorization Act of 2010 (jointly) as the “America COMPETES Acts” or the “COMPETES Acts.”

Table I. America COMPETES Act: Selected Authorizations and Funding Status

FY2008-FY2010, in Millions of Current Dollars

Program/Provision	FY2008 Authorization	FY2008 Funding	FY2009 Authorization	FY2009 Funding	FY2010 Authorization	FY2010 Funding
Department of Education (ED)^a						
Teachers for a Competitive Tomorrow-Bachelor's (Subtitle A, Part I)	\$151.2	\$1.0	\$151.2	\$1.1	\$151.2	\$1.1
Teachers for a Competitive Tomorrow-Master's (Subtitle A, Part I)	\$125.0	\$1.0	\$125.0	\$1.1	\$125.0	\$1.1
Advanced Placement and International Baccalaureate Programs (Subtitle A, Part II) ^b	\$75.0	n/a ^c	n/d	n/a ^d	n/d	n/a ^e
Promising Practices in Science, Technology, Engineering, and Mathematics Teaching (Subtitle A, Part III)	\$1.2	n/d	n/d	n/d	n/d	n/d
Math Now for Elementary School and Middle School Students Program (Subtitle B, Sec. 6201)	\$95.0	n/d	n/d	\$0.0 ^{f,g}	n/d	\$0.0 ^g
Math Skills for Secondary School Students (Subtitle B, Sec. 6203)	\$95.0	n/d	\$95.0	\$0.0 ^g	\$95.0	\$0.0 ^g
Foreign Language Partnership Program (Subtitle C)	\$28.0	n/d	n/d	\$0.0 ^g	n/d	\$0.0 ^g
Alignment of Secondary School Graduation Requirements with the Demands of 21 st Century Postsecondary Endeavors and Support for P-16 Education Data Systems (Subtitle D)	\$120.0	n/d ^h	n/d	n/d ⁱ	n/d	n/d ⁱ
Department of Energy (DOE)^k						
Pilot Program of Grants to Specialty Schools for Science and Mathematics ^l (Subpart B, Chapter 1)	\$14.0	\$0.0	\$22.5	\$0.0	\$30.0	\$0.0

Program/Provision	FY2008 Authorization	FY2008 Funding	FY2009 Authorization	FY2009 Funding	FY2010 Authorization	FY2010 Funding
Experiential-Based Learning Opportunities ^l (Subpart B, Chapter 2)	\$7.5	\$0.0	\$7.5	\$0.0	\$7.5	\$0.0
Summer Institutes ^m (Subpart B, Chapter 4)	\$15.0	n/d	\$20.0	n/d	\$25.0	n/d
National Energy Education Development (Subpart B, Chapter 5) ^l	\$0.5	\$0.0	n/d	\$0.0	n/d	\$0.0
Nuclear Science Talent Expansion Program for Institutions of Higher Education-Expansion Grants (Sec. 5004)	\$3.5	n/d	\$6.5	n/d	\$9.5	n/d
Nuclear Science Talent Expansion Program for Institutions of Higher Education-Competitiveness Grants (Sec. 5004)	\$3.0	n/d	\$5.5	n/d	\$8.0	n/d
Hydrocarbon Systems Science Talent Expansion Program for Institutions of Higher Education- Expansion Grants (Sec. 5005)	\$3.5	n/d	\$6.5	n/d	\$9.5	n/d
Hydrocarbon Systems Science Talent Expansion Program for Institutions of Higher Education- Competitiveness Grants (Sec. 5005)	\$3.0	n/d	\$5.5	n/d	\$8.0	n/d
Department of Energy Early Career Awards for Science, Engineering, and Mathematics Researchers (Sec. 5006)	\$25.0	\$0.0	\$25.0	\$0.0	\$25.0	n/d ⁿ
Authorization of Appropriations for Department of Energy for Basic Research (Office of Science, Sec. 5007)	\$4,586.0 ^o	\$4,082.9 ^p	\$5,200.0 ^o	\$4,807.2 ^p	\$5,814.0	\$4,963.9 ^p
Discovery Science and Engineering Innovation Institutes ^q (Sec. 5008)	\$30.0	n/d	\$30.0	n/d	\$30.0	n/d
Protecting America's Competitive Edge (PACE) Graduate Fellowship Program ^r (Sec. 5009)	\$7.5	n/d	\$12.0	n/d	\$20.0	n/d

Program/Provision	FY2008 Authorization	FY2008 Funding	FY2009 Authorization	FY2009 Funding	FY2010 Authorization	FY2010 Funding
Distinguished Scientist Program ^s (Sec. 5011)	\$15.0	\$0.0	\$20.0	\$0.0	\$30.0	\$0.0
Advanced Research Projects Agency-Energy (ARPA-E, Sec. 5012)	\$300.0	\$0.0	n/d	\$15.0 ^c	n/d	\$0.0
National Institute of Standards and Technology (NIST)^u						
NIST Total	n/d	\$755.8	n/d	\$819.0	n/d	\$856.6
Scientific and Technical Research and Services (Sec. 3001)	\$502.1	\$440.5	\$541.9	\$472.0	\$584.8	\$515.0
Construction of Research Facilities (Sec. 3001)	\$150.9	\$160.5	\$86.4	\$172.0	\$49.7	\$147.0
Industrial Technology Services, Total (Sec. 3001)	\$210.0	\$154.8	\$253.5	\$175.0	\$272.3	\$194.6
<i>Technology Innovation Program</i>	<i>\$100.0</i>	<i>\$65.2</i>	<i>\$131.5</i>	<i>\$65.0</i>	<i>\$140.5</i>	<i>\$69.9</i>
<i>Manufacturing Extension Partnership</i>	<i>\$110.0</i>	<i>\$89.6</i>	<i>\$122.0</i>	<i>\$110.0</i>	<i>\$131.8</i>	<i>\$124.7</i>
National Science Foundation (NSF)^v						
NSF Total (Sec. 7002)	\$6,600.0	\$6,084.0	\$7,326.0	\$6,468.8	\$8,132.0	\$6,972.2
Research and Related Activities, Total (Sec. 7002)	\$5,156.0	\$4,853.3	\$5,742.3	\$5,152.4	\$6,401.0	\$5,615.3
<i>Major Research Instrumentation</i>	<i>\$115.0</i>	<i>\$93.9</i>	<i>\$123.1</i>	<i>\$100.0</i>	<i>\$131.7</i>	<i>\$90.0</i>
<i>Faculty Early Career Development Program</i>	<i>\$165.4</i>	<i>\$203.2</i>	<i>\$183.6</i>	<i>\$186.6</i>	<i>\$203.8</i>	<i>\$218.5</i>
<i>Research Experiences for Undergraduates</i>	<i>\$61.6</i>	<i>\$62.7</i>	<i>\$68.4</i>	<i>\$74.5</i>	<i>\$75.9</i>	<i>\$80.6</i>
<i>Experimental Program to Stimulate Competitive Research</i>	<i>\$120.0</i>	<i>\$120.0</i>	<i>\$133.2</i>	<i>\$133.0</i>	<i>\$147.8</i>	<i>\$147.1</i>
<i>Integrative Graduate Education and Research Traineeship</i>	<i>\$47.3</i>	<i>\$39.5</i>	<i>\$52.5</i>	<i>\$38.4</i>	<i>\$58.3</i>	<i>\$39.6</i>
<i>Graduate Research Fellowship</i>	<i>\$9.0</i>	<i>\$8.1</i>	<i>\$10.0</i>	<i>\$8.5</i>	<i>\$11.1</i>	<i>\$33.7</i>
<i>Professional Science Master's</i>	<i>\$10.0</i>	<i>\$0.0</i>	<i>\$12.0</i>	<i>\$0.0</i>	<i>\$15.0</i>	<i>\$0.0^w</i>
Education and Human Resources, Total (Sec. 7002)	\$896.0	\$766.3	\$995.0	\$845.5	\$1,104.0	\$872.8
<i>Mathematics and Science Education Partnerships</i>	<i>\$100.0</i>	<i>\$47.9</i>	<i>\$111.0</i>	<i>\$61.0</i>	<i>\$123.2</i>	<i>\$57.9</i>
<i>Robert Noyce Scholarship Program</i>	<i>\$89.8</i>	<i>\$55.1</i>	<i>\$115.0</i>	<i>\$55.0</i>	<i>\$140.5</i>	<i>\$54.9</i>
<i>STEM Talent Expansion Program</i>	<i>\$40.0</i>	<i>\$29.5</i>	<i>\$50.0</i>	<i>\$29.1</i>	<i>\$55.0</i>	<i>\$31.6</i>
<i>Advanced Technological Education</i>	<i>\$52.0</i>	<i>\$51.5</i>	<i>\$57.7</i>	<i>\$51.9</i>	<i>\$64.0</i>	<i>\$64.5</i>
<i>Integrative Graduate Education and Research Traineeship</i>	<i>\$27.1</i>	<i>\$25.3</i>	<i>\$30.1</i>	<i>\$25.4</i>	<i>\$33.4</i>	<i>\$30.1</i>
<i>Graduate Research Fellowship</i>	<i>\$96.6</i>	<i>\$87.9</i>	<i>\$107.2</i>	<i>\$107.0</i>	<i>\$119.0</i>	<i>\$102.5</i>
<i>Laboratory Science Pilot Program (Sec. 7026)</i>	<i>\$5.0</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>

Program/Provision		FY2008 Authorization	FY2008 Funding	FY2009 Authorization	FY2009 Funding	FY2010 Authorization	FY2010 Funding
Major Research Equipment and Facilities Construction (Sec. 7002)	(Sec.	\$245.0	\$166.9	\$262.0	\$160.8	\$280.0	\$165.9
Agency Operations and Award Management (Sec. 7002)		\$285.6	\$282.0	\$309.8	\$294.1	\$329.5	\$299.9
Office of the National Science Board (Sec. 7002)		\$4.1	\$3.8	\$4.2	\$4.0	\$4.3	\$4.4
Office of Inspector General (Sec. 7002)		\$12.4	\$11.8	\$12.8	\$12.0	\$13.2	\$14.0

Source: FY2008 to FY2010 authorizations for America COMPETES Act programs are from P.L. 110-69. Department of Education (ED) FY2008 to FY2010 funding levels are from ED's FY2009 to FY2011 congressional budget justifications and from the ED website, as noted. Department of Energy (DOE) FY2008 to FY2010 funding levels are from DOE's FY2009 to FY2012 congressional budget justifications and from correspondence between CRS and DOE. National Institute of Standards and Technology (NIST) FY2008 to FY2010 funding levels are from NIST's FY2010 to FY2012 budget summaries and related documents (available at http://www.nist.gov/public_affairs/budget/index.cfm). FY2008 to FY2010 National Science Foundation (NSF) funding data are from the foundation's FY2010 to FY2012 congressional budget justifications.

Notes: The term "n/d" means "not defined." Undefined funding levels include instances where an act provides "such sums as may be necessary" or is silent on funding for a specific activity or program. The term "n/a" means "not applicable," as noted. Italicized items contribute to account total. Numbers are rounded. Funding data included in this table are estimated, enacted, actual, or current appropriations as reported by each agency. Funding data may or may not include rescissions, supplemental funding, or other post-enactment changes to regular appropriations. Funding levels do not include supplemental appropriations from the American Recovery and Reinvestment Act (ARRA, P.L. 111-5).

- a. FY2008 to FY2010 ED funding levels are estimated appropriations.
- b. The Department of Education relies on the Elementary and Secondary Education Act, as amended by No Child Left Behind (ESEA, P.L. 107-110), for its Advanced Placement (AP) program authority. The AP program authorized by the COMPETES Acts differs from the AP program authorized by ESEA. ED also differentiates between the AP Incentive Program, which provided funding to eligible entities to increase the participation of low-income students in pre-AP and AP courses and tests, and the AP Test Fee Program, which awarded grants to states to pay all or a portion of eligible students' AP test fees. More information about ED's AP Incentive Grant Program is available at <http://www2.ed.gov/programs/apincent/index.html>. More information about ED's AP Test Fee Program is available at <http://www2.ed.gov/programs/apfee/index.html>.
- c. According to ED's website, combined FY2008 funding for ED's ESEA-authorized AP programs was \$43.1 million.
- d. According to ED's website, combined FY2009 funding for ED's ESEA-authorized AP programs was \$43.5 million.
- e. According to ED's website, combined FY2010 funding for ED's ESEA-authorized AP programs was \$45.8 million.
- f. ED's FY2009 congressional budget justification includes a \$95.0 million request for the Math Now for Elementary and Middle School Students (Math Now) program. ED does not appear to have initiated the program. P.L. 111-8 (Omnibus Appropriations Act, 2009) which provided appropriations to ED in FY2009, did not include funding for Math Now.

- g. The Administration did not seek funding for Math Now, Math Skills for Secondary School Students, or the Foreign Language Partnership Program in FY2010. P.L. 111-117 (Consolidated Appropriations Act, 2010), which provided regular appropriations to ED, does not include funding for these programs either. The FY2009 estimate for these programs from ED's FY2011 congressional budget justification is zero.
- h. The Institute of Education Sciences (IES) at ED operates a Statewide Longitudinal Data Systems grant program under the authority of Section 208 of the Educational Technical Assistance Act of 2002 (ETAA, P.L. 107-279). In FY2008, ED's ETAA-authorized statewide data system program received \$48.3 million in funding. ED does not appear to provide defined appropriations for alignment activities.
- i. The American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5) provided approximately \$100.0 billion to ED for various purposes. Of this amount, ED provided \$245.0 million to states for data systems that complied with Section 6401 of the America COMPETES Act. (See http://nces.ed.gov/programs/slds/pdf/2009_ARRA_RFA.pdf.) Section 6401 required states to include certain data elements (e.g., student demographics, test records, etc.) in statewide data systems. In addition to ARRA funding, ED received regular appropriations for its ETAA-authorized Statewide Data Systems program in FY2009. The FY2009 funding level for the ETAA-authorized program was \$65.0 million.
- j. Funding for ED's ETAA Statewide Data System program in FY2010 was \$58.3 million.
- k. FY2008 to FY2010 DOE funding data are reported as current appropriations.
- l. According to the DOE, this program did not receive appropriations and was not initiated. Section 901 of the America COMPETES Reauthorization Act of 2010 repealed this program.
- m. According to the DOE, this program corresponded with the DOE Academies Creating Teacher Scientists (DOE ACTS) program. DOE ACTS received \$4.1 million in FY2009 and \$3.8 million in FY2010. (The program was eliminated in FY2012 as per the recommendation of a committee of visitors, which found a lack of clarity in the program's goals and which questioned the program's educational impact.)
- n. According to DOE, there is no line item for Early Career Awards. The agency initiated the program in FY2010 with ARRA funds.
- o. The Energy Policy Act of 2005 (42 U.S.C. 16311(b)) authorized FY2008 and FY2009 funding levels for the Office of Science.
- p. FY2008 to FY2010 Office of Science funding levels include Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) program transfers from other DOE units, as well as other changes made to agency or program budget authority during the period (e.g., the Coraville, IA, project rescission in FY2008). These numbers most closely represent total funding available for Office of Science purposes. Excluding SBIR/STTR transfers from other DOE units, the Office of Science received \$4.036 billion in FY2008, \$4.758 billion in FY2009, and \$4.904 billion in FY2010. For more information about the SBIR/STTR program, see CRS Report R43695, *Small Business Innovation Research and Small Business Technology Transfer Programs*, by John F. Sargent Jr.
- q. According to DOE, it operated several activities that were consistent with this provision. DOE did not separate the funding levels for these activities from the budgets of the larger programs that operated them. In correspondence with CRS, DOE stated that the Bioenergy Research Centers, Scientific Discovery through Advanced Computing Institutes, and the Energy Frontier Research Centers—all of which are located in the National Laboratories—were consistent with Section 5008 of the America COMPETES Act.
- r. According to DOE, it managed at least two programs that were consistent with P.L. 110-69's PACE provisions: (1) the Computational Science Graduate Fellowship (CSGF) in the Office of Science, Advanced Scientific Computing Research, and (2) the Graduate Fellowship (SCGF) program in the Office of Science, Workforce Development for Teachers and Scientists. Funding for the CSGF was \$6.0 million per year from FY2008 to FY2010. Funding for the SCGF was first provided in FY2010 (\$5.0 million).
- s. According to DOE, funds were neither requested nor appropriated for this provision.

- t. In addition to regular appropriations of \$15.0 million, ARPA-E received \$388.9 million in ARRA funding in FY2009.
- u. FY2008 to FY2010 NIST funding data are enacted appropriations.
- v. FY2008 to FY2010 NSF funding data are actual appropriations.
- w. NSF provided ARRA funding to this program in FY2010. The NSF Science Master's Program solicitation (NSF 09-607) noted the availability of \$14.7 million in program funding.

Table 2. America COMPETES Reauthorization Act of 2010: Selected Authorizations and Funding Status

FY2011-FY2013, in Millions of Current Dollars

Program/Provision	FY2011 Authorization	FY2011 Funding	FY 2012 Authorization	FY 2012 Funding	FY2013 Authorization	FY2013 Funding
Department of Commerce (DOC)						
Federal Loan Guarantees for Innovative Technologies in Manufacturing (Sec. 602)	\$20.0	\$0.0 ^a	\$20.0	\$0.0 ^b	\$20.0	\$0.0 ^c
Regional Innovation Program (Sec. 603)	\$100.0	\$0.0 ^a	\$100.0	\$0.0 ^b	\$100.0	\$0.0
Loan Guarantees for Science Park Infrastructure (Sec. 603)	\$7.0	\$0.0 ^a	\$7.0	\$0.0 ^b	\$7.0	\$0.0
Department of Education (ED)						
Teachers for a Competitive Tomorrow-Bachelor's (Sec. 1003)	\$2.0	\$0.0 ^d	\$2.0	\$0.0 ^d	\$2.0	\$0.0 ^d
Teachers for a Competitive Tomorrow-Master's (Sec. 1003)	\$2.0	\$0.0 ^d	\$2.0	\$0.0 ^d	\$2.0	\$0.0 ^d
Advanced Placement and International Baccalaureate Programs ^e (Sec. 1003)	\$75.0	n/d ^f	\$75.0	n/d ^g	\$75.0	n/d ^h
Alignment of Secondary School Graduation Requirements with the Demands of 21 st Century Postsecondary Endeavors and Support for P-16 Education Data Systems (Sec. 1003)	\$120.0	n/d ⁱ	\$120.0	n/d ⁱ	n/d	n/d ⁱ

Program/Provision	FY2011 Authorization	FY2011 Funding	FY 2012 Authorization	FY 2012 Funding	FY2013 Authorization	FY2013 Funding
Department of Energy (DOE)						
Summer Institutes (Sec. 901)	\$25.0	n/di	\$25.0	n/ak	\$25.0	n/ak
Nuclear Science Talent Expansion Program for Institutions of Higher Education-Expansion Grants (Sec. 902)	\$9.8	n/d	\$10.1	n/d	\$10.4	n/d
Nuclear Science Talent Expansion Program for Institutions of Higher Education-Competitiveness Grants (Sec. 902)	\$8.2	n/d	\$8.5	n/d	\$8.8	n/d
Hydrocarbon Systems Science Talent Expansion Program-Expansion Grants (Sec. 902)	\$9.8	n/d	\$10.0	n/d	\$10.4	n/d
Department of Energy Early Career Awards for Science, Engineering, and Mathematics Researchers ^l (Sec. 902)	\$25.0	n/d	\$25.0	n/d	\$25.0	n/d
Protecting America's Competitive Edge (PACE) Graduate Fellowship Program ^m (Sec. 902)	\$20.6	n/d	\$21.2	n/d	\$21.9	n/d
Distinguished Scientist Program ⁿ (Sec. 902)	\$31.0	n/d	\$32.0	n/d	\$33.0	n/d
Authorization of Appropriations for Department of Energy for Basic Research (Office of Science, Sec. 903)	\$5,247.0	\$4,897.3 ^o	\$5,614.0	\$4,935.0 ^o	\$6,007.0	\$4,681.2 ^o
Advanced Research Projects Agency-Energy (ARPA-E, Sec. 904)	\$300.0	\$179.6	\$306.0	\$275.0	\$312.0	\$250.6

Program/Provision	FY2011 Authorization	FY2011 Funding	FY 2012 Authorization	FY 2012 Funding	FY2013 Authorization	FY2013 Funding
National Institute of Standards and Technology (NIST)						
NIST Total (Sec. 402)	\$918.9	\$750.1	\$970.8	\$750.8	\$1,039.7	\$769.4
Scientific and Technical Research and Services (Sec. 402)	\$584.5	\$497.4 ^P	\$661.1	\$567.0	\$676.7	\$579.8
Construction of Research Facilities (Sec. 402)	\$124.8	\$69.9	\$84.9	\$55.4	\$121.3	\$56.0
Industrial Technology Services, Total (Sec. 402)	\$209.6	\$182.8 ^P	\$224.8	\$128.4	\$241.7	\$133.6
<i>Manufacturing Extension Partnership</i>	<i>\$141.1</i>	<i>\$128.4</i>	<i>\$155.1</i>	<i>\$128.4</i>	<i>\$165.1</i>	<i>\$123.0</i>
<i>Malcolm Baldrige National Quality Award</i>	<i>\$10.0</i>	<i>\$9.6</i>	<i>\$10.3</i>	<i>\$0.0</i>	<i>\$10.6</i>	<i>\$0.0</i>
NIST Green Jobs Act of 2010 (New, Sec. 703)	\$7.0	n/d	\$7.0	n/d	\$7.0	n/d
National Science Foundation (NSF)						
NSF Total (Sec. 503)	\$7,424.4	\$6,912.6	\$7,800.0	\$7,105.4	\$8,300.0	\$6,901.9
Research and Related Activities (Sec. 503)	\$5,974.8	\$5,608.4	\$6,234.3	\$5,758.3	\$6,637.9	\$5,558.9
Education and Human Resources (Sec. 503)	\$937.9	\$861.0	\$979.0	\$830.5	\$1,041.8	\$834.6
Major Research Equipment and Facilities Construction (Sec. 503)	\$164.7	\$125.4	\$225.5	\$198.1	\$236.8	\$196.5
Agency Operations and Award Management (Sec. 503)	\$327.5	\$299.3	\$341.7	\$299.3	\$363.7	\$293.5
National Science Board (Sec. 503)	\$4.8	\$4.5	\$4.8	\$4.4	\$4.9	\$4.1
Office of the Inspector General (Sec. 503)	\$14.7	\$14.0	\$14.7	\$14.1	\$15.0	\$14.3
STEM-Training Grant Program (New, Sec. 556)	\$10.0	n/d	\$10.0	n/d	\$10.0	n/d

Source: FY2011 to FY2013 authorizations are from P.L. 111-358 (America COMPETES Reauthorization Act of 2010). FY2011 to FY2013 NSF, DOC, and NIST funding levels are from FY2013 to FY2015 agency congressional budget justifications, unless otherwise noted. FY2011 to FY2013 DOE funding levels are from agency budget justifications as well as correspondence between CRS and DOE. FY2011 to FY2013 ED program funding levels are from ED’s budget justifications as well as program information published on the ED website, as noted.

Notes: The term “n/d” means “not defined.” Undefined funding levels include instances where an act provides “such sums as may be necessary” or is silent on funding for a specific activity or program. The term “n/a” means “not applicable,” as noted. Italicized items contribute to account total. Numbers are rounded. Funding data included in this table are estimated, enacted, actual, or current appropriations as reported by each agency and may or may not include all rescissions, supplemental funding, or other post-enactment changes to regular appropriations. Funding levels in the column titled “FY2013 Funding” include reductions from both the sequester and rescissions contained in P.L. 113-6, Sections 3001 and 3004. FY2013 funding levels for the Department of Commerce (including NIST) and the National Science Foundation are regular appropriations. FY2013 funding levels for the Department of Energy and the Department of Education are continuing appropriations.

- a. Congress does not appear to have provided appropriations for the programs authorized under Sections 602 and 603 in FY2011. The Department of Defense and Full-Year Continuing Appropriations Act, 2011 (P.L. 112-10) provided continuing appropriations to DOC and certain other federal agencies in FY2011. As a general rule, continuing appropriations are provided in the manner, and for the same purposes, as in the previous fiscal year (e.g., FY2010). Because authorization for the programs under Sections 602 and 603 did not begin until FY2011, those activities may have been considered new or different purposes compared to FY2010, and therefore ineligible for FY2011 funding under P.L. 112-10. Under limited circumstances some agencies may use multiyear or “no year” funds to initiate new activities, even if current fiscal year funds are otherwise provided by continuing resolution, but that does not appear to have happened in this instance. For more information about continuing resolutions, see CRS Report R42647, *Continuing Resolutions: Overview of Components and Recent Practices*, by Jessica Tollestrup.
- b. As enacted, P.L. 112-55 (Consolidated and Further Continuing Appropriations Act, 2012) provided up to \$5.0 million each for the loan guarantee programs under Sections 602 and 603 of P.L. 111-358. The FY2014 DOC congressional budget justification states that these programs received no funding in FY2012.
- c. As enacted, P.L. 113-6 (Consolidated and Further Continuing Appropriations Act, 2013) provided up to \$5.0 million each (pre-sequestration, pre-rescission) for the loan guarantee programs under Sections 602 and 603 of P.L. 111-358. The FY2015 DOC congressional budget justification states that these programs received no funding in FY2013.
- d. P.L. 112-10 eliminated funding for the Teachers for a Competitive Tomorrow program in FY2011. According to ED, the department did not make new or non-competing continuation awards in any year between FY2011 and FY2013. However, existing grantees with unexpended prior-year funds were authorized to use those funds or contact ED for technical assistance during this period. More information is available at <http://www2.ed.gov/programs/tct/funding.html>.
- e. The Department of Education relies on the Elementary and Secondary Education Act, as amended by No Child Left Behind (ESEA, P.L. 107-110), for Advanced Placement (AP) program authority. The AP program authorized by the COMPETES Acts differs from the AP program authorized by ESEA. ED also differentiates between the AP Incentive Program, which provides funding to eligible entities to increase the participation of low-income students in pre-AP and AP courses and tests, and the AP Test Fee Program, which awards grants to states to pay all or a portion of eligible students’ AP test fees. More information about ED’s AP Incentive Grant Program is available at <http://www2.ed.gov/programs/apincent/index.html>. More information about ED’s AP Test Fee Program is available at <http://www2.ed.gov/programs/apfee/index.html>.
- f. Combined funding for ED’s ESEA-authorized AP programs in FY2011 was \$42.9 million.
- g. Combined funding for ED’s ESEA-authorized AP programs in FY2012 was \$26.9 million. In addition, ED’s AP programs received a reprogramming of \$2.9 million from the Magnet Schools program and \$200,000 from the Charter Schools program in FY2012, for a total of approximately \$30.0 million.
- h. Combined funding for ED’s ESEA-authorized AP programs in FY2013 was \$28.9 million.

- i. ED does not typically specify funding for alignment activities in its budget documents.
- j. According to the DOE, this program corresponded to the DOE Academies Creating Teacher Scientists (DOE ACTS) program. DOE ACTS received \$0.2 million in FY2011.
- k. DOE ACTS was eliminated in FY2012 as per the recommendation of a committee of visitors, which found a lack of clarity in the program's goals and questioned the program's educational impact.
- l. According to DOE, each of the six Office of Science research programs provides funding for Early Career Research awards from their respective core appropriations. The source and amount of funds provided each year depends on the number of proposals receiving high reviews, research areas covered in those proposals, and the availability of funds. DOE estimates that it provided approximately \$16.0 million per year in new Early Career Research awards between FY2011 and FY2013 while also providing out-year funds for ongoing awards in FY2012 and FY2013. As a result, DOE states that the total funding profile for awards evolved from \$16.0 million in FY2011, to \$32.0 million in FY2012, to \$48.0 million in FY2013.
- m. According to DOE, the department managed at least two programs that were consistent with PACE provisions during the P.L. 111-358 authorization period: (1) the Computational Science Graduate Fellowship (CSGF) in the Office of Science, Advanced Scientific Computing Research, and (2) the Graduate Fellowship (SCGF) program in the Office of Science, Workforce Development for Teachers and Scientists. Funding for the CSGF was \$6.0 million per year in FY2011 and FY2012 and \$9.0 million in FY2013. Funding for the SCGF was \$8.0 million in FY2011, \$5.0 million in FY2012, and \$0.0 in FY2013. (According to the DOE, the SCGF was restructured in FY2014 and is no longer aligned with the intent of PACE.)
- n. According to DOE, this program has not received appropriations and was not initiated.
- o. FY2011 to FY2013 Office of Science funding levels include Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) program transfers, as well as other changes made to agency or program budget authority during the period (e.g., the contractor pay freeze in FY2012). These numbers most closely represent total funding available for Office of Science purposes. Excluding SBIR/STTR transfers from other DOE units, the Office of Science received \$4.843 billion in FY2011, \$4.874 billion in FY2012, and \$4.621 billion in FY2013. For more information about the SBIR/STTR program, see CRS Report R43695, *Small Business Innovation Research and Small Business Technology Transfer Programs*, by John F. Sargent Jr.
- p. FY2011 funding for Scientific and Technical Research and Services (STRS) and Industrial Technology Services (ITS) has been adjusted to account for the transfer of the Baldrige Performance Excellence Program from STRS to ITS.

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