



# America COMPETES Acts: FY2008-FY2013 Funding Tables

**Heather B. Gonzalez**  
Specialist in Science and Technology Policy

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## Summary

Major provisions of the America COMPETES Reauthorization Act of 2010 are set to expire in 2013. As such, the 113<sup>th</sup> Congress will have the opportunity to reconsider this act and its policy contributions. Those contributions include, among other things, funding authorizations for certain federal physical sciences and engineering research programs, as well as selected STEM (i.e., science, technology, engineering, and mathematics) education programs.

To aid Congress in its deliberations over future funding for these policies, this report tracks historical federal funding associated with the America COMPETES Reauthorization Act of 2010 (P.L. 111-358) and its predecessor, the America COMPETES Act (P.L. 110-69). This report includes two tables summarizing authorizations and funding status for selected provisions of these acts over the course of their respective authorization periods. (See **Table 1** and **Table 2**.)

This report has been updated to reflect FY2013 enacted funding levels—as contained in P.L. 113-6 (Consolidated and Further Continuing Appropriations Act, 2013)—for specified COMPETES-related accounts. The FY2013 enacted funding levels contained herein do not account for the effects of sequestration, or other legal determinations made by OMB that may affect the final appropriations levels. This report will be updated to reflect actual funding for specified COMPETES-related accounts when that information becomes available to CRS.

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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 therefore 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, and other issues—either alone or in combination—that policymakers perceive 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 \$33.6 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, among other things. 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). P.L. 111-358 authorized \$45.6 billion in appropriations between FY2011 and FY2013. Many of these provisions are set to expire in 2013.

Given the pivotal role that funding levels play in both the design and implementation of the America COMPETES acts,<sup>1</sup> policymakers pay close attention to trends in these accounts. This report, which was written to aid policymakers in tracking these trends, includes two tables (**Table 1** and **Table 2**) summarizing authorization levels and funding for selected America COMPETES acts accounts across both authorization periods (e.g., FY2008 to FY2010 and FY2011 to FY2013). The following CRS reports provide additional in-depth analysis of P.L. 110-69, P.L. 111-358, and related policy issues:

- CRS Report R41819, *Reauthorization of the America COMPETES Act: Selected Policy Provisions, Funding, and Implementation Issues*, by Heather B. Gonzalez.
- CRS Report R42430, *America COMPETES 2010 and the FY2013 Budget*, 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 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.

This report has been updated to reflect FY2013 enacted funding levels contained in P.L. 113-6 (Consolidated and Further Continuing Appropriations Act, 2013) and the explanatory statement

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<sup>1</sup> This report refers to the America COMPETES Act and the America COMPETES Reauthorization Act of 2010 (jointly) as the “America COMPETES acts.”

published in the March 11, 2013, *Congressional Record* (starting on page S1287).<sup>2</sup> FY2013 funding levels *have not been adjusted* to account for the effects of sequestration or other legal determinations made by the Office of Management and Budget (OMB) that may affect the final appropriations levels.<sup>3</sup>

Readers may wish to note that P.L. 113-6 provided both regular and continuing appropriations to federal agencies.<sup>4</sup> This distinction is significant because agencies receiving regular appropriations may use funds for any new purposes for which those funds have been provided. In contrast, those agencies receiving continuing appropriations are limited to the purposes for which the funds were provided *for the appropriations being extended by reference*, unless otherwise specified.<sup>5</sup> Further, the explanatory statement resolved many of the differences between conflicting provisions in House and Senate appropriations committee reports for agencies with regular appropriations; but it was generally silent on differences between provisions for agencies with continuing resolutions. COMPETES acts agencies receiving regular appropriations in P.L. 113-6 included the National Science Foundation and the Department of Commerce. Both the Department of Energy and the Department of Education received continuing appropriations. The explanatory statement did not resolve differences between House and Senate appropriations committee report recommendations for the Office of Science.

This report will be updated to reflect actual funding for specified COMPETES-related accounts when that information becomes available to CRS.

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<sup>2</sup> Where applicable, FY2013 funding levels in this report account for the 1.877% rescission in P.L. 113-6, § 3001, as well as the 0.2% rescission in § 3004.

<sup>3</sup> For more information about sequestration, see CRS Report R41965, *The Budget Control Act of 2011*, by Bill Heniff Jr., Elizabeth Rybicki, and Shannon M. Mahan; and CRS Report R42949, *The American Taxpayer Relief Act of 2012: Modifications to the Budget Enforcement Procedures in the Budget Control Act*, by Bill Heniff Jr.

<sup>4</sup> For more information about the types of federal appropriations measures, see CRS Report R42388, *The Congressional Appropriations Process: An Introduction*, by Jessica Tollestrup; and CRS Report R42647, *Continuing Resolutions: Overview of Components and Recent Practices*, by Jessica Tollestrup.

<sup>5</sup> See P.L. 113-6, §1102 and 1104.

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

FY2008-FY2010, in Millions of Current Dollars

<b>Program/Provision</b>	<b>FY2008 Authorization</b>	<b>FY2008 Funding</b>	<b>FY2009 Authorization</b>	<b>FY2009 Funding</b>	<b>FY2010 Authorization</b>	<b>FY2010 Funding</b>
<b>Department of Education (ED)<sup>a</sup></b>						
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)	\$75.0	n/a <sup>b</sup>	n/d	n/a <sup>c</sup>	n/d	n/a <sup>d</sup>
Promising Practices in Science, Technology, Engineering, and Mathematics Teaching (Subtitle A, Part III)	\$1.2	n/d	\$0.0	n/d	\$0.0	n/d
Math Now for Elementary School and Middle School Students Program (Subtitle B, Sec. 6201)	\$95.0	\$0.0	n/d	\$0.0 <sup>e</sup>	n/d	\$0.0 <sup>f</sup>
Summer Term Education Programs (Subtitle B, Sec. 6202)	n/d	n/d	n/d	\$0.0 <sup>f</sup>	n/d	\$0.0 <sup>f</sup>
Math Skills for Secondary School Students (Subtitle B, Sec. 6203)	\$95.0	n/d	\$95.0	\$0.0 <sup>f</sup>	\$95.0	\$0.0 <sup>f</sup>
Foreign Language Partnership Program (Subtitle C)	\$28.0	n/d	n/d	\$0.0 <sup>f</sup>	n/d	\$0.0 <sup>f</sup>
Alignment of Secondary School Graduation Requirements with the Demands of 21 <sup>st</sup> Century Postsecondary Endeavors and Support for P-16 Education Data Systems (Subtitle D)	\$120.0	n/d <sup>g</sup>	n/d	n/d <sup>h</sup>	n/d	n/d <sup>i</sup>
Mathematics and Science Partnership Bonus Grants (Subtitle E)	n/d	n/d	n/d	\$0.0 <sup>f</sup>	n/d	\$0.0 <sup>f</sup>
<b>Department of Energy (DOE)<sup>j</sup></b>						
Science, Engineering, and Mathematics Education at the Department of Energy (Sec. 5003)	n/d	n/d	n/d	n/d	n/d	n/d

<b>Program/Provision</b>	<b>FY2008 Authorization</b>	<b>FY2008 Funding</b>	<b>FY2009 Authorization</b>	<b>FY2009 Funding</b>	<b>FY2010 Authorization</b>	<b>FY2010 Funding</b>
Pilot Program of Grants to Specialty Schools for Science and Mathematics <sup>k</sup> (Subpart B, Chapter 1)	\$14.0	\$0.0	\$22.5	\$0.0	\$30.0	\$0.0
Experiential-Based Learning Opportunities <sup>k</sup> (Subpart B, Chapter 2)	\$7.5	\$0.0	\$7.5	\$0.0	\$7.5	\$0.0
Summer Institutes <sup>l</sup> (Subpart B, Chapter 4)	\$15.0	n/d	\$20.0	n/d	\$25.0	n/d
National Energy Education Development (Subpart B, Chapter 5) <sup>k</sup>	\$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 <sup>m</sup>
Authorization of Appropriations for Department of Energy for Basic Research (Office of Science, Sec. 5007)	\$4,586.0	\$4,082.9	\$5,200.0	\$4,807.2	\$5,814.0	\$4,963.9
Discovery Science and Engineering Innovation Institutes <sup>n</sup> (Sec. 5008)	\$30.0	n/d	\$30.0	n/d	\$30.0	n/d
Protecting America's Competitive Edge (PACE) Graduate Fellowship Program <sup>o</sup> (Sec. 5009)	\$7.5	n/d	\$12.0	n/d	\$20.0	n/d

<b>Program/Provision</b>	<b>FY2008 Authorization</b>	<b>FY2008 Funding</b>	<b>FY2009 Authorization</b>	<b>FY2009 Funding</b>	<b>FY2010 Authorization</b>	<b>FY2010 Funding</b>
Distinguished Scientist Program <sup>p</sup> (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 <sup>r</sup>	n/d	\$0.0
<b>National Institute of Standards and Technology (NIST)<sup>q</sup></b>						
<b>NIST Total</b>	<b>n/d</b>	<b>\$755.8</b>	<b>n/d</b>	<b>\$819.0</b>	<b>n/d</b>	<b>\$856.6</b>
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>
<b>National Science Foundation (NSF)<sup>s</sup></b>						
<b>NSF Total (Sec. 7002)</b>	<b>\$6,600.0</b>	<b>\$6,084.0</b>	<b>\$7,326.0</b>	<b>\$6,468.8</b>	<b>\$8,132.0</b>	<b>\$6,972.2</b>
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<sup>t</sup></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>



Program/Provision	FY2008 Authorization	FY2008 Funding	FY2009 Authorization	FY2009 Funding	FY2010 Authorization	FY2010 Funding
Graduate Research Fellowship	\$96.6	\$87.9	\$107.2	\$107.0	\$119.0	\$102.5
Laboratory Science Pilot Program (Sec. 7026)	\$5.0	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>
Major Research Equipment and Facilities Construction (Sec. 7002)	\$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-FY2010 authorizations for America COMPETES Act programs are from P.L. 110-69. Department of Education (ED) FY2008-FY2010 funding levels are from ED's FY2009-FY2011 congressional budget justifications. Department of Energy (DOE) FY2008-FY2010 funding levels are from DOE's FY2009-FY2012 congressional budget justifications and from correspondence between CRS and DOE. National Institute of Standards and Technology (NIST) FY2008-FY2010 funding levels are from NIST's FY2008-FY2010 and FY2009-FY2012 appropriations summaries (available at [http://www.nist.gov/public\\_affairs/budget/index.cfm](http://www.nist.gov/public_affairs/budget/index.cfm)). FY2008-FY2010 National Science Foundation (NSF) funding data is from the foundation's FY2010-FY2012 congressional budget justifications.

**Notes:** The term "n/d" means "not defined" (e.g., "such sums as may be necessary"). The term "n/a" means "not applicable." 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). Electronic copies of this data available to Members of Congress and their staff upon request.

- a. FY2008-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 Advanced Placement (AP) program authority. The AP program authorized by the COMPETES Acts differs from the AP program authorized by ESEA. Funding for ED's ESEA-authorized AP program in FY2008 was \$31.6 million.
- c. The FY2009 estimate for ED's ESEA-authorized AP program was \$28.8 million.
- d. The FY2010 estimate for ED's ESEA-authorized AP program was \$27.2 million.
- e. ED's FY2009 congressional budget justification includes a new \$95.0 million request for the Math Now for Elementary and Middle School Students (Math Now) program. However, ED does not appear to have initiated the program. P.L. 111-8 (Omnibus Appropriations Act, 2009) which provided regular appropriations to ED in FY2009, does not include funding for the Math Now program.
- f. The Administration did not seek funding for Math Now, Summer Term Education Programs, Math Skills for Secondary School Students, Foreign Language Partnership Program, or Mathematics and Science Partnership Bonus Grants 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.

- g. The Institute of Education Sciences (IES) at ED operates a program for Statewide Data Systems 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.
- h. The American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5) provided approximately \$100.0 billion to ED for various education purposes. Of this amount, ED provided approximately \$245.0 million in ARRA funding to states for statewide data systems that comply with Section 6401 of the America COMPETES Act. (See [http://nces.ed.gov/programs/slds/pdf/2009\\_ARRA\\_RFA.pdf](http://nces.ed.gov/programs/slds/pdf/2009_ARRA_RFA.pdf).) Section 6401 requires states to include specific data elements (e.g., student demographics, test records, etc.) in statewide data systems. In addition to ARRA funding for statewide data systems, ED received regular FY2009 appropriations for its ETAA-authorized Statewide Data Systems program. The FY2009 funding level for the ETAA-authorized program was \$65.0 million.
- i. Funding for ED's ETAA Statewide Data System program in FY2010 was \$58.3 million.
- j. DOE FY2008-FY2010 funding data are reported as current appropriations.
- k. According to the DOE, this program did not receive appropriations and was not initiated. Sec. 901 of the America COMPETES Reauthorization Act of 2010 repealed this program.
- l. According to the DOE, this program corresponds to 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.
- m. According to DOE, there is no line item for Early Career Awards. The agency initiated the program in FY2010 with ARRA funds.
- n. According to DOE, the department operates several activities that are consistent with this provision. The department does not, however, separate the funding levels for these activities from the budgets of the larger programs that operate them. DOE states 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—are consistent with Section 5008 of the America COMPETES Act.
- o. According to DOE, the department manages at least two programs that are consistent with 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-FY2010. Funding for the SCGF was first provided in FY2010 (\$5.0 million).
- p. According to DOE, funds were neither requested nor appropriated for this provision.
- q. FY2008-FY2010 NIST funding data are enacted appropriations.
- r. In addition to regular appropriations of \$15.0 million, ARPA-E received \$388.9 million in ARRA funding in FY2009.
- s. FY2008-FY2010 NSF funding data are actual appropriations.
- t. NSF states that it provided ARRA funding to this program in FY2010. The NSF Science Master's Program solicitation (NSF 09-607) notes 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	FY 2013 Enacted (P.L. 113- 6)	FY2013 Post- Sequestration
<b>Department of Commerce (DOC)</b>							
Federal Loan Guarantees for Innovative Technologies in Manufacturing (New, Sec. 602)	\$20.0	n/d	\$20.0	\$5.0 <sup>a</sup>	\$20.0	\$4.9	
Regional Innovation Program (New, Sec. 603)	\$100.0	n/d	\$100.0	\$0.0 <sup>a</sup>	\$100.0	n/d	
Loan Guarantees for Science Park Infrastructure (New, Sec. 603)	\$7.0	n/d	\$7.0	\$5.0 <sup>a</sup>	\$7.0	\$4.9	
<b>Department of Education (ED)</b>							
Teachers for a Competitive Tomorrow-Bachelor's (Sec. 1003)	\$2.0	\$0.0 <sup>b</sup>	\$2.0	\$0.0	\$2.0	n/d	
Teachers for a Competitive Tomorrow-Master's (Sec. 1003)	\$2.0	\$0.0 <sup>b</sup>	\$2.0	\$0.0	\$2.0	n/d	
Advanced Placement and International Baccalaureate Programs (Sec. 1003)	\$75.0	n/d <sup>c</sup>	\$75.0	n/d <sup>d</sup>	\$75.0	n/d	
Alignment of Secondary School Graduation Requirements with the Demands of 21 <sup>st</sup> Century Postsecondary Endeavors and Support for P-16 Education Data Systems <sup>e</sup> (Sec. 1003)	\$120.0	n/d <sup>e</sup>	\$120.0	n/d <sup>e</sup>	\$120.0	n/d	

Program/Provision	FY2011 Authorization	FY2011 Funding	FY 2012 Authorization	FY 2012 Funding	FY2013 Authorization	FY 2013 Enacted (P.L. 113- 6)	FY2013 Post- Sequestration
<b>Department of Energy (DOE)</b>							
Summer Institutes (Sec. 901)	\$25.0	n/d <sup>f</sup>	\$25.0	n/d <sup>g</sup>	\$25.0	n/d	
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	\$10.1	n/d	\$10.4	n/d	
Department of Energy Early Career Awards for Science, Engineering, and Mathematics Researchers <sup>h</sup> (Sec. 902)	\$25.0	n/d	\$25.0	n/d	\$25.0	n/d	
Protecting America's Competitive Edge (PACE) Graduate Fellowship Program <sup>i</sup> (Sec. 902)	\$20.6	n/d	\$21.2	n/d	\$21.9	n/d	
Distinguished Scientist Program <sup>i</sup> (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	\$5,614.0	\$4,873.6	\$6,007.0	\$4,866.2	

Program/Provision	FY2011 Authorization	FY2011 Funding	FY 2012 Authorization	FY 2012 Funding	FY2013 Authorization	FY 2013 Enacted (P.L. 113- 6)	FY2013 Post- Sequestration
Advanced Research Projects Agency- Energy (ARPA-E, Sec. 904)	\$300.0	\$179.6	\$306.0	\$275.0	\$312.0	\$264.5	
<b>National Institute of Standards and Technology (NIST)</b>							
<b>NIST Total (Sec. 402)</b>	<b>\$918.9</b>	<b>\$750.1</b>	<b>\$970.8</b>	<b>\$750.8</b>	<b>\$1,039.7</b>	<b>\$807.1</b>	
Scientific and Technical Research and Services (Sec. 402)	\$584.5	\$497.4 <sup>k</sup>	\$661.1	\$567.0	\$676.7	\$608.3	
Construction of Research Facilities (Sec. 402)	\$124.8	\$69.9	\$84.9	\$55.4	\$121.3	\$58.8	
Industrial Technology Services, Total (Sec. 402)	\$209.6	\$182.8 <sup>k</sup>	\$224.8	\$128.4	\$241.7	\$140.0	
<i>Manufacturing Extension Partnership</i>	\$141.1	\$128.4	\$155.1	\$128.4	\$165.1	\$125.8	
<i>Malcolm Baldrige National Quality Award</i>	\$10.0	\$9.6	\$10.3	\$0.0	\$10.6	n/d	
NIST Green Jobs Act of 2010 (New, Sec. 703)	\$7.0	n/d	\$7.0	n/d	\$7.0	n/d	
<b>National Science Foundation (NSF)</b>							
<b>NSF Total (Sec. 503)</b>	<b>\$7,424.4</b>	<b>\$6,912.6</b>	<b>\$7,800.0</b>	<b>\$7,033.1</b>	<b>\$8,300.0</b>	<b>\$7,239.8</b>	
Research and Related Activities (Sec. 503)	\$5,974.8	\$5,608.4	\$6,234.3	\$5,689.0	\$6,637.9	\$5,859.2	
Education and Human Resources (Sec. 503)	\$937.9	\$861.0	\$979.0	\$829.0	\$1,041.8	\$877.0	
Major Research Equipment and Facilities Construction (Sec. 503)	\$164.7	\$125.4	\$225.5	\$197.1	\$236.8	\$192.1	
Agency Operations and Award Management (Sec. 503)	\$327.5	\$299.3	\$341.7	\$299.4	\$363.7	\$293.2	
National Science Board (Sec. 503)	\$4.8	\$4.5	\$4.8	\$4.4	\$4.9	\$4.3	

Program/Provision	FY2011 Authorization	FY2011 Funding	FY 2012 Authorization	FY 2012 Funding	FY2013 Authorization	FY 2013 Enacted (P.L. 113- 6)	FY2013 Post- Sequestration
Office of the Inspector General (Sec. 503)	\$14.7	\$14.0	\$14.7	\$14.2	\$15.0	\$13.9	
STEM-Training Grant Program (New, Sec. 556)	\$10.0	n/d	\$10.0	n/d	\$10.0	n/d	

**Source:** FY2011-FY2013 authorizations for America COMPETES Reauthorization Act of 2010 programs are from P.L. 111-358. FY2011-FY2012 funding levels are from FY2013 agency congressional budget justifications unless otherwise noted. FY2011-FY2013 funding levels for the DOE are from agency budget justifications as well as correspondence between CRS and DOE. FY2013 enacted funding levels are from P.L. 113-6 and the explanatory statement (starting on page S1287) published in the March 11, 2013, *Congressional Record*.

**Notes:** The term “n/d” means “not defined” (e.g., “such sums as may be necessary”). The term “n/a” means “not applicable.” 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. May or may not include rescissions, supplemental funding, or other post-enactment changes to regular appropriations. Funding levels in the column titled “FY2013 Enacted” include the rescissions contained in P.L. 113-6, § 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. Electronic copies of this data available to Members of Congress and their staff upon request.

- a. As enacted, P.L. 112-55 (Consolidated and Further Continuing Appropriations Act, 2012) provides up to \$5.0 million each for the loan guarantee programs in Sections 602 and 603 of P.L. 111-358. However, it is not clear if DOC initiated these programs. The DOC FY2013 congressional budget justification does not specify funding for either program in FY2012. DOC’s FY2013 request includes \$25.0 million for a new Regional Innovation Strategies Program. The FY2013 request does not include funding for loan guarantees for manufacturing.
- b. P.L. 112-10 (Department of Defense and Full-Year Continuing Appropriations Act, 2011) eliminated funding for the Teachers for a Competitive Tomorrow program in FY2011.
- c. 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. Funding for ED’s ESEA-authorized AP program in FY2011 was \$43.3 million.
- d. Funding for ED’s ESEA-authorized AP program in FY2012 was \$27.0 million.
- e. ED does not specify funding for alignment activities.
- f. According to the DOE, this program corresponds to the DOE Academies Creating Teacher Scientists (DOE ACTS) program. DOE ACTS received \$0.2 million in FY2011.
- g. 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 which questioned the program’s educational impact.
- h. According to the DOE, each of the six Office of Science research programs provides funding for Early Career Research awards from its respective core appropriations. The source and amount of funds provided each year depends on the number of proposals that receive high reviews, research areas covered in those proposals, and the availability of funds. DOE estimates that it provides approximately \$16.0 million per year in Early Career Research awards.
- i. According to DOE, the department manages at least two programs that are consistent with 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

FY2011-FY2012. Funding for the SCGF was \$8.0 million in FY2011 and \$5.0 million in FY2012. The Administration is not seeking funding for the SCGF in FY2013.

- j. According to DOE, this program has not received appropriations and was not initiated.
- k. 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.

## **Author Contact Information**

Heather B. Gonzalez  
Specialist in Science and Technology Policy  
hgonzalez@crs.loc.gov, 7-1895