



## **The FY 2015 Budget Request: An Overview**

### **Introduction**

On March 4—a month later than the first Monday in February release that is customary—President Barack Obama unveiled a \$3.9 trillion Federal Budget Request for fiscal year (FY) 2015. The release sets in motion this year’s appropriations process; Congressional Appropriations Subcommittees have already begun their schedule of hearings in hopes of passing each of the 12 annual appropriations bills by the October 1 start of FY 2015.

Below, you’ll find a detailed breakdown of how the Federal agencies and programs of particular interest to ASTC and its members fared.

### **Reorganization of Federal STEM Education Programs**

Last year, the President proposed a major—and unprecedented—consolidation of Federal science, technology, engineering, and mathematics (STEM) education programs. The proposal, which was followed by the release of the Committee on STEM Education’s (CoSTEM’s) 5-Year Federal STEM Education Strategic Plan, was touted as a way to reduce waste and to end programs that were “laudable, but not essential.” If approved by Congress, the President’s plan would have resulted in the termination and consolidation of 90 STEM (and environmental and health) education programs across 11 different agencies and, at least according to the Administration, “the realignment of ongoing STEM education activities to improve the delivery, impact, and visibility of STEM efforts.” Nearly \$180 million from the programs in question—including Environmental Literacy Grants at the National Oceanic and Atmospheric Administration (NOAA), the Competitive Program for Science Museums, Planetariums, and NASA Visitor Centers Plus Other Opportunities at the National Aeronautics and Space Administration (NASA), and the Science Education Partnership Award program at the National Institutes of Health (NIH)—would have been redirected to the Department of Education, National Science Foundation, and Smithsonian Institution. ASTC and other STEM education stakeholders expressed serious concerns with the proposal, and Congress agreed: it was not enacted last year.

Because of this sort of “valuable input from the STEM education community,” the Administration is proposing a “fresh reorganization” proposal that “reduces fragmentation of STEM education programs across government, and focuses on efforts around the five key areas identified by the Federal STEM Education 5-Year Strategic Plan: K-12 instruction; undergraduate education, graduate education, broadening participation in STEM education and careers by women and minorities traditionally underrepresented in these fields; and education activities that typically take place outside the classroom.” **According to the White House Office of Science and Technology Policy (OSTP), “the Administration is not requesting a transfer of funding between agencies. As a result, some agencies have had a portion of their STEM education funds partially restored compared to the FY 2014 Budget proposal. This means, for example, that funding is provided to NASA, NIH, and NOAA to ensure that the K-12 STEM education community can take advantage of these agencies’ respective areas of expertise.”**

## Department of Education

	FY 2013 Actual	FY 2014 Request	FY 2014 Enacted	FY 2015 Request	FY 2015 vs. FY 2014
ED	65,700	71,200	67,300	68,600	+1,300
RTTP	520.2	1,000	-	300	+300
i3	141.6	215	141.6	165	+23.4
STEM Innov.	-	265	-	170	+170
MSP	141.9	-	149.7	-	-149.7
ETL: STEM	-	-	-	149.7	+149.7
21 <sup>st</sup> CCLC	1,092	1,252	1,149	1,149	-

(in millions of dollars; numbers rounded)

The Department of Education (ED) would receive \$68.6 billion in overall discretionary funding for FY 2015 under the Budget Request, \$1.3 billion more than the FY 2014 level.

### Race to the Top

**The Race to the Top (RTTP) program, first authorized by the American Recovery and Reinvestment Act of 2009 (ARRA), would receive \$300 million in funding for FY 2015 under the Budget Request; the program did not receive FY 2014 funding.** RTTP was intended to create incentives for comprehensive State and local reforms and innovations designed to close achievement gaps and produce significant improvements in student achievement, high school graduation rates, and college enrollment rates for all students. In FY 2015, an additional RTTP investment would allow the Department of Education to create a new Race to the Top – Equity and Opportunity competition that would focus on improving the academic performance of students in the Nation’s highest poverty schools. The program would:

*...create incentives for States and school districts to make comprehensive changes in how they identify and close opportunity and achievement gaps. Building on previous reforms and existing Federal investments like Title I and Statewide Longitudinal Data Systems, grants would support: (1) developing and implementing systems that integrate data on school-level finances, human resources, and academic achievement; and (2) developing, attracting, and retaining effective teachers and leaders in high-poverty schools. Grants would also fund evidence-based practices, such as increasing access to rigorous coursework and activities that mitigate the effects of concentrated poverty, such as enhancing school climate and culture. Data would be used to identify the greatest disparities in opportunity and performance as well as effective strategies to address them so that all students are prepared for college and careers.*

### Investing in Innovation Fund

**For FY 2015, ED proposes the continuation of another program that was initially supported through the ARRA, the Investing in Innovation Fund (i3); the Budget Request includes \$165 million for i3, \$23.4 million more than the FY 2014 level.** i3 has made competitive awards to develop and expand innovative strategies and practices that have been shown to be effective in improving educational outcomes for students. According to ED, the funding would:

*...maintain strong support for using an evidence-based approach to test new ideas, validate what works, and scale up the most effective approaches in high-need areas, including identifying and supporting effective teachers and leaders, improving low-performing schools, and encouraging parent engagement. The request would provide up to \$49.5 million for the Advanced Research Projects Agency for Education (ARPA-ED), an initiative modeled on similar entities at the Departments of Defense and Energy that would aggressively pursue technological breakthroughs with the potential to improve the effectiveness and productivity of teaching and learning.*

### STEM Innovation

**The Budget Request includes \$170 million in new funding for a comprehensive STEM Innovation proposal, including \$110 million for STEM Innovation Networks, \$40 million for STEM Teacher Pathways, and \$20 million to support a National STEM Master Teacher Corps; the President included a similar proposal in his FY 2014 Budget Request, but Congress did not provide it with funding.** According to ED, the effort would:

*...transform teaching and learning in STEM education in American schools. Scientists and engineers are innovators—developing new industries and opportunities that create jobs and spur economic growth—and we must ensure that our Nation’s capacity to innovate and compete is never limited by a shortage of talent in STEM fields. The 2015 Budget Request proposes a fresh government-wide reorganization to enable more strategic investment in STEM education and more effective evaluation of outcomes. The proposed STEM initiative at the Department is a central element of this strategy.*

The STEM Innovation Networks component, which would “provide competitive awards to LEAs in partnership with institutions of higher education, nonprofit organizations, other public agencies, and businesses to transform STEM teaching and learning by accelerating the adoption of practices in P-12 education that help increase the number of students who seek out and are effectively prepared for postsecondary education and careers in STEM fields,” may be of particular interest to ASTC members, as museums are specifically mentioned as eligible partners.

### Mathematics and Science Partnerships/Effective Teaching and Learning: STEM

**While no FY 2015 funding is proposed for the Mathematics and Science Partnerships (MSP) program, ED is requesting \$149.7 million—the same amount allocated to MSP for FY 2014—for a new Effective Teaching and Learning: STEM program.** According to the agency, it would:

*...build on the experience of the current MSP program by making formula grants to State Education Agencies (SEAs) to implement a comprehensive strategy for the provision of high-quality STEM instruction and support to students. States would be permitted to reserve up to 20 percent of grant funds for State-level activities to support the development and implementation of a coherent approach to providing high-quality, evidence-based STEM instruction in high-need schools.*

### 21<sup>st</sup> Century Community Learning Centers

**The 21<sup>st</sup> Century Community Learning Centers (21<sup>st</sup> CCLC) afterschool program would receive \$1.1 billion in funding under the FY 2015 request, the same amount available for FY 2014.** ED states that the funding would:

*...support competitive grants to States, local education agencies (LEAs), nonprofit organizations, or local government entities for projects that provide the additional time, support, and enrichment activities needed to improve student achievement, including projects that support expanding learning time by significantly increasing the number of hours in a regular school schedule and by comprehensively redesigning the school schedule for all students in a school.*

## **Institute of Museum and Library Services**

	<b>FY 2013 Actual</b>	<b>FY 2014 Request</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Request</b>	<b>FY 2015 vs. FY 2014</b>
<b>IMLS</b>	219,821	225,812	226,860	226,448	-412
<b>Library Serv.</b>	175,044	177,069	180,909	178,602	-2,307
<b>Museum Serv.</b>	27,909	31,513	28,724	29,649	+925
<b>Mus. For Amer.</b>	19,564	22,707	20,200	20,643	+443
<b>Nat. Lead.</b>	7,468	7,880	7,600	8,080	+480
<b>Native/Hawaii</b>	877	926	924	926	+2
<b>AA History</b>	1,136	1,410	1,407	1,410	+3

The Institute of Museum and Library Services (IMLS) would receive a decrease in overall funding under the FY 2015 Budget Request; the \$226.4 million proposed for the agency is \$412,000 less than the amount available for FY 2014. While funding for library grant programs authorized by the Library Services and Technology Act would also decrease (by \$2.3 million compared with the FY 2014 level), **funding for museum grant programs authorized by the Museum Services Act would increase by nearly \$1 million compared with the FY 2014 level.**

#### Museums for America

**The FY 2015 Budget Request calls for \$20.6 million in funding for Museums for America, the agency's largest grant program for museums; this amount is \$443,000 more than the amount available for FY 2014.** According to IMLS:

*Museums for America grants are available to museums of all kinds and sizes. In FY 2014, IMLS served new applicants and small museums by introducing a "no match" grant opportunity. Small museums have identified cost share as an obstacle to competing for Federal funds. In FY 2015, IMLS will commit \$3 million in this program for individual museum grant awards of \$25,000 or less that will not require a match. IMLS is also implementing a strategy to encourage applications from regions where museum applications are low or application success rates are less than 25 percent.*

Note that the Conservation Project Support program was combined with Museums for America in 2013 to strengthen funding for more comprehensive projects involving collections care and conservation; as a result, it no longer appears as a line item in the Institute's Budget Request.

#### National Leadership Grants for Museums

**The FY 2015 Budget Request includes \$8.1 million for National Leadership Grants for Museums, \$480,000 more than the amount available for FY 2104.** According to IMLS:

*National Leadership Grants for museums provide funding for projects that improve and advance professional practices for the nation's 17,500 museums. Grants support research, professional development, and models and new tools that can be widely used throughout the field.*

Note that the 21<sup>st</sup> Century Museums Professionals Grants program was absorbed by the National Leadership Grants for Museums program in 2013 in an effort to offer a streamlined application process for applicants; as a result, it no longer appears as a line item in the Institute's Budget Request.

#### Native American/Native Hawaiian Museum Services

**The FY 2015 Budget Request includes \$926,000 for Native American/Native Hawaiian Museum Services, \$2,000 more than the amount available for FY 2014.** According to IMLS:

*This program provides grants to Federally recognized tribes and organizations that serve Native Hawaiians for museum-related cultural services and programs for their members and the public. Many of these programs involve the preservation, care, and interpretation of significant objects and traditions of Native American culture. This program helps these communities learn from their common experiences and challenges.*

#### Museum Grants for African American History and Culture

**The FY 2015 Budget Request includes \$1.4 million for Museum Grants for African American History and Culture, \$3,000 more than the amount available for FY 2014.**

According to IMLS:

*Museum Grants for African American History and Culture support institutional capacity and sustainability through professional training, technical assistance, internships, outside expertise, and other tools.*

### Museums, Libraries, and STEM Learning

In the FY 2014 Budget Request, IMLS identified the improvement of STEM learning skills for children and young adults as an agency priority and indicated that they planned to create a “funding priority” for projects that developed new programming models to teach STEM skills to at-risk youth. This year, the agency includes “Museums, Libraries, and STEM Learning” as a “Strategic Focus,” stating that:

*Libraries and museums are crucial to building skills in STEM learning for children and young adults. Libraries and museums are community technology hubs where out-of-school STEM learning efforts include development of “maker spaces,” where teens and adults can creatively apply STEM concepts to create their own inventions, and hosting of community science fairs and STEM-focused exhibits and public programs. In FY 2015, we will continue our funding priority for projects that develop new programming models to teach STEM skills to at-risk youth.*

IMLS indicates that a minimum of \$2 million from current library and museum grant programs will be devoted to this undertaking.

## **National Aeronautics and Space Administration**

	<b>FY 2013 Actual</b>	<b>FY 2014 Request</b>	<b>FY 2014 Enacted</b>	<b>FY 2015 Request</b>	<b>FY 2015 vs. FY 2014</b>
<b>NASA</b>	16,865	17,715	17,647	17,461	-186
<b>Education</b>	116.3	94.2	116.6	88.9	-27.7
<b>STEM Ed. Prog.</b>	62.3	61.2	58.6	55.9	-2.7
<b>SEAP</b>	34.4	31.2	28.6	25.9	-2.7
<b>CP4SMP+</b>	-	-	TBD	-	TBD
<b>Opp. Growth</b>	-	-	-	10	+10

(in millions of dollars; numbers rounded)

Once again, the President’s Budget Request includes a decrease in overall funding for the National Aeronautics and Space Administration. If enacted, the agency would receive \$17.5 billion for FY 2015, \$186 million less than the amount available for FY 2014.

### Education and STEM Education and Accountability

**Under the Budget Request, the NASA education account would see a large, \$27.7 million reduction, from \$116.6 million in FY 2014 to \$88.9 million in the upcoming fiscal year. Furthermore, funding for the STEM Education and Accountability Program would also be reduced in FY 2015; \$55.9 million is proposed, \$2.7 million less than the amount available for FY 2014. A sub-category of that account, STEM Education and Accountability Projects, would absorb the entirety of the \$2.7 million cut, as \$25.9 million is requested for FY 2015 compared with the \$28.6 million available for the previous fiscal year. In its request, NASA states that:**

*The Agency will fundamentally restructure its STEM education investments into a coordinated education effort reporting to the NASA Office of Education. NASA will continue to work closely with other Federal agencies in executing the Administration’s STEM education objectives. The Agency aims to increase both the use of NASA resources and the availability of opportunities to a diverse audience of educators and students, including women, minorities, and persons with disabilities.*

In addition:

*NASA will continue to integrate and consolidate its STEM education projects and activities into a more focused portfolio, consistent with Congressional direction to streamline and consolidate STEM education programs within NASA. Specifically, NASA will continue internal consolidation of education functions, assets, and efforts of the mission directorates into the coordinated STEM Education and Accountability Projects (SEAP). SEAP assets are critical and unique components that*

NASA can make available to the National Science Foundation, Smithsonian Institution, and Department of Education, on a reimbursable basis, as they facilitate Federal STEM education activities through the Administration's Committee on STEM process for agency coordination. Additionally, the expiration of some prior-year cooperative agreements enables NASA to reinvent its formal and informal education portfolio to better address the Administration's STEM goals.

Competitive Program for Science Museums, Planetariums, and NASA Visitor Centers

**The Competitive Program for Science Museums, Planetariums, and NASA Visitor Centers Plus Other Opportunities (CP4SMP+), which saw roughly \$7 million in annual funding in recent fiscal years, was not included in the FY 2015 Budget Request.** NASA included the following language in its request:

*NASA's FY 2013 CP4SPM+ received nearly 70 proposals from informal education institutions and NASA visitor centers requesting support for teacher professional development, exhibits, planetarium shows, and STEM engagement programming. The final selection process is nearing completion, with final selections depending on finalization of the FY 2014 budget.*

Opportunity, Growth, and Security Initiative

NASA is also proposing a new Opportunity, Growth, and Security Initiative that includes an additional \$10 million in funding for the Office of Education to "enhance the reach and impact of NASA education activities." NASA's request indicates that the funding would:

*...augment competitive funding within SEAP that would advance learning and engagement via partnerships or forms of direct financial assistance for youth, including undergraduates, and for youth-serving informal education institutions.*

## National Institutes of Health

	FY 2013 Actual	FY 2014 Request	FY 2014 Enacted	FY 2015 Request	FY 2015 vs. FY 2014
NIH	29,151	31,331	30,151	30,363	+210.8
OD	1,411	1,473	1,400	1,452	+52
SEPA	19.4	-	18.5	18.5	-

(in millions of dollars; numbers rounded)

The National Institutes of Health would receive \$30.4 billion in funding for FY 2015 under the President's proposal, \$210.8 million more than the FY 2014 level. Of that total amount, NIH's Office of the Director (OD)—which has overseen the Science Education Partnership Award (SEPA) program since the dissolution of the National Center for Research Resources—is slated to receive \$1.45 billion, \$52 million more than the amount available for FY 2014.

Science Education Partnership Award

**In a significant—and welcome—reversal, the Administration is requesting \$18.5 million in funding for the SEPA program for the upcoming fiscal year, the same amount available for FY 2014.** Last year, the program was among those targeted for elimination as part of the Administration's STEM education consolidation effort, though funding was ultimately restored by Congress. From the NIH Budget Request:

*The SEPA program supports NIH's mission to enhance health, lengthen life, and reduce illness and disability as well as support of the early pipeline component of workforce development. SEPA's K-12 STEM projects provide resources for research-related career opportunities for the students and professional development opportunities for the teachers in minority, underserved, and rural communities. In FY 2015, the SEPA Program will be coordinated with the Department of Education to ensure that program activities and commercialized products are aligned with ongoing P-12 reform efforts, and refocused to emphasize biomedical education research interventions. SEPA projects will continue to be required to conduct rigorous evaluation to measure effectiveness. SEPA*

projects are encouraged to collaborate with Institutional Development Award (IDeA) programs where graduating SEPA students fill the undergraduate pipeline at IDeA institutions, thus continuing NIH's efforts in Enhancing Diversity in the Biomedical Workforce.

The reference to "coordination" with the Department of Education is noteworthy, and appears in other sections of the FY 2015 Budget Request as well. The aforementioned Office of Science and Technology Policy refers to it as a "partnership," while ED offers this statement:

*The 2015 Budget builds on these efforts by proposing a fresh reorganization with targeted adjustments to enable more strategic investment in STEM education, with a focus on building and using evidence-based practices and developing new interagency models for leveraging assets and expertise. For example, the Department will work with the National Institutes of Health to co-administer NIH's Science Education Partnership Award program to ensure that program activities are aligned with ongoing P-12 reform efforts, designed to reach the highest need schools, and disseminated broadly.*

Further details regarding the coordination/partnership/co-administration have yet to emerge.

## National Oceanic and Atmospheric Administration

	FY 2013 Actual	FY 2014 Request	FY 2014 Enacted	FY 2015 Request	FY 2015 vs. FY 2014
<b>NOAA</b>	4,748	5,448	5,332	5,496	+174
<b>Education</b>	25.2	16.3	27.2	16.4	-10.8
<b>Comp. Grants</b>	5.1	-	TBD	-	TBD
<b>B-WET</b>	5.5	-	7.2	-	-7.2

(in millions of dollars; numbers rounded)

The National Oceanic and Atmospheric Administration would receive \$5.5 billion in overall funding under the President's FY 2015 Budget Request, an increase of \$174 million over the FY 2014 level.

### Education Program and Competitive Education Grants

NOAA's Office of Education is, once again, slated for a significant cut under the FY 2015 Budget Request; the proposed level of \$16.4 million in funding is \$10.8 million less than the amount available for FY 2014. In addition, **neither the Competitive Education Grant Program nor the Bay- Watershed Education and Training (B-WET) Regional Programs receive support in the President's request—termination is proposed for both.** NOAA suggests that they will continue to provide students with watershed educational experiences through other programs, and that they intend to:

*...develop and execute an efficient streamlined process to help lead STEM agencies, such as the National Science Foundation and Department of Education, translate NOAA expertise into materials and strategies to support former STEM education goals in the reorganization process...*

## National Science Foundation

	FY 2013 Actual	FY 2014 Request	FY 2014 Enacted	FY 2015 Request	FY 2015 vs. FY 2014
<b>NSF</b>	6,902	7,626	7,172	7,255	+83.1
<b>EHR</b>	834.6	880.3	846.5	890	+43.3
<b>DRL</b>	215.5	277.9	230.2	241.6	+11.3
<b>AISL</b>	48	47.8	55	55	-

(in millions of dollars; numbers rounded)

The National Science Foundation would receive an \$83.1 million increase under the President's FY 2015 Budget Request; the agency is slated to receive \$7.25 billion. **The Directorate for**

**Education and Human Resources (EHR) and the Division of Research on Learning in Formal and Informal Settings (DRL) would also see increases over their FY 2014 levels; EHR would see an additional \$43.3 million and DRL would see an additional \$11.3 million.** According to the Budget Request:

*The Division of Research on Learning in Formal and Informal Settings focuses its investments on building knowledge through research to improve STEM learning. DRL programs support basic research, as well as research and development related to the design and testing of resources, models, STEM learning environments, and tools that advance understanding about learning and teaching and promote broadening participation and access to both formal and informal STEM activities. DRL-funded projects build a research foundation for innovations in STEM learning environments and for measuring and characterizing broadening participation in STEM and the STEM professional workforce.*

In addition:

*The findings from DRL-funded research and development projects provide resources that help to foster partnerships between EHR and other directorates, NSF-funded facilities and centers, other Federal agencies, and the private sector and that encourage complementary investments by EHR and these partners in discipline-based and practice-based approaches to STEM education.*

#### Advancing Informal STEM Learning

Though the President's FY 2014 Budget Request included only \$47.8 million in funding for the Advancing Informal STEM Learning (AISL) program (formerly known as Informal Science Education), Congress expressed its support for the program by including \$55 million in the FY 2014 Omnibus Appropriations Bill. **For FY 2015, the President is proposing level funding of \$55 million—a positive development.** NSF's request indicates that the funding will:

*...provide resources to support design, adaptation, implementation, and research on innovative modes of learning in the informal environment, including emphases on citizen science and cyberlearning.*