

AGENDA

EIA and Improvement Mechanisms Subcommittee

Monday, November 16, 2015
10:00 AM, Room 403, Blatt Building

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|------|---|--|
| I. | Welcome and Introductions | Dr. Bob Couch |
| II. | Approval of Minutes of November 9, 2015 Meeting | Dr. Bob Couch |
| III. | FY2016-17 Budget Testimony | Ken May
<i>Executive Director,
SC Arts Commission</i> |
| IV. | Discussion & Development of EIA
Budget Recommendations | Dr. Bob Couch |
| V. | Adjournment | |

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Dr. Bob Couch, Chair
Margaret Anne Gaffney
Rep. Dwight Loftis
Deb Marks
Rep. Joe Neal
David Whittemore

Melanie D. Barton
EXECUTIVE DIRECTOR

Minutes
EIA and Improvement Mechanisms Subcommittee Meeting
November 9, 2015
10:00 A.M., Room 403 Blatt Building

Subcommittee Members Present: Dr. Bob Couch (Chair); Rep. Dwight Loftis; Rep. Joe Neal; Ms. Deb Marks; and Mr. David Whittemore

EOC Staff Present: Kevin Andrews; Melanie Barton; Bunnie Ward; Hope Johnson-Jones; and Dana Yow

Welcome and Introductions

Dr. Couch opened the meeting at 10:00 a.m.

Approval of the Minutes of September 21, 2015

There being no changes, the minutes were approved as distributed.

EIA-funded programs briefed Subcommittee members about progress during FY 2015-16 and plans for FY 2016-17, including requests for increases in EIA funding.

SC Department of Education

Emily Heatwole and Mellanie Jinnette provided an overview of increase requests for FY 2016-17. SCDE has submitted increase requests for 17 EIA-funded programs. These increase requests include 17 new FTEs.

“Modernize Vocational Equipment” budget should be increased to replace \$1.5 million in nonrecurring funding with recurring funding. SCDE is also requesting \$5 million in additional funding to pay for industry certification/credential exams and a pilot program to incentivize teachers.

The budget for the newly established Office of Early Learning and Literacy needs to be increased by \$257,400 to hire three new FTEs to support reading plans and data analysis. Another \$171,600 would fund two additional FTEs to monitor, develop and support quality early childhood programs.

Rep. Loftis asked how reading programs and interventions are coordinated. Ms. Heatwole responded the will be a proviso forthcoming to streamline and coordinate programs because they have operated as silos. Mrs. Barton requested additional information about the progress monitoring system and its implementation status. Ms. Heatwole stated it is in progress and would provide additional information.

SCDE requested another \$1.5 million for adult education because funding has been stagnant since the recession. The funds would go directly to school districts and 20% of the funded amount would be allocated to pay for costs associated with GED testing for students.

Rep. Loftis requested additional information about the adult education student population, primarily the number of younger students (18-24) and older adult education students.

SCDE requested \$10.625 million increase in assessments. Ms. Marks asked for additional information about projected costs for administering several of the assessment items that were listed on the document without associated costs.

SCDE also requested an increase for technology infrastructure and security for SCDE and data. Rep. Loftis asked if funding for these purposes should be directed toward General Fund and asked SCDE for additional detail.

Ms. Barton noted that SCDE has proposed a .15 additional student weighting in the EFA for dual enrollment.

SCDE supports a salary increase for teachers after 22 years. Rep. Loftis suggested that teacher salary increases should be considered at the beginning of teachers' careers due to challenges with recruiting and retaining teachers during the beginning of their careers.

Dr. Couch inquired about the \$6 million in unappropriated funds for vocational equipment from 2015-16. Dr. Couch also inquired about SCDE plans for High Schools that Work, which is named in the EEDA. He reported funding for this program has decreased about \$2 million over the past five to six years.

Reach Out and Read - Callee Boulware

No EIA funding increase was requested. SC invested \$1.5 million to support expansion to children living in poverty. Ms. Boulware reported on the status of this investment. Approximately 30,000 children are on a new waiting list for expansion. The program's goal is to expand to approximately 40,000 children, from 100,000 to 140,000 over the next year. Reach Out and Read has hired two new program specialists to support expansion and partnerships. Early childhood partners include libraries, faith-based organizations, home visitation programs, adult education and Latino outreach groups. Research and evaluation is also expanding to include enhanced focus on reaching children birth – six months of age.

STEM Centers SC – Dr. Thomas Peters

Dr. Peters requested \$975,000 in additional EIA funding for 2016-17. Funding will support development of a STEM Teacher Fellows program to recruit STEM teachers at the secondary level; implement a STEM School/STEM Teacher Certification program; provide seed funding for

the Grand Challenges in STEM Education Initiative; and support infrastructure improvements and staff raises.

SC Charter School District – Superintendent Elliott Smalley

Supt. Smalley requested \$12,987,28 in additional EIA funding to allow for the District to operate at the current level. Based on 2015-16 student enrollment, the District is the twelfth largest in the state, with approximately 22,700 student projected enrollment in 2016-17. The District will undergo a strategic planning process and will engage charter operators in the Spring 2017. Suptdt. Smalley emphasized the need for a focus on quality and accountability that rewards schools and approaches that improve student achievement.

CERRA – Jane Turner

Ms. Turner reported recruitment and retention continue to be a challenge nationally and statewide. For past three years, the number of students enrolling in teacher preparation programs has decreased. Almost 35% of teachers leave the profession after the first five years.

Using \$1.5 million in last year's rural recruitment funds, CERRA's goal is to install teacher cadet programs in every rural district during the year. CERRA supports the expansion of the mentor program for rural districts from one to two years. CERRA also revised mentor training guidelines and launched trainings in September using the new guidelines. CERRA will submit a report to the Legislature during Winter 2016 and plans to implement in the Fall 2016. Ms. Turner commented a primary consideration is developing leadership opportunities for teachers so they do not leave the classroom to pursue career advancement.

Mrs. Barton noted that part of this challenge is how to compensate teachers so they are incentivized to enter the profession and stay. Aiken County pays teachers more than \$8,000 annually above the state minimum salary for the first five years.

Science Plus – Amy St. John

Ms. St. John discussed the new "Mini Plus" program that is a new one-day training institute. This model will allow Science Plus to provide training opportunities throughout the state. Rep. Neal asked about long-term outcomes. Ms. St. John responded it is difficult to access individual teacher data and primarily use data posted on the SCDE website.

Teach for America – Josh Bell

Mr. Bell reported there are 14 partner districts and 60 partner schools. Two initiatives have been implemented: RiseSC's goal is to increase the number of teachers who have ties to the state. Teach for America is committed to recruiting teachers who have similar backgrounds to students in participating schools. Without RiseSC, there would be much less diversity in the teaching force. InnovateSC is another initiative that aims to increase the number of corps

teachers who can teach computer science or other STEM-related subjects. Mr. Bell also commented there is a lack of career pathways for corps alumni, who leave their Teach for America positions in the state for opportunities in other states. Mr. Bell also noted there is a need for a unified statewide vision about teacher recruitment and retention. Mr. Bell also noted difficulty with accessing student achievement data, which is needed to consider the impact of corps teachers.

Patriot's Point - Keith Grybowski

Mr. Grybowski requested an increase for \$235,000 to expand participation to all fifth graders in the state. About 23,000 students are projected to participate in 2015-16. He noted they will conduct an evaluation of students in Georgetown County and will consider the impact of various methods of delivery, including student visits to ship, student use of books, downloads and apps that will be compared to a control group.

Patriot's Point is also developing additional eighth grade curriculum that utilizes innovative Ocular goggles that provides a more realistic learning experience for the students.

There being no other business, the subcommittee adjourned.



SOUTH CAROLINA

REVENUE AND FISCAL AFFAIRS OFFICE

CHAD WALLDORF, Chairman
 HOWELL CLYBORNE, JR.
 EMERSON F. GOWER, JR.

FRANK A. RAINWATER
 Executive Director

Budget Outlook - Fact Sheet

FY 2016-17

November 10, 2015

	Recurring Funds	Non-Recurring Funds
FY 2015-16		
Capital Reserve Fund		131,047,797
Contingency Reserve Fund		86,750,797
BEA Revenue Estimate Adjustment		239,798,000
Total		326,548,797
Total Projected Non-Recurring Funds		457,596,594
FY 2016-17		
General Fund Revenue Available for Appropriation* (Incremental Increase Over Appropriation Base)	766,547,158	
Projected New EIA Revenue	54,986,750	
Projected New Lottery Funds (Total Available FY2016-17 Lottery Funds - \$341,300,000)	20,375,000	
Total Projected Recurring Funds	841,908,908	

Total Unobligated Funds Available in FY 2016-17 (Includes recurring and non-recurring funding sources)	\$1,299,505,502
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*Components of General Fund Revenue Available for Appropriation:		
FY 2014-15 Revenue Growth	\$131.4 Million	
FY 2015-16 Recurring Funds Not Included in FY 2016-17 Recurring Base	\$204.0 Million	
FY 2015-16 Additional Revenue Growth	\$51.5 Million	
FY 2016-17 Revenue Growth	\$379.6 Million	

*Recurring General Fund budget growth for FY 2016-17 is 8.7%

**FY 2015-16 Recurring Lottery Funds (\$320,925,000) not included in Total Unobligated Funds Available in FY 2016-17

EIA Revenue Projections

Fiscal Year 2015-16	
Revised EIA Projection (November 10, 2015)	\$716,345,000
EIA Total Appropriation 2015-16 *	<u>\$704,198,250</u>
Projected EIA Surplus	\$12,146,750
Fiscal Year 2016-17	
Preliminary Estimate (November 10, 2015)	\$751,585,000
EIA <i>Recurring</i> Base Appropriation 2015-16	<u>\$696,598,250</u>
Projected "New" EIA Revenue	\$54,986,750

* Includes one-time transition payments to districts of \$7,600,000
 Source: Board of Economic Advisors

DRAFT WORKING DOCUMENT

**Budget and Proviso Recommendations for FY2016-17
(Last Amended November 13, 2015)**

Section 59-6-10 of the Education Accountability Act requires the Education Oversight Committee (EOC) to "review and monitor the implementation and evaluation of the Education Accountability Act and Education Improvement Act programs and funding" and to "make programmatic and funding recommendations to the General Assembly."

To meet this statutory requirement, the EOC required each EIA-funded program or entity to submit a program and budget report. These reports were submitted to the EOC on or before October 2, 2015.

The EIA and Improvement Mechanisms Subcommittee met on three occasions in the fall of 2015:

- September 21: Discussed budget overview
- November 9: Held public hearing for all entities funded by or requesting EIA revenues
- November 16: Held additional public hearings and formalized recommendations.

On November 10, 2015 the Board of Economic Advisors (BEA) issued its preliminary outlook for the Fiscal Year 2016-17 General Fund and EIA revenue forecast. The BEA identified additional one-time EIA revenues due to increased revenue collections in the current fiscal year of \$12.1 million and a \$54.9 million increase over the current year's EIA appropriation base (Table 1).

**Table 1
EIA Revenue Projections**

Fiscal Year 2015-16	
Revised EIA Projection (November 10, 2015)	\$716,345,000
EIA Total Appropriation 2015-16 *	<u>\$704,198,250</u>
Projected EIA Surplus	\$12,146,750
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* Includes one-time transition payments to districts of \$7,600,000

Source: Board of Economic Advisors

Objective 1: Support Educators for 21st Century Learning

There are two critical needs facing public education in South Carolina:

1. The current educator pipeline is not sufficient to meet existing or future needs with significant shortage of special education and STEM teachers; and
2. Teachers need assistance in teaching and facilitating the learning of 21st century skills like communication, collaboration, critical thinking, and creativity.

On the Path to Equity: Improving the Effectiveness of Beginning Teachers, a 2014 report by Alliance for Excellent Education, determined that half a million teachers in the United States leave the classroom or profession annually at a cost to public education of \$2.2 billion. The high turnover rate “disproportionately affects high-poverty schools and seriously compromises the nation’s capacity to ensure that all students have access to skilled teaching. . . . Turnover is especially high among new teachers, with 40 to 50 percent leaving the profession after five years.”¹

In South Carolina, the Center for Educator Recruitment, Retention, and Advancement (CERRA) releases an annual report on teacher supply and demand. In its Fall 2014 report, CERRA found that 5,300 teachers did not return to their classroom in 2014-15, up 5.5% from the prior year. “Of those who left during or at the conclusion of the 2013-2014 school year, 34% did so in the first five years of their career and 13% after just one year or less in the classroom.” And, “based on current and historical data, South Carolina is not producing enough teachers to “keep up with the needs of our public schools. As a result, districts must hire teachers from other states or those with an alternative teaching license.”² As reported this fall, teacher shortages are affecting states throughout the country including North Carolina, California, Georgia and Ohio.

To begin addressing these issues, staff recommends the following budget and policy proposals:

Recommendation 1A: Teacher Supplies - \$750,000

The South Carolina Department of Education (SCDE) projects there were 49,940 teachers who received \$250 during FY 2015-16. EOC staff recommends fully funding this line item at the maximum allowable amount of \$275. For FY 2016-17 an increase in teacher supply appropriation of \$750,000 would accommodate approximately 52,166 teachers receiving \$275 each for the cost of supplies.

¹ *On the Path to Equity: Improving the Effectiveness of Beginning Teachers*. 2014. <<http://all4ed.org/wp-content/uploads/2014/07/PathToEquity.pdf>>.

² *A Report on the Fall 2014 Supply and Demand Survey*. January 2015. Center for Educator Recruitment, Retention, and Advancement. <http://cerra.org/media/documents/2015/1/2014_Supply__Demand_Report1.pdf>.

Recommendation 1B: S²TEM Centers SC – STEM Teacher Fellows Initiative - \$350,000

Nationally, student interest in STEM is high; almost half of students in the 2013 ACT-tested graduating class have an interest in STEM majors or occupations. The academic gap that exists in general for ethnically diverse students is even more pronounced among those interested in STEM fields.³ While student interest may be high, the supply of teachers for STEM-related fields in South Carolina continues to be a challenge. Data from CERRA's annual Supply and Demand Survey demonstrates the need. Vacancies in secondary mathematics, science, agriculture, and industrial technology education are among the ten most critical needs subject areas.⁴

Staff recommends allocating EIA funding to develop an initiative to recruit highly qualified STEM teachers at the secondary levels in rural communities. In and of itself, STEM is an interdisciplinary approach with hands-on and problem-based learning. Students benefit from quality STEM education by becoming:

- **Problem-solvers** – able to define questions and problems, design investigations to gather data, collect and organize data, draw conclusions, and then apply understandings to new and novel situations.
- **Innovators** – creatively use science, mathematics, and technology concepts and principles by applying them to the engineering design process.
- **Inventors** – recognize the needs of the world and creatively design, test, redesign, and then implement solutions (engineering process).
- **Self-reliant** – able to use initiative and self-motivation to set agendas, develop and gain self-confidence, and work within time specified time frames.
- **Logical thinkers** – able to apply rational and logical thought processes of science, mathematics, and engineering design to innovation and invention.
- **Technologically literate** - understand and explain the nature of technology, develop the skills needed, and apply technology appropriately.⁵

³ Source: ACT, *The Condition of Stem 2013 South Carolina, 2014*.

<https://www.act.org/stemcondition/13/pdf/SouthCarolina.pdf>

⁴ Source: EOC, *2013-14 South Carolina Teacher Loan Program Annual Report, June 8, 2015*.

⁵ Source: Hays Blaine (HB) Lantz, Jr., Ed.D., *Science, Technology, Engineering, and Mathematics (STEM) Education, What Form? What Function?* 2009. <http://www.currtechintegrations.com/pdf/STEMEducationArticle.pdf>.

Recommendation 1C: State Agency Teacher Pay

The following state agencies/special schools requested increases in their line-item appropriation for teacher salaries. Pursuant to Proviso 1A.5, “each state agency shall receive such funds as are necessary to adjust the pay of all instructional personnel to the appropriate salary provided by the salary schedules of the school district in which the agency is located.” The EOC contacted the seven special schools that receive EIA funds, and four responded.

Table 2

Increased Funding to the Following Special Schools and Line Items

Governor’s School for the Arts & Humanities	\$138,025
Governor’s School for Math & Science	\$ 63,241
Department of Disabilities and Special Needs	(\$65,000)
State Agency Teacher Salary	\$217,474

Recommendation 1D: Teacher Salary

The South Carolina Department of Education requested an increase of \$6.9 million in EIA revenues to extend the statewide minimum teacher salary schedule from 22 to 23 years. Currently, there are 24 school districts whose teacher salary schedules do not extend beyond 22 years, leaving 57 school districts that pay beyond 22 years. The Department projects that 20 percent of the teaching workforce would be affected by the change.

While extending the statewide minimum teacher salary schedule may assist in retaining some of the state’s most veteran teachers, it will not address recruiting more teachers into the pipeline. Therefore, the staff recommends the following:

- Engaging an outside expert, like the Moore School of Business, in a study to develop a teacher salary schedule that would create attract and retain high quality teachers for our classrooms. The salary schedule would guarantee an entry level salary that would attract our best and brightest into the profession and a professional pathway to reward teachers for their performance and responsibilities. The schedule would also be used to keep the average teacher salary at or above the Southeastern average teacher salary (Table 3). In addition, looking at rural districts that have high teacher turnovers, the salary schedule might also include a supplement for working conditions. The outside expert would work with current and pre-service teachers, district human resource directors, and school business officials.

Table 3
Average Teacher Salary

	SC Actual	SE Actual	Difference
FY2012-13	\$48,375	\$47,964	\$411
FY2013-14	\$48,430	\$48,289	\$141
FY2014-15	\$48,561	\$49,223	(\$662)
FY2015-16		\$50,239	
FY2016-17		\$51,495	

Sources:

Revenue and Fiscal Affairs Office, September 8, 2015 Letter to State Superintendent of Education

Email from Chief Financial Officer, SCDE, October 19, 2015

Note: Salaries in bold are estimates.

- Reallocating current, available appropriations to improving the overall teacher salary schedule or to the Rural Teacher Initiative. For example, the EOC staff analyzed the recurring EIA appropriations for National Board Certification and Teacher Salary Supplement and Fringe Benefits (Tables 4 and 5). Based upon the unexpended funds from FY14 and FY15, the staff anticipates at least \$16.5 million in funds from these line items will not be expended in FY16. These unexpended funds could be reallocated to an initiative to increase the statewide minimum teacher salary for teachers with less than five years of experience.

Table 4
National Board Certification

	Appropriation	Expenditures	Transfer In	Unexpended
FY2012-13	\$68,564,000	\$56,822,696	\$0	\$11,741,304
FY2013-14	\$54,000,000	\$55,117,175	\$1,117,175	\$0
FY2014-15	\$55,500,000	\$53,651,386	\$0	\$1,848,614
FY2015-16	\$54,000,000	\$50,114,161	\$0	\$3,885,839

Sources:

Annual EIA Program and Budget Reports submitted by the SCDE to EOC

<http://apps.ed.sc.gov/agency/cfo/Finance/Financial-Services/reports//Reports/StateTotalForm>

Note: Expenditures for FY2015-16 are **estimates** based on SCDE's October 2015 EIA Allocation to school districts.

**Table 5
Teacher Salary Supplement & Fringe Benefits**

	Appropriation	Carry Forward	Expenditures	Transfer In	Unexpended
FY2012-13	\$92,828,102	\$402,367	\$89,318,197		\$3,912,272
FY2013-14	\$141,523,712	\$2,953,180	\$133,011,842	\$0	\$11,465,050
FY2014-15	\$143,407,443	\$7,526,552	\$140,804,803	\$0	\$10,129,192
FY2015-16	\$145,907,443	\$10,129,192	\$139,708,359	\$0	\$16,328,276

Sources:

Annual EIA Program and Budget Reports submitted by the SCDE to EOC

<http://apps.ed.sc.gov/agency/cfo/Finance/Financial-Services/reports//Reports/StateTotalForm>

Note: Expenditures for FY2015-16 are **estimates** based on SCDE's October 2015 EIA Allocation to school districts.

Recommendation 1E: Technology

The state should continue to invest in school technology, which is critical for equipping teachers with tools to engage students. The staff recommends continued funding of technology to school districts that is at least at the current year’s level of \$29,288,976. School technology was funded in FY2014-15 and FY2015-16 through lottery funds. The SCDE also requested EIA funds for technology upgrades for the agency. If the General Assembly allocates additional funds for the technology needs of the agency, then the EOC recommends that those funds be General Fund revenues and not EIA revenues.

OBJECTIVE 2: Improve Students’ College & Career Readiness

The second objective focuses on providing students with the opportunities and experiences needed to graduate from high school career, college and civic ready for the 21st century. The following recommendations are based on initiatives to support the Profile of the South Carolina Graduate.

Recommendation 2A: High Schools that Work \$1,309,051

The Education and Economic Development Act (EEDA) of 2005 required that, by the 2009-10 school year, every high school in the state had to implement the principles of the High Schools that Work model (Section 59-59-130). These principles include:

- Set high expectations and get students to meet them;
- Increase rigor so that students complete a challenging program of study with an upgraded academic core and a major;
- Have teachers work together to integrate academic and technical studies;

- Increase access to challenging vocational & technical studies, with a major emphasis on using high level mathematics, science, language arts and problem-solving skills;
- Give students access to a system of work-based and school-based learning planned cooperatively by educators and employers;
- Actively engage each student in the learning process;
- Involve students and parents in a guidance and advisement system;
- Provide a structured system of extra help; and
- Use student assessment and program evaluation data for continuous improvement. (Southern Regional Education Board)

In the current school year in South Carolina, there are 432 schools (227 high school and career centers and 205 middle schools) that have implemented either a High Schools that Work program or Making Middle Grades Work program. The goals of these programs are: include 85% of all students meeting college and career ready standards in reading, mathematics and science and achieve a 90% graduation rate. The cost per site is approximately \$8,000 for the staff development, technical assistance, communications and publications, and assessment services. Currently, districts have to absorb much of the cost of the program. The \$1.3 million increase would fully fund the programs.

Recommendation 2B: Assessments – To Be Determined

For the current fiscal year, the General Assembly appropriated \$27,261,400 in recurring EIA revenues and \$7.3 million in non-recurring EIA funds for assessments. SCDE also carried forward \$11.2 million in assessment funds into the current fiscal year. According to information provided by the Department, \$10.9 million of the \$11.9 million in carry forward funds from FY2014-15 will pay for the cost of the ACT Aspire and the ACT assessments administered in the prior school year (Table 6).

Table 6
Obligations to be Paid from EIA Funds Carried Forward (\$11,932,229)

Assessment	Amount
ACT for Spring 2015	\$2,603,225
Aspire for Spring 2015	\$6,116,575
WorkKeys for Spring 2015	\$1,105,558
AP Remaining from 2015 (estimated)	\$100,000
NCSC Remaining from 2015	\$28,902
SC-Alt Science and Social Studies from Spring 2015	\$365,106
PSAT for Fall 2015	<u>\$585,225</u>
Total	\$10,904,591

Source: SCDE, November 12, 2015

The assessments for grades 3-8 in English language arts (ELA) and mathematics and grade 11 college readiness are currently being procured and final costs are unknown. At this time, the EOC staff is unable to recommend specific increases for this line item. However, data submitted by the Department document that the agency will have sufficient funds to administer all assessments currently required by state and federal accountability in the current fiscal year and may have as much as \$6.6 million in additional carry forward funds to address several items on the Department’s budget request for FY2016-17 (Table 7). This analysis assumes the cost of the assessments for grades 3-8 and grade 11 will be comparable to the cost of the ACT Aspire and the ACT plus Writing assessments administered in the prior school year:

Table 7
Requests made by SCDE for FY2016-17

End-of-Course Assessments in English 2 and Geometry, if needed	\$3,000,000
College readiness assessment in Grade 9 or 10	\$1,250,000
Augmentation of Grades 3-8 assessments, if needed	<u>\$2,000,000</u>
TOTAL:	\$6,250,000

The staff recommends that, if funds are available, the college readiness assessment be implemented in grade 9 or grade 10 but not in both grades. The staff also recommends the cost of assessments for 4K and kindergarten continue to be paid out of unexpended EIA revenues allocated for the half and full-day 4K programs.

**Table 8
Projected Assessment Budget**

	FY 16 Projected Costs	EIA Appropriations	Federal Revenue
Recurring		\$27,261,400	\$6,062,702
Non-Recurring		\$7,300,000	
<i>Test Administration</i>			
PASS Science and Social Studies	\$6,180,789		
EOCEP (All Subjects)	\$3,714,527		
<i>ACT (invoices for FY 15 administration will be paid in FY 16)</i>			
<i>Aspire (invoices for FY 15 administration will be paid in FY 16)</i>			
<i>WorkKeys (invoices for FY 15 administration will be paid in FY 16)</i>			
Grade 3-8 Assessment for FY 16 (Costs Unknown)	\$6,200,000		
Grade 11 Assessment for FY 16 (Costs Unknown)	\$2,650,000		
Grade 9-10 Assessment for FY 16 (Costs Unknown)			
EOCEP ELA and Math (New) for FY 16 (Costs Unknown)			
WorkKeys for FY 16	\$1,500,000		
ACCESS for ELLs			\$1,351,518
Adoption List Call for Submission and Distribution	\$3,100,000		
Performance Task Assessments	\$495,780		
Grade 2 Census Tests	\$852,294		
AP 2015 (remaining invoices for FY 15 administration will be paid in FY 16)	\$3,251,926		
Monitoring Test Administrations	\$6,000		
<i>Students with Disabilities</i>			
SC-Alt (Science and SS only) (remaining invoice for FY 15 to be paid in FY 16)			\$833,946
NCSC (remaining invoice for FY 15 to be paid in FY 16)			\$1,133,517
Total	\$27,951,316	\$34,561,400	\$ 3,318,981
Projected Carry Forward Funds to FY2016-17:		\$6,610,084	

Source: SCDE email to EOC, November 9, 2015.

Recommendation 2C: STEM Premier® (Department of Commerce) - \$300,000

STEM Premier® is a digital platform that allows students ages 13 and older to create a profile that showcases their skills, talents, interests, and assessment scores. Colleges and companies can then search the platform for students and communicate through the internal private and secure STEM Premier messaging system. Messages contain opportunities from organizations, schools and industry. STEM Premier® and the SC Manufacturers Education Foundation (SCMEF), a 501C3 organization affiliated with the South Carolina Manufacturers Alliance (SCMA), are working together to promote the platform to high schools, technical schools and college students in South Carolina. Staff recommends funds be allocated to the SC Department of Commerce who would coordinate the expansion to high schools using the Regional Education Centers. In the spring of 2014, STEM Premier initiated its first pilots in two South Carolina high schools. Since then, STEM Premier has expanded its implementation to over 29 high schools in 18 school districts and 50 high schools in South Carolina.

Cost: First, the premium level subscription component of the platform is free to all students. If the school would like to use the dashboard component of STEM Premier® for data analysis, the cost is \$1,500 annually per school. This cost covers the use of the software, technical support and upgrades. The dashboard allows the schools to gather data that provides useful information about their students and programs being offered. Additionally, there is a one-time per school implementation cost of \$1,500 that includes one (1) eight-hour on-site training day for student implementation and dashboard training. The dashboard price reflects a 25% discount. Table 9 describes how the program could be implemented over multiple years in schools.

**Table 9
Phased-In Implementation of STEM Premier®**

Year School Implemented	Number of Schools Implemented	Annual Program Cost (1)			
		Year-1	Year-2	Year-3	Year-4
Year-1	100	\$300,000	\$150,000	\$150,000	\$150,000
Year-2	100		\$300,000	\$150,000	\$150,000
Year-3	50			\$150,000	\$75,000
Total	250	\$300,000	\$450,000	\$450,000	\$375,000

Recommendation 2D: Modernization of Vocational Education \$1,501,307

The recommendation is to annualize the appropriation and to increase the base allocation per district from \$20,000 to \$50,000. Proviso 1A.37 is recommended to read:

Amend Proviso 1A.37. (SDE-EIA: Career and Technology Education Consumables) Funds appropriated for Modernize Vocational Equipment shall be allocated accordingly. Each district and multi-district career center will receive a base allocation of \$50,000. The remaining funds will be distributed to school districts and multi-district career centers based on the prior year actual student enrollments for career and technology education courses. In the district plan submitted to the Department, each district and multi-district career center must document that the district plan for equipment is aligned to current and future industry jobs in the community and state and must include information on the availability of vocational equipment at local technical colleges. A maximum of twenty-five percent of the funds appropriated for Modernize Vocational Equipment, Career and Technology Education may be utilized to purchase textbooks, instructional materials and other consumables used in classroom instruction. The department may carry forward unexpended Modernize Vocational Equipment and Tech Prep funds to be used for the same purpose.

Recommendation 2E: SC Public Charter School District (SCPCSD) - \$12,987,128

Created by the General Assembly in 2006, SCPCSD increases the number of public school options for students and parents. It authorizes public charter schools, setting high expectations and holding schools accountable for student achievement. Any K-12 student eligible to attend public school in South Carolina can attend a public charter school. SCPCSD currently includes 32 schools with 18,467 students. SCPCSD is the twelfth largest school district in the state.

When a student transfers from a traditional school district to a school within the SCPCSD, the federal and state dollars follow the child, but the local tax dollars do not. To compensate for this loss, an annual proviso provides \$3,600 for student who attends a brick-and-mortar school and \$1,900 for a student who participates in a virtual school. SCPCSD projects FY 2016-17 student enrollment to be 23,273 students, exceeding the General Assembly's projection of 22,749 students. The requested increase will fund SCPCSD's projected student enrollment numbers. This increase does not address the confirmed or potential new schools; 28 new letters of intent have been filed with SCPCSD.

Recommendation 2F: Industry Credentials - \$1,000,000

The South Carolina Department of Education requested \$3.0 million to pay for national industry exams and \$2.0 million to establish an incentive program to reward schools for their performance on these exams.

The EOC staff concurs with the Department of Education of the need to pay for industry exams, especially for students and schools that do not have the financial resources to pay for these exams, which typically cost as much as \$100 per exam. Career Centers who participated in the EOC's report card working group raised this issue. However, implementing a comprehensive

system will take time, time to identify the national industry exams to be administered and time to prepare teachers and schools. Collaboration between the South Carolina Department of Education and the business community is required to identify the national industry exams that should be included. Therefore, the staff recommends that the Department’s proposal be phased in over time:

- FY2016-17 Identify national industry exams and allocate \$1.0 million (\$100 per student) for exams administered
- FY2017-18 Increase the appropriation by \$1.0 million; add to or delete exams from the list
- FY2018-19 Increase the appropriation by \$1.0 million
- FY2019-20 Institute the incentive program using results

Add New Proviso to read:

“The funds appropriated for Industry Credentials must be allocated to school districts based upon the number of national industry exams administered in the current fiscal year. Funds may be carried forward from the current fiscal year into the subsequent fiscal year and expended for the same purpose. Annually, the Department, in collaboration with the Department of Commerce will identify the national industry exams that qualify for funding.”

Recommendation 2G: Instructional Materials \$12,146,750

Staff recommends that all non-recurring EIA revenues be allocated to instructional materials.

Recommendation 2H: Aid to Districts \$36,652,998

Staff recommends that the balance of EIA revenues be allocated to school districts under the Aid to District line item. These funds are allocated based on the number of weighted pupil units. Districts have flexibility over the expenditure of these funds.

Recommendation 2I: Dual Enrollment

The Department of Education recommends that the Education Finance Act (EFA) be amended to include a weighting for dual enrollment of 0.15. The weighting is based upon a projected 12,000 students who take dual enrollment courses. The staff concurs with the Department’s funding of dual enrollment courses and its definition of a dual enrollment course, “a course that will lead to both high school credit and post-secondary credit.”

Recommendation 2J: College Readiness Benchmarks

At its August retreat, the EOC invited former Kentucky Commissioner of Public Education, Terry Holliday to discuss Kentucky’s college and career readiness initiatives. Beginning in the fall of

2012, all public postsecondary institutions in Kentucky set benchmarks as college readiness indicators. Upon admission to a public postsecondary institution, students scoring at or above the scores indicated were not required to take developmental, supplemental, or transitional coursework and would be allowed to enter into college credit-bearing coursework that counts toward degree credit requirements. Dr. Holliday noted that adopting these benchmarks has saved Kentucky parents more than \$15 million in tuition costs.

The Institute for College Access and Success reports that the average debt for seniors who graduated from South Carolina's public and nonprofit colleges in 2014 was \$29,163, 14th highest in the nation. Fifty-nine (59) percent of seniors had debt.

The staff recommends that the Commission on Higher Education and the Technical College System adopt benchmarks as college readiness indicators with at least one of the indicators being the college readiness assessment that all 11th graders in South Carolina take. Students scoring at or above the scores indicated would not be required to take remedial courses in English language arts or mathematics and would be allowed to enter into college credit-bearing coursework.

Recommendation 2K: Computer Science Initiative

During the cyclical review of the math standards in 2015, several members of the EOC's working group recommended that the high school math standards include a course description for computer science. In 2015 there were 26,750 South Carolina public school students who took 42,303 AP exams; however, only 262 or 0.6% of all exams were in AP computer science.⁶

For students to be prepared for the 21st century, they must understand at least the principles of computer science. Computer science is best defined as "the study of computers and algorithmic processes, including their principles, their hardware and software designs, their applications, and their impact on society." Computer science teaches critical thinking skills that are useful in all disciplines.

As schools become increasingly aware of the need to prepare students for work in the 21st century, 27 states allow computer science to count toward high school math or science graduation requirements. Some estimates suggest that 67 percent of new STEM jobs are in computing, yet only 8 percent of STEM graduates are in computer science.⁷ Other southeastern states have supported this effort, including Georgia, North Carolina, Florida, Kentucky, Alabama, Arkansas, Tennessee, and Virginia.

Kentucky adopted this policy and was recognized as having an innovative state policy by Code.org, a national non-profit organization that promotes computer science education and

⁶ http://www.ed.sc.gov/scdoe/assets/File/data/test-scores/national-assessment/ap/AP2015_final.pdf

⁷ <https://code.org/advocacy/state-facts/SC.pdf>

computer programming. In addition to AP Computer Science, Kentucky schools offer coding classes as part of regular course offerings or as an extracurricular activity. This year every high school in Arkansas must offer a computer science course. The Huntsville City Schools in Alabama incorporate computer science instruction into its curriculum beginning in kindergarten.

Some higher education institutions are also making computer science courses available. In November 2014, Purdue University announced it would offer an introductory computer science and programming course for free to Indiana high school students. Although the course is ungraded and does not count for credit, it prepares students to test out of freshman programming classes at Purdue and other universities.⁸

The EOC recommends that a Computer Science Initiative, a public-private partnership, be implemented in FY2016-17 to:

- Establish rigorous K-12 computer science standards, modeled after the Computer Science Teachers Association's K-12 Computer Science Standards;
- Identify available curriculum for schools;
- Determine what professional development teachers should receive and determine the cost;
- Determine a clear certification pathway for computer science teachers that includes alternative certification pathways;
- Determine what incentives institutions of higher education could offer pre-service teachers in computer science; and
- Determine a timeline for phasing in a requirement that all secondary schools offer computer science. Computer science instruction could be a requirement of each career cluster.

⁸ <http://www.purdue.edu/newsroom/releases/2014/Q4/purdue-offers-free-online-computer-programming-course-to-indiana-high-school-students.html>

Table 10
Summary of Staff EIA Budget Recommendations

EOC Recommendation Number	EIA Line Item	Proviso	Recurring EIA Base	Staff Recommendations
RECURRING				
1A	Teacher Supplies	1A.9	\$13,596,000	\$750,000
1B	STEM Centers SC		\$1,750,000	\$350,000
1C	State Agency Teacher Salary	1A.4	\$73,861	\$217,474
	Governor’s School for Arts & Humanities	1A.4	\$959,994	\$138,025
	Disabilities & Special Needs	1A.4	\$613,653	(\$65,000)
	Governor’s School for Science & Math	1A.4	\$533,130	\$63,241
2A				
2A	High Schools that Work	1A.16	\$2,146,499	\$1,309,051
2B	Assessments	1A.17	\$27,261,400	\$0
2C	Regional Education Centers (P32)		\$1,302,000	\$300,000
2D	Modernization of Vocational Equipment	1A.37	\$13,798,983	\$1,501,307
2E	SC Public Charter School District	1A.53	\$68,131,619	\$12,987,128
2F	Industry Certifications/Credentials	NEW	\$0	\$1,000,000
2H	Aid to Districts	1A.31.	\$37,386,600	\$36,652,998
				\$54,986,750
NON-RECURRING				
2G	Instructional Materials		\$20,922,839\$	\$12,146,750

Note: Provisos in **bold** reflect amendments or additions recommended.

Making Computer Science Fundamental to K-12 Education: Eight Policy Ideas

Computing is a fundamental part of daily life, commerce, and just about every occupation in our modern economy. **It is essential that students are exposed to the field of computer science in our K-12 system—as it is foundational in transforming the way a student thinks about the world. It not only teaches them about technology, it also teaches them how to think differently about any problem. Computer science puts students on the path toward some of the highest paying, fastest growing jobs in America.**

Only 1/4 of schools teach it. A lack of access hurts our economy and creates major inequities in education, particularly for those groups that have been traditionally underrepresented in computer science and other Science, Technology, Engineering and Mathematics (STEM) fields¹.

States and local school districts recognize the need for change. More than a dozen states have recently proposed new policies to allow computer science courses to count toward core mathematics or science high school graduation requirements. This is a good step, but it is only the first of many.

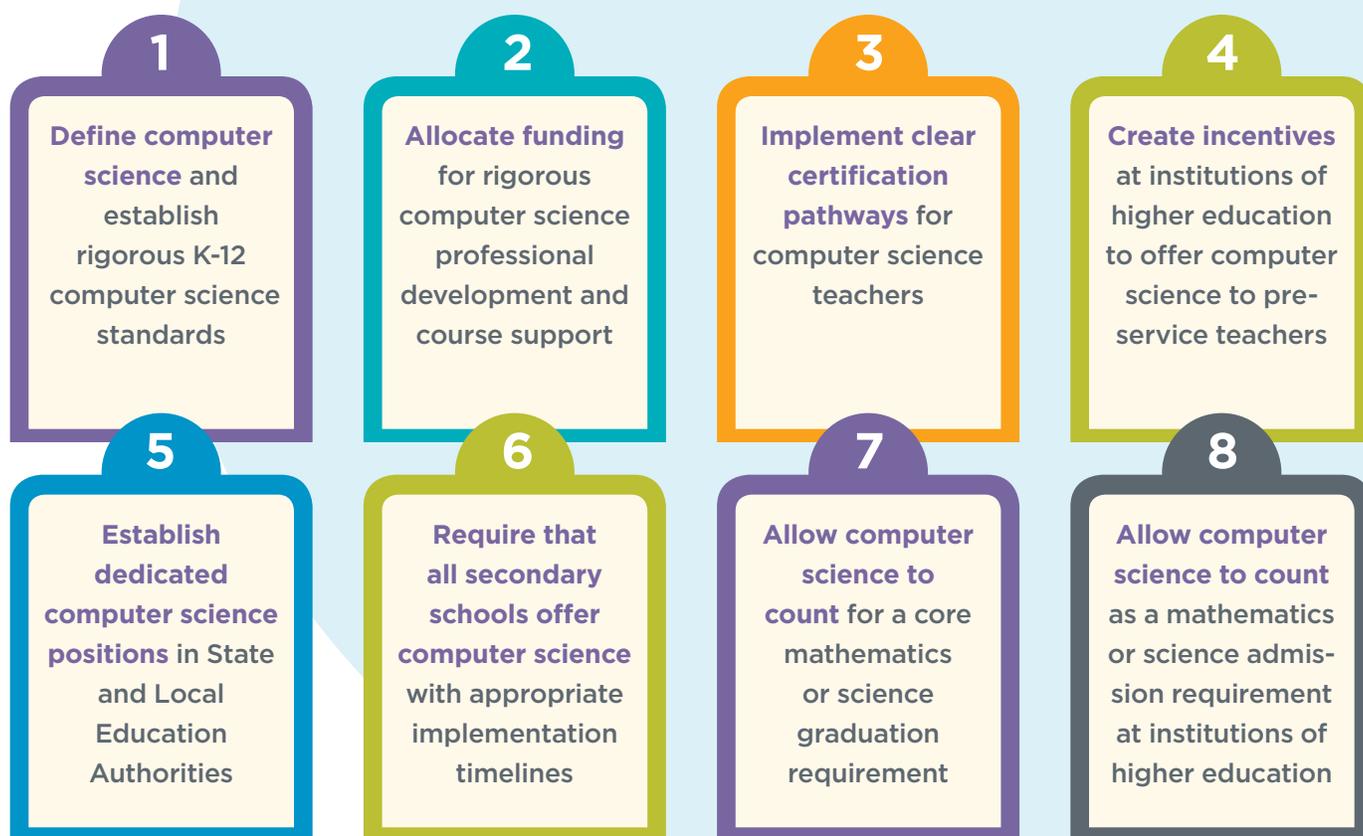
States and local school districts need to adopt a broad vision of a policy framework to support and expand K-12 computer science. The eight recommendations listed are for building and sustaining a comprehensive policy framework that supports broadening the teaching and learning of computer science. They support a vision built on four principles: Clarity, Capacity, Leadership and Sustainability.

Simply establishing these policies does not guarantee student success in computer science. We need great teachers and leaders as well as access to technology—devices and broadband—to teach computer science. The absence of policies that support computer science can and should be addressed by states and local school districts.



¹ Gallup research study Searching for Computer Science: Access and Barriers in K-12 Education: <http://csedu.gallup.com/>

Eight ideas to make computer science fundamental to K-12 education:



These ideas are intended to be a menu of choices that states have to ensure that computer science is a central part of K-12 education. We recognize that not all states will be in a position to adopt them and many will require years of careful implementation. We have articulated below which policies we believe should have a long implementation pathway to ensure success. Further, these policy ideas may require resources in either funding or time. States should adopt the policies for which they are best positioned and work to ensure that computer science is at the core of our education system. We should not continue to let computer science be marginalized.

We recommend that state officials bring together key stakeholders from the state and local education authorities, representatives from the state's executive branch, local computer science teacher leaders, national groups with expertise in computer science education and industry leaders and legislators to discuss these ideas, identify which are viable and develop plans to implement them.

Principle: Clarity

Define Computer Science and Establish K-12 Computer Science Standards

Confusion between computer science education and broader technology or technology education goals has worked against computer science curricu-

lum in schools. States have largely focused on teaching students how to use technology through existing subjects. Our goal is to teach students how to create technology through studying the academic subject of computer science. States should adopt

discrete standards for computer science education modeled after the **Computer Science Teachers Association's K-12 Computer Science Standards***. These standards would focus on both the creation

and use of software and computing technologies at all levels of K-12 education and define learning targets to ensure consistency across the state.

Principle: Capacity

Allocate Funding for Rigorous Computer Science Professional Development and Course Support

Because computer science courses are often electives, there is a lack of funding for professional development and staffing support at the district level for teachers. States should provide professional development resources by creating matching fund opportunities to bring computer science to school districts. Funding priority should be given to districts in which a demonstrable effort will be made to engage underrepresented groups. This will expand the capacity for in-service teachers and motivate pre-service teachers to pursue teaching computer science.

Implement Clear Certification Pathways for Computer Science Teachers

The expansion of K-12 computer science education offerings is hampered by the lack of qualified computer science teachers. By creating clear, navigable and rewarding professional paths tied to content knowledge for computer science teachers, we can grow their ranks. Existing incentives for teacher endorsements in mathematics (or other high-need STEM fields) should be replicated for computer science teacher endorsements. As these certification requirements are developed, existing teachers should be grandfathered into any new classifications. In addition, computer science professionals should be encouraged to become teachers through expedited certification processes,

ensuring that a transition to the classroom is as seamless as possible.

Create Incentives at Institutions of Higher Education to Offer Computer Science to Pre-Service Teachers

The computer science teacher shortage can also be addressed by exposing more pre-service teachers to computer science during their required coursework or by creating specific pathways for computer science teachers. Students preparing to be mathematics, science or broader technology teachers could easily become computer science teachers in many states if they were exposed to relatively minimal computer science coursework within teacher preparation programs. Further, pre-service education technology courses could easily integrate in computer science content. Finally, with reforms to state certification programs for computer science teachers, states can expand computer science preparation programs at schools of education. States should create competitive programs for schools of education to encourage pre-service teachers to take computer science courses, integrate computer science content in education technology courses, or create specific methods courses to prepare computer science teachers. In addition, states should incentivize partnership opportunities between local school districts and schools of education to create direct pathways for teachers into high-need school districts.

Principle: Leadership

Establish Dedicated Computer Science Positions in State and Local Education Authorities

In order to ensure rapid scaling and statewide support, it is essential that states provide

support to—and facilitate the sharing of best practices with—school districts. Creating a statewide computer science leadership position within the State Education Authority will send a signal to

* <https://csta.acm.org/Curriculum/sub/K12Standards.html>

schools that computer science is an important core offering needed for all levels of education. This position would also promote the expansion of computer science in the state through events like Computer Science Education Week and the

Hour of Code campaign. In addition, to encourage districts' expansion of computer science offerings and professional development for educators, states could encourage districts to provide funding for similar positions at the local level.

Principle: Sustainability

Require that All Secondary Schools Offer Computer Science

Most high schools don't offer computer science courses because states or local school districts have not prioritized this discipline. Given the important role computer science plays in our economy and the world around us, ensuring all students have access to computer science in K-12 is critical. This should start early by embedding computer science in the K-5 curriculum, which could steer students toward computer science courses in middle and high school. At the high school level, states (where appropriate) should adopt policies that require schools to at least offer a computer science course based on rigorous standards to students, whether it be a remote course or an in-person course. This policy can't—and shouldn't—happen overnight; rather, schools and state education authorities should be given a five-year window to effectively plan and implement the provision of computer science to all secondary students.

Allow Computer Science to Count for a Core Mathematics or Science Graduation Requirement

Currently, only 25 states and DC have clear, publicly accessible policies allowing rigorous computer science courses to satisfy existing high school

graduation requirements for mathematics (taken after or concurrently with Algebra II) or science. States that count computer science as a core graduation requirement see 50% more enrollment in their AP Computer Science courses and increased participation from underrepresented minorities.²

Allow Computer Science to Count as a Mathematics or Science Admission Requirement for Institutions of Higher Education

Admission policies for most colleges and universities do not include rigorous computer science courses as meeting the mathematics or science entrance requirements, which discourages students from taking such courses in secondary education—even if they count as a high school graduation requirement. State leaders can work with institutions of higher education to ensure credit and articulation policies align with secondary school graduation requirements. Alternatively, higher education institutions could adopt policies that recommend students, particularly those planning on majoring in STEM fields, to take computer science in high school.

² Review of 2012 AP Data on a per state basis for AP Computer Science and AP Calculus provided by the College Board.

