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MEMORANDUM

To: The Governor; The Superintendent of Public Instruction; The General Assembly;
The State Board of Education

From: Office of Fiscal and Management Analysis
Legislative Services Agency

Re: Fiscal Impact Statement - Indiana College and Career Readiness Educational
Standards

Date: April 14, 2014

I. STATUTORY DIRECTIVE

Under IC 20-19-4-8, the Legislative Services Agency is to prepare an analysis of the total estimated fiscal impact on all affected entities after the Indiana College and Career Readiness Educational Standards (ICCREES) are fully implemented, based on the recommendation of the Education Roundtable to the State Board of Education (SBOE).

II. FINDINGS

State Impact

ICCREES Assessment Cost: Table 1 shows the net fiscal impact to the state. In the 2014-15 school year, the net fiscal impact would be an increase in the testing expenditure of approximately \$10.5 M. This represents the cost to supplement the ISTEP+ test so that the U.S. Department of Education (U.S. DOE) would approve it as a college- and career-ready test. The expenditure in the 2014-15 school year could increase by up to approximately \$8 M if the development cost for the ICCRES assessments is funded in this school year. In the 2015-16 school year, when the ICCRES assessments are scheduled to be implemented, the net fiscal impact is estimated to be between \$23 M and \$32 M; beginning in the 2016-17 school year, the net fiscal impact is estimated to be between \$17 M and \$26 M annually.

Table 1. Net Fiscal Impact (Millions \$)

2014-15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20
10.5 - 18	23 - 32	17 - 25	17 - 26	17 - 26	17 - 26

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The cost per student for the ICCRES English/language arts (ELA) and mathematics tests is estimated to be between \$44 and \$54. By contrast, the current per-student cost of the two national consortia that are developing college- and career-ready assessments, the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (SBAC), is approximately \$29.50 and \$22.50, respectively. The difference in cost could be attributed to the fact that the ICCRES assessment system is a single state system. If it were to be implemented by about 30 states, the estimated per-student cost for the ELA and mathematics tests is projected to decrease by approximately 30%. Implementing additional cost-reducing strategies such as online delivery, using local teachers to score some test items, and computer scoring of other items, could possibly reduce the per-student cost by an additional 30%. Assuming that the state would be able to achieve a savings of 30%, the net fiscal impact would be reduced to approximately \$12 M to \$18 M in the 2015-16 school year, and approximately \$6 M to \$13 M annually thereafter (see Table 2).

Table 2. Net Fiscal Impact: 30% Price Reduction (Millions \$)

2014-15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20
10.5 - 18	12 - 18	7 - 13	7 - 12	6 - 12	6 - 12

A second significant difference between the cost for the ICCRES assessments and that for assessments developed by PARCC and SBAC is that Indiana would have to absorb all of the development cost of its assessment system, whereas the U.S. DOE funded the development of both the PARCC and SBAC systems. In September 2010, the U.S. DOE awarded \$170 M to PARCC and \$160 M to SBAC to develop the next generation of higher-quality assessments and instructional materials.

Professional/Curriculum Development: Professional development teaches educators the new standards; curriculum development applies those standards to lesson plans and practical classroom exercises. Developing a curriculum is an ongoing process; it is assumed that administrators and staff would be constantly evaluating, updating, and aligning the curriculum and instructional resources in order to improve teaching and learning.

According to Indiana Department of Education (IDOE) officials, the Department plans on following a two-track approach in developing professional development resources to support the ICCRES. The first would be to perform a comprehensive needs assessment to determine the specific requirements of the local school districts. Simultaneously, the Department intends to leverage already existing programs and resources to create an environment where local school officials can share information and ideas. For example, the Department intends to take advantage of professional development activities available through eLearning. The additional cost of these initiatives is currently estimated by IDOE to be between \$75,000 and \$100,000.

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Local Impact

Professional/Curriculum Development: The scope of professional development activities to support the implementation of the ICCRES would depend on local action. According to a survey of school corporations, corporations have varied capacities and may have different approaches to supporting their educators. Relatively larger school corporations may have curriculum development committees that facilitate these activities, while other districts may only be capable of allowing individual teachers or small groups of educators to determine curriculum. Some corporations may have the financial resources to provide professional development over multiple days, either after the school day or during the summer. With fewer resources available, other corporations may be able to offer only a limited amount of formal professional development learning. In some corporations, professional development is included in the collective bargaining agreement. The options open to school districts may also include funding paid days during the summer, having training prior to the start of the school year, and funding a limited number of release days per year. The options may also cover hiring dedicated district-level instructional coaches to work with educators during the school year, and identifying and assigning designated teacher leaders to work with educators during the year. In some cases corporations may have to hire substitute staff to teach classes when teachers attend professional development training.

Professional development costs would depend on how much training is required for staff personnel to successfully implement the ICCRES. Schools would have to determine the extent to which the ICCRES differ from the current standards, as well as the number of professional development hours needed to train staff in the implementation of the new standards. As a result, the options for the delivery of professional development vary in terms of the delivery method, program intensity, and number of participating teachers. Computing an accurate direct cost figure cannot be estimated at this time. An alternative metric would be to consider cost in terms of opportunity cost, as there would be activities the staff may have to forgo in order to complete the required training.

The Pioneer Institute estimated professional development costs for implementing standards similar to the ICCRES to be approximately \$1,931 per educator, or \$125 M total for all educators. This is a “one-time” cost for experienced educators. The amount was estimated by first determining the typical cost for professional development in states that had previously implemented academic standards, weighted by the relative size of the states. It is assumed that the cost would be the same for the ICCRES. The initial impact would be reduced if phased in over several years or if limited at first to only ELA and mathematics instructors.

On the other hand, the Fordham Institute estimated that the cost for transitioning to standards similar to ICCRES would be about \$2,000 per educator if professional development was delivered in-person, and between \$200 to \$600 if the delivery was through online instruction, or a combination of online and in-person instruction. Online instruction can also reduce the costs associated with in-person, onsite delivery

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(including the expense of paying for substitutes, and missed instructional time). The institute estimated the net costs at approximately \$500 per teacher for a total cost of approximately \$32.5 M statewide.

Textbooks/Instructional Materials: The fiscal impact on local districts would depend on the extent to which existing instructional materials are aligned with the ICCRES. This would dictate whether new instructional materials should be purchased, or if existing materials can be supplemented, and the extent to which supplementary materials will be available online at low or minimal costs. Instructional materials are generally updated every six years to reflect changes in standards and curriculum, though new standards do not necessarily require new textbooks. In 2011, the General Assembly permitted the use of computer software and digital content as a “textbook”, meaning that Indiana has flexibility in its choice of instructional materials and has the option to supplemental materials to bridge any gaps between the old and new standards. The majority of the corporations surveyed indicated that either they did not plan on purchasing new textbooks because of the ICCRES, or that they would replace textbooks according to the normal replacement schedule. Schools currently spend between \$80 M and \$135 M on textbooks.

Technology: According to a study by the Indiana Office of Management and Budget, schools would be technology-proficient by 2016. However, depending on the type of assessments that are approved by the IDOE, schools may have to expend additional resources to be able to administer the required tests. An adaptive test may require a wider bandwidth and more memory than are currently available. Hardware and bandwidth are the most significant cost drivers in a technology upgrade. According to IDOE officials, memory may have to be increased to at least 2 GB. Hardware costs range widely. Technology changes at an astonishing speed, with more capable machines introduced at lower prices on a regular basis. One significant constraint is whether the computers used by students would be compatible with the testing environment and the cost to upgrade to such an environment.

In terms of bandwidth, requirements hinge on the number of users and the density of applications. Costs vary depending on the number of users. For example, a standard connection serving about 20 to 50 users may cost between \$350 and \$1,200 monthly. A more advanced connection serving 50 or more users may cost between \$3,000 and \$12,000 monthly.

According to a survey of school corporations, about 30% of the computers statewide may need to be upgraded to 2 GB. The upgrade cost for some corporations could be significant. One school corporation indicated that it could cost between \$900,000 and \$1.3 M to upgrade or replace its computers, and the cost could be as high as \$3 M or more.

Total costs are shaped not just by the price of the technology, but also by policy choices. For example, mandating a relatively short window in which schools must administer tests will put considerable strain on their technology capacities. However, allowing schools a longer block of time may mean that some

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students would take their tests significantly later than others, which raises serious questions of fairness relative to accountability and teacher evaluation, as well as test security issues.

III. ANALYSIS

Background: In August 2010, the SBOE adopted the Common Core State Standards for ELA and mathematics. These standards became known as the Indiana Common Core Standards (ICCS), and they replaced the Indiana Academic Standards (IAS). Adopting the ICCS enabled the state to fulfill the federal mandate of having college- and career-ready academic standards in place, and also to meet its No Child Left Behind (NCLB) waiver requirement under which the state must implement a college- and career-ready assessment by the 2014-15 school year.

In 2013, Indiana's HEA 1427 required the state to adopt college- and career-ready standards no later than July 1, 2014. As the IAS have not to date been certified as college- and career-ready, Indiana could either maintain the ICCS adopted by the SBOE or develop new state-based standards that are rigorous enough to be deemed college- and career-ready.

HEA 1427 mandated that after May 15, 2013, no further action could be taken to implement the ICCS, though any standards adopted before that date would remain in effect until new standards were adopted. The legislation also prohibited the state from entering into or renewing an agreement after June 30, 2013, with any organization that required the state to cede any autonomy of education standards and assessments. In July 2013, Governor Mike Pence and State Superintendent Glenda Ritz announced their intent to withdraw from participation in the PARCC, one of the two consortia developing assessments aligned with the ICCS.

To comply with HEA 1427 and the NCLB waiver requirement, the SBOE has a July 2014 deadline to either reaffirm the ICCS or adopt alternative college- and career-ready education standards that meet U.S. DOE requirements. In 2014, Indiana's SEA 91 mandated that the SBOE adopt the ICCRES, voiding the previously adopted ICCS. It also reaffirmed that Indiana would not cede any autonomy or control of education standards and assessments to any organization.

In addition to implementing college- and career-ready standards, federal requirements mandate development and implementation of a high-quality assessment to measure student comprehension of the standards. Several states opted to join one of the two consortia of states working to develop such high-quality assessments: (1) PARCC, in which Indiana participated until its recent withdrawal, and (2) SBAC.

Results: Indiana currently spends approximately \$47.1 M on student testing and remediation. Of this total, approximately \$19.7 M is for ISTEP+ testing, and \$2.5 M is for ISTEP+ ECA testing, for a total of \$22.2 M. The ISTEP+ estimate includes the cost of testing students in ELA and mathematics in Grades

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3-8, science in Grades 4 and 6, and social studies in Grades 5 and 7. The ISTEP+ ECAs in Algebra 1 and English 10 are graduation requirements taken in Grade 10, with opportunities for retest upon failure in either subject. Students also take Biology 1 in Grade 10.

Under HEA 1427, the ISTEP+ test has to be administered for the 2014-15 school year. However, Indiana must also give a college- and career-ready test in this school year. As a result, in addition to its current expenditures, the IDOE estimates that it will cost an additional \$10.5 M to supplement the ISTEP+ test so that the federal government would approve it as a college- and career-ready test. As official cost figures for the ICCRES assessments are not yet available, two cost estimates were computed. The first is based on the cost of the college- and career-ready supplemented ISTEP+ test. It will be referred to as the College- and Career-Ready ISTEP+, or the CCR ISTEP+ model. The second estimate is computed using a cost model developed by the Assessment Solutions Group (ASG), a research organization that does consulting work for states and local districts on assessment procurement and implementation issues.

For the 2014-15 school year, the IDOE will spend a total of \$30.2 M on the ISTEP+ test and its supplements. This includes \$19.7 M for the ISTEP+ test and \$10.5 M for the supplements. Based on the number of tests, estimated at approximately 1.4 M, the cost per test would be approximately \$22. For a student who will be taking both the ELA and mathematics tests, the cost would be approximately \$44.

Under this scenario, it can be assumed that the total cost of the ICCRES assessment system would be similar to the total cost for the ISTEP+ and its college- and career-ready supplements computed above. This assumption is based on the fact that the ICCRES assessment would also have to be college- and career-ready. As a result, in many respects it should be compatible with the ISTEP+ and its college- and career-ready supplements.

The ICCRES assessment system is scheduled to be implemented in the 2015-16 school year. This analysis assumes that students who would be high school freshmen or above in this school year would be given a choice of taking the ECA (Algebra 1 and English 10) tests under the current standards or under the ICCRES. Once the student has made a choice, the student would be retested under the chosen assessment system. Also, beginning in the 2016-17 school year, these tests under the current standards will be phased out until only the tests under the ICCRES would be administered beginning in the 2019-20 school year.

Table 3 shows the estimated costs for the CCR ISTEP+ model. The cost for the ICCRES assessments for the 2015-16 school year is estimated at \$45 M; it decreases to a little under \$39 M thereafter. The higher estimate for the 2015-16 school year is because the ECA tests under both the current standards and the ICCRES would be administered. The estimate for Test Development is the ongoing replacement cost of test questions that cannot be reused after they have been made public.

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The annual additional state expenditure above the current cost of the ISTEP+ and ECA tests is estimated at \$23.4 M for the 2015-16 school year and a little over \$17 M thereafter. The cost per student for the ELA and mathematics tests would be around \$44.

Table 3. Cost Estimates - CCR ISTEP+ Model (Millions \$)

	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20
Current Cost of ISTEP+, ECA tests	22.2	22.2	22.2	22.2	22.2
Cost of ICCRES Assessments	44.9	38.7	38.7	38.8	38.8
Test Development	0.7	0.7	0.7	0.7	0.7
Total State Expenditure	45.6	39.4	39.4	39.5	39.5
Additional State Expenditure	23.4	17.2	17.2	17.3	17.3

The ASG model is based on 125,000 students per grade in Grades 3-8 and Grade 10 (Indiana has, on average, 86,000 students per grade). The assessments are for ELA and mathematics to be taken online; the questions are a combination of multiple choice, short-answer, and essay type. The model is based on a four-year cycle with the first year devoted to content development, and the next three years for testing and validation. The cost per test is approximately \$27, not counting the cost for content development, which is estimated at \$8 M.

Table 4 shows the estimated costs for the ASG model. The cost for the ICCRES assessments for the 2015-16 school year is estimated at \$53.5 M; it decreases to a little over \$47 M thereafter. As with the CCR-ISTEP+ model, the expenditure for the 2015-16 year is higher because the ECA tests under both the current standards and the ICCRES would be administered.

The annual additional state expenditure, above the current cost of the ISTEP+ and ECA tests, is estimated at \$32 M for the 2015-16 school year, and about \$26 M thereafter. The cost per student for the ELA and mathematics tests would be around \$54.

Table 4. Cost Estimates – ASG Model (Millions \$)

	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20
Current Cost of ISTEP+, ECA tests	22.2	22.2	22.2	22.2	22.2
Cost of ICCRES Assessment	53.5	46.8	47.2	47.5	47.5
Test Development	0.7	0.7	0.7	0.7	0.7
Total State Expenditure	54.2	47.5	47.9	48.2	48.2
Additional State Expenditure	32.0	25.3	25.7	26.0	26.0

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