

Attachment 6a: ESEA Flexibility Amendment Assessment Plan

Georgia Student Assessment Program Transition Plan for High Quality College and Career Ready Assessments

Development & Implementation Activities

Given Georgia's withdrawal from Governing State status within the Partnership for Assessment of Readiness for College and Careers (PARCC), the state is proceeding with developing a new high-quality, cohesive (articulated) assessment system that is rigorous and ensures Georgia students are competitive with their peers. A paramount objective of this new system will be to signal students' readiness for college and career at every level of their educational matriculation.

While Georgia was a member of PARCC, the state worked intentionally to ensure it had a viable alternate solution should the need arise. In this regard, it is important to note that Georgia is not starting from square one.

The purpose of the Georgia Student Assessment Program is to measure the level of student achievement of the state-mandated content standards (i.e., the College and Career Georgia Performance Standards), to identify students failing to achieve mastery of content, to provide teachers with actionable information for improving student learning, and to assist school systems in identifying strengths and shortcomings of educational programs. This is a tall order.

To ensure Georgia is successful, our assessment program must:

- consist of both formative and summative tools;
- be rigorous to ensure Georgia students are well positioned to compete with other students across the United States and internationally;
- be intentionally designed across grade levels to send a clear signal about student progress/growth and preparedness for the next level, be it the next grade level or college or career; and
- support evaluations of educator effectiveness.

To accomplish this, Georgia must:

- continue the strong partnership between the K-12 and post-secondary educational systems (Georgia Department of Education (GaDOE); University System of Georgia (USG); Technical College System of Georgia (TCSG));
- transition from assessments that are solely multiple-choice to assessments that include test questions that require students to demonstrate their understanding by *showing* what they know;
- ensure the assessment system is accessible to all students;
- create an assessment system that accurately depicts the levels of achievement and progress over time for students at all levels; and
- continue to – and accelerate – the transition to online administration of the tests rather than traditional paper/pencil format, allowing for innovative technology-enhanced items.

Georgia's Next Steps and Timeline

The following table summarizes the steps Georgia will take toward development and implementation of a new high-quality college and career-ready assessment system.

- Establish partnerships (e.g., item sharing) with other states
 - Responsible Party: Assessment
 - Completion Date: December 2013
 - Evidence: MOUs
- Finalize conceptualized assessment system design and purpose given withdrawal from PARCC
 - Responsible Party: Assessment
 - Key Partners: Curriculum & Instruction/TCSG & USG/Assessment Advisory Cadre/Georgia Technical Advisory Committee (TAC)
 - Completion Date: November 15 , 2013
 - Evidence: Design Paper
- Finalize test blueprints in grades 3-8 (ELA/Literacy and Math) and ELA/Literacy high school
 - Responsible Party: Assessment
 - Key Partners: Curriculum & Instruction/TCSG & USG/Georgia TAC
 - Completion Date: November 15, 2013
 - Evidence: Blueprints
- Write Request for Proposal (RFP)
 - Responsible Party: Assessment
 - Key Partners: GaDOE Procurement/ Department of Administrative Services (DOAS)
 - Completion Date: November 22, 2013
 - Evidence: RFP
- Establish Administration Policies and Procedures
 - Responsible Party: Assessment
 - Key Partners: Assessment Advisory Cadre /TCSG & USG/Georgia TAC
 - Completion Date: January 31, 2014
 - Evidence: Administration procedures including security protocols, allowable accommodation policies, etc.
- Develop Validity Evidence Framework
 - Responsible Party: Assessment
 - Key Partners: Assessment Advisory Cadre /TCSG & USG/Georgia TAC/Center for Assessment
 - Completion Date: January 31 , 2014
 - Evidence: Document outlining validity studies to be undertaken
- Field Test CCGPS Items embedded on current assessments (CRCT & EOCT – 3rd round of field testing)
 - Responsible Party: Assessment
 - Completion Date: April – June, 2014
 - Evidence: Field test data
 - Fiscal Resources: FY14 Contract Work
- Award Contract(s)
 - Responsible Party: Assessment
 - Key Partners: Superintendent/State Board of Education/DOAS
 - Completion Date: May 2014
 - Evidence: Board Item, Notice of Intent to Award

- On-Board New Contractor
 - Responsible Party: Assessment
 - Key Partners: Curriculum & Instruction/TCSG & USG
 - Completion Date: May-June 2014
 - Evidence: Transfer of items, data, and related ancillaries
- Contract Commencement
 - Responsible Party: Assessment
 - Completion Date: July 1, 2014
 - Evidence: Contract and 2014-2015 Statement of Work
 - Fiscal Resources: State & Federal (Title VI A) Funds
- Field Test Data Review (items field tested in Spring 2014)
 - Responsible Party: Assessment
 - Key Partners: Curriculum & Instruction/TCSG & USG/Georgia Educators
 - Completion Date: Summer/Fall 2014
 - Evidence: Agenda, training materials, related documentation
- New Item Development
 - Responsible Party: Assessment & Contractor
 - Key Partners: Curriculum & Instruction/TCSG & USG/Georgia Educators
 - Completion Date: Summer/Fall 2014
 - Evidence: Items accepted for field testing
- If needed: Fall Off-Grade Field Test*
 - Responsible Party: Assessment
 - Completion Date: Fall 2014
 - Evidence: Field test plan and sample
- If needed: Range-Finding/Rubric Validation/Scoring of Field Test Items
 - Responsible Party: Assessment & Contractor
 - Key Partners: Curriculum & Instruction/TCSG & USG/Georgia Educators
 - Completion Date: Summer/Fall 2014
 - Evidence: Rubrics, student exemplars, and annotations
- Implementation of Operational Assessment
 - Responsible Party: Assessment
 - Key Partners: Georgia Educators/TCSG & USG/GA TAC
 - Completion Date: Spring 2015
 - Evidence: Administration
- Range-Finding/Hand-Scoring of Open-Ended Items
 - Responsible Party: Assessment & Contractor
 - Key Partners: Curriculum & Instruction/TCSG & USG/Georgia Educators
 - Completion Date: Spring/Summer 2015
 - Evidence: Scoring documentation (inter-rater reliabilities, item performance statistics)
- Post-Assessment Calibration of Items
 - Responsible Party: Assessment & Contractor
 - Key Partners: Georgia TAC
 - Completion Date: Spring/Summer 2015
 - Evidence: Item and form technical documentation
- Standard Setting
 - Responsible Party: Assessment
 - Key Partners: Curriculum & Instruction/TCSG & USG/Georgia Educators

- Completion Date: Summer 2015
 - Evidence: Agenda, technical report
- State Board Adoption of Achievement Standards (i.e., cut scores)
 - Responsible Party: Assessment
 - Key Partners: Superintendent/State Board of Education
 - Completion Date: August or September 2015
 - Evidence: Agenda, technical report
- Score Reporting
 - Responsible Party: Assessment
 - Completion Date: August or September 2015
 - Evidence: Student, School, District, State Score Reports
- Technical Documentation
 - Responsible Party: Assessment & Contractor
 - Key Partners: GA TAC
 - Completion Date: December 2015
 - Evidence: Technical Report
- Federal Peer Review**
 - Responsible Party: Assessment
 - Key Partners: Contractor/GA TAC/TCSG & USG
 - Completion Date: December 2015
 - Evidence: Appropriate technical documentation
- Validity Studies***
 - Responsible Party: Assessment
 - Key Partners: GA TAC/TCSG & USG/Center for Assessment
 - Completion Date: Ongoing
 - Evidence: Technical Reports

*Georgia has been developing and field testing CCGPS-aligned items since Spring 2012 resulting in a bank of items available for the new assessment system. For the first operational administration in Spring 2015, additional proven items (i.e., field tested; technically sound), including open-ended items, may be leased, borrowed from other state assessment programs, or developed and field tested in fall 2014 (using an off-grade approach to ensure students have had the opportunity to learn the knowledge, concept, or skill assessed). Ongoing development through embedded field testing should ensure future program sustainability.

**Should US ED desire, Georgia is willing to submit peer review evidence as available on a rolling basis.

***To include, but not be limited to, an independent alignment study; evaluation of college-readiness benchmark; evaluation of readiness signals at elementary and middle grades.

Overview of Current Georgia Student Assessment Program and Future Plans

Georgia adopted the Common Core State Standards, known as the College and Career Georgia Performance Standards (CCGPS), in July 2010. Georgia immediately began a precision review of Georgia's former content standards, the Georgia Performance Standards, and the CCGPS to determine the status of alignment (introduction of new content, concepts, and skills; removal of content, concepts, and skills) and shifts in content across grade levels. The Curriculum and Instruction Division worked with its advisory committees, comprised of Georgia educators, to conduct the precision review and establish an implementation timeline for the CCGPS. Part of that work included the identification of transitional standards – those concepts and skills that shifted grade levels.

At the same time, the Assessment Division worked to identify the steps that would be necessary to measure student achievement relative to the new content standards. This parallel line of work included a process of consultation within and across agency divisions, with Georgia educators, and with Georgia's Technical Advisory Committee (TAC) to determine how best to transition the assessment system. Based on the implementation timeline, a two-year period of transition (2012-2013 and 2013-2014) was identified. During this period, students would receive instruction on the new content standards prior to the implementation of a new high-quality comprehensive assessment system in 2014-2015.

Grade 3 – 8

Criterion-Referenced Competency Tests (CRCT)

Georgia administered a transitional version of its long-standing CRCT in 2012-2013 and will do so again in 2013-2014. The CRCTs are administered in reading, English language arts, mathematics, science, and social studies. The content tests in reading, English language arts, and mathematics assessed the CCGPS given that classroom implementation of the standards occurred in 2012-2013. Thus, Georgia assessed its students in grades 3 – 8 on the same standards on which they received instruction. Given the program was not redeveloped, the CRCTs maintained the previous structure (domains), cut scores, and scale.

While the cut scores for the CRCT achievement standards were not changed and remain 800 and 850, respectively, for accountability purposes, in February the Department convened committees of Georgia educators to review the achievement expectations given the curricular transition. The committees were charged with recommending a coherent system of readiness indicators *to inform instructional planning and decision making*. The committees considered the content standards, the test items included on the Spring 2013 CRCT in each content area, as well as the performance of Georgia students on other measures such as the National Assessment of Educational Progress (NAEP).

The resulting CRCT Readiness Indicators have been designed to:

- ✓ send a signal about where students are relative to the higher expectations in the CCGPS; and
- ✓ provide feedback about students' preparedness for the increase in rigor and expectation for student achievement that is on the horizon.

These readiness indicators were developed and designed to help communicate to and prepare our state's educators as well as our students for the increase in rigor (in both the content and achievement expectations) that is on the horizon as we work to establish a coherent college and career ready assessment system.

High School

End of Course Tests (EOCT)

In high school, Georgia approached the two English Language Arts EOCTs just as it did the CRCT in that content area – through a transitional process. The Ninth Grade Literature and American Literature EOCTs were constructed of test items that were aligned to the CCGPS. These two EOCTs maintained their previous structure (domains), cut scores, and scale.

In the area of high school mathematics, Georgia approached the implementation of the standards differently. Students enrolling in grade nine for the first time in 2012-2013 were enrolled in a brand new course, Coordinate Algebra. This new course resulted in the development, administration, and reporting of a new EOCT also named Coordinate Algebra. A standard setting was conducted following the Winter 2012 administration and reports issued. Per State Board of Education Rule, the EOCTs serve as 20% of the course grade for students. This cohort of students will progress to a second new course during their 10th grade year (2013-2014), Analytic Geometry. Again, this will result in the development, administration, and reporting of a new EOCT by the same name. Standard setting will occur in December 2013, with the direct participation of Georgia educators, with scores reported for the first time following the State Board's adoption of the recommendation of the standard setting committee.

Alternate Assessments:

Criterion-Referenced Competency Tests – Modified (CRCT-M) – Grades 3 - 8

Georgia Alternate Assessment (GAA) – Grades K, 3 – 8, and High School

Georgia also approached its Alternate Assessment based on Modified Achievement Standards (AA-MAS), the CRCT-Modified (CRCT-M), in the same fashion – through a transition plan. Georgia has informed districts that the 2013-2014 school year will be the last year for this assessment. The GaDOE has worked and will continue to work with districts to successfully transition students who participate in this assessment program back to the general assessment program.

For the purposes of its Alternate Assessment based on Alternate Achievement Standards (AA-AAS), the Georgia Alternate Assessment (GAA), Georgia, once again, used a transitional approach for this portfolio-based assessment. The GAA blueprints were updated to reflect the CCGPS, ensuring Georgia's eligible students for the AA-AAS received instruction and were assessed in the state's adopted standards just as was the case with the general education peers in grades 3 – 8.

Throughout the planning and implementation stages of this work, Georgia consulted with its Technical Advisory Committee (TAC) on a regular basis.

English Language Proficiency Assessments

Access for ELLs – Grades 3 - 12

The Georgia Department of Education is a member of the WIDA (World-Class Instructional Design and Assessment) consortium. WIDA is a not-for-profit educational consortium of state departments of education that designs and implements English language proficiency standards for K – 12 students who are English language learners. As a member of WIDA, Georgia administers the Assessing Comprehension and Communication in English State to State (ACCESS) for ELLs as its English language proficiency assessment. ACCESS is designed to measure annual gains in students' English proficiency. In response to the college and career-ready standards, WIDA has amplified their English proficiency standards, which have been adopted by Georgia.

Summary of Georgia's Progress toward New Assessments to Date:

- Common Core State Standards adopted by SBOE July 2010
- Precision Review of standards conducted - identification of 'transition standards' where content, concepts, or skills moved grade levels
- Timeline determined for implementation/roll-out of standards
- Instructional Frameworks & related supports developed and posted for educators
- Professional Learning conducted
 - Building awareness (2010-2011)
 - Comprehensive review of standards (2011-2012)
 - Continuing professional learning through multiple avenues (Georgia Public Broadcasting, webinars, face to face, etc.) 2012-2013 and 2013-2014
- Assessment transition within current programs
 - Contracts extended during the transitional period to maintain program stability while leveraging ongoing development work to build CCGPS-aligned items
 - Revision of assessment blueprints and ancillary resources (Content Descriptions, Study Guides, Content Weights) to reflect CCGPS
 - Georgia Technical Advisory Committee (TAC) engaged throughout process
 - Field testing of CCGPS-aligned items Spring 2012 and Spring 2013
 - Transitional assessments, aligned to CCGPS, administered in 2012-2013 and 2013-2014.
 - Growth model selected, with an eye toward transition of assessment programs, allowing student growth to be reported without interruption
 - New CCGPS-aligned assessment (i.e., not transitional) built for Coordinate Algebra (grade 9) as part of End of Course Tests (EOCT) program, administered in 2012-2013. Achievement standards set to reflect college and career readiness expectations. (Georgia's first assessment designed specifically to send a clear signal of college and career readiness.)
 - In grades 3-8, CRCT Readiness Indicators developed to provide a clearer signal about students' preparedness for the increase in rigor expected on the upcoming assessments and inform instructional practice
 - Readiness Indicators utilized Georgia's performance on NAEP and other measures to inform placement of the threshold scores
 - Current programs have online testing options
 - Race to The Top funds used to develop new formative items that include open-ended/constructed response items

Development of a New Georgia Comprehensive Assessment Program

As outlined and described above, Georgia is actively engaged in the process of developing a new high-quality assessment program that will be fully aligned to the College and Career-Ready Georgia Performance Standards (CCGPS) in English Language Arts and Mathematics. Georgia will also continue, as required by state law, the assessment of all students in grades 3 – 8 and high school in the content areas of science and social studies. Georgia must build a new, cohesive assessment system that significantly increases the expectation for student learning, includes a variety of item types allowing students to demonstrate their knowledge and skill, and will continue – and accelerate – the state's move toward the online administration student assessments.

Since the 2011-2012 school year, Georgia has been developing test items aligned to the CCGPS. Thus, while not sufficient to fulfill all of Georgia's needs in the area, there is a sizable initial pool of items from which to select. To augment this item pool, particularly in the area of open-ended/constructed

response items, Georgia is actively pursuing cross-state partnerships to share test items. Several states have expressed a willingness to establish such agreements.

To augment summative assessment and ensure a comprehensive assessment system, Georgia has used Race to the Top funding, to create formative assessment resources aligned to the CCGPS. The formative tools have been designed to support classroom implementation of the standards and inform teaching and learning in real time. This work has taken a three-prong approach toward developing a formative assessment toolkit.

- The first prong of this toolkit is a bank of formative assessment items available, on demand, to all Georgia educators as a classroom resource within our Online Assessment System (OAS). This bank consists of items, mainly constructed response, aligned to the CCGPS in English language arts and mathematics in grades 3-8 and high school. These items were developed to be of high quality and were piloted with Georgia students. Ancillary supporting material includes scoring rubrics and annotated exemplar student responses.
- The second prong of this toolkit is a set of benchmarks in English language arts and mathematics in grades 1 through high school and selected grades/courses for science and social studies. These benchmarks are intended for use by districts to help monitor student progress during the year towards mastery of the grade-level standards. The benchmarks are comprised of short answers, constructed-response items, and performance tasks as well as selected-response items. Also housed within the OAS, ancillary supports also include scoring rubrics and annotated exemplar student responses.
- The third prong of this toolkit is a professional development course to enhance educators understanding of formative instructional practices to promote improved instructional practice and student learning. Formative instructional practices include the formal and informal assessment processes that teachers and students use to gather evidence of learning. A key expectation of FIP is that teachers develop and refine skills to guide students toward ownership for their own learning. The Georgia Formative Instructional Practices (FIP) program provides a blended learning experience focusing on four core components:
 - Creating and using clear learning targets;
 - Collecting and documenting accurate evidence of student achievement;
 - Analyzing evidence and providing effective feedback; and
 - Engaging students to take ownership of their learning through peer feedback, self-assessment, and more.

A major goal of the toolkit is to provide educators with high-quality resources that support the implementation of the content standards in the classroom. These items and tools have been built with the intent of communicating to educators and students the increase in expectations for student learning that Georgia must make to remain competitive. Emphasis has been placed on development of open-ended items given Georgia students have limited experience with these types of items. Additionally, open-ended items allow greater access to students to demonstrate their knowledge and provide significantly more salient information about the level of individual student understanding of concepts and skills so that instruction can be adjusted to meet individual students more succinctly where they are.

Importantly, these tools have been designed to work in concert with the summative program to directly support of Georgia's educator effectiveness measures. Teachers and administrators who are implementing formative instructional practices are naturally addressing numerous performance standards and indicators included on the observational tools used within the effectiveness measures.

Attachment 6b: Responses to US ED Follow Up Questions

US ED Follow-Up Questions for Georgia's Assessment Plan

- Please identify and address significant obstacles the SEA may encounter in executing this plan, including potential procurement and resource issues.
 - Significant obstacles include (1) ensuring sufficient funding [Governor has requested an additional \$10 million be included in the FY15 budget to support testing; this is making its way through the legislative process]; (2) a potential challenge to the competitive bid process [we are working to run a clean process to mitigate this threat]; and (3) overcoming the anti-Common Core debate within our state [proposed legislation prohibiting Georgia from assessing the CCSS was defeated this week in committee].
- Please describe the validation framework in more detail, including planned validation studies and responsible parties.
 - The Georgia Department of Education (GaDOE) will work with the University System of Georgia (USG) and the Technical College System of Georgia (TCSG) to conduct a series of validation studies. Please see pages 49 – 50 of the Statement of Work emailed on March 12, 2014, for a preliminary list of special studies, which include CCR validation.
 - The discussions had by the GaDOE, USG, and TCSG leadership team to date have centered on adopting a validation threshold criterion such as the one adopted by PARCC: A student who earns the college- and career-ready determination on the identified Georgia assessment has approximately a 0.75 probability of earning college credit, by attaining at least a grade of C or its equivalent, in introductory credit-bearing courses in the corresponding content area. The three agencies will work together, with the selected vendor, to plan and carry out the CCR validation study.
 - Georgia will work with its Technical Advisory Committee to determine additional validation studies, beyond those explicitly included in the SOW. The following requirement is provided for within the SOW: “The Offeror may be required to perform additional data analyses, at no additional cost, as directed by the Department, in order to ensure the accuracy of the test scores, or to provide data for programmatic review, program evaluation, federal peer review, or other inquiries into the functioning of the assessment system. Depending on the need identified by the Department or its TAC, the Offeror may be asked to prepare technical briefs addressing special topics that directly impact the technical underpinnings and quality of the assessment system” (p. 45). Also see a similar requirement on page 39.
 - Ultimately GaDOE is responsible for the on-going validation of the assessment system. Critical partners will be the Georgia TAC, USG, TCSG, and the selected vendor or a third-party independent contractor selected by GaDOE (based on need).
- Please describe the overall alignment approach, including the resources supporting this approach and the responsible parties.

- Alignment is a critical aspect of all standards-based assessment programs. Georgia uses an iterative alignment process coupled with an independent verification. When items are developed, alignment to specific content standard and test/item specifications must be detailed. All items are reviewed numerous times prior to their inclusion on a test. New items are reviewed by GaDOE curriculum and assessment specialists prior to their review by a committee of Georgia teachers.^(1, 2) Annually, Georgia convenes committees of Georgia educators, by grade, content area, or course to review all newly developed items.⁽³⁾ In recent years, USG and TCSG faculty have joined high school teachers in the review of item. Only those items approved by GaDOE and the committees are placed onto test forms for field testing. Items selected for field testing are again reviewed by GaDOE curriculum and assessment specialists when they are placed onto forms.^(4, 5) This is in addition to the internal review required by the item development contractor at this stage.⁽⁶⁾ After field testing, the items are reviewed by another committee of Georgia educators (a separate annual event called data review occurs for field tested items).⁽⁷⁾ This review is done in concert with GaDOE curriculum and assessment specialists. Importantly, alignment is considered as well as item-level performance data. Historically, Georgia has utilized Webb’s Depth of Knowledge and a DOK is assigned to each item at development by the contractors and by Georgia educators (independently) at both new item and data review. Once items are placed onto an operational form, once again GaDOE curriculum and assessment staff review alignment.^(8, 9) The contractor is also required to review alignment of each item at this stage.⁽¹⁰⁾ In short, each the alignment (both content and cognitive expectation) is considered multiple times before it is placed on an operational test.
- Alignment of each test form is detailed in the test map. The test map includes the list of individual items that comprise the form, the standards measured, key item performance data, the statistical targets for the form, including DOK parameters, and the degree to which the form meets those targets. The test map serves as a critical tool to gauging the alignment of the test form as well as providing the technical parameters for equating.
- Periodically, but especially when new tests are developed, the GaDOE contracts for an independent, third-party alignment study. Such a study is required for Georgia’s new assessment system (see pages 46 – 47 of the SOW).
- Please provide a timeline for the completion of an alignment study.
 - An independent, third-party alignment study will be conducted once the new forms have been constructed in the first year of implementation. This is anticipated to occur in Spring/Summer 2015.
- Please describe how the data generated by this assessment system will support GaDOE’s growth model.
 - Georgia has adopted the Student Growth Percentile (SGP) as its growth model. This model does not rely on projections like many value-added models do. Rather the

model calculates the actual growth a student makes relative to his or her academic peer group. As such, Georgia will be able to continue to calculate growth based on how all peer groups in the state transition to the new assessment system. GaDOE has worked with its technical advisors to prepare for the transition, including Damian Betebenner, the developer of the SGP model.

- Georgia will work with its Assessment TAC as well as its Educator Effectiveness TAC to ensure a technically sound transition.
- Please clarify whether GaDOE intends to develop new high school assessments aligned to CCGPS, or whether GaDOE believes the current high school end of course assessments are aligned to CCGPS.
 - Georgia will develop new high school end-of-course assessments to enhance the alignment of its program. As detailed in the SOW, some current features of the current EOCT program may be utilized. Since adopting the CCGPS, the new EOCT mathematics assessments – Coordinate Algebra and Analytic Geometry – were intentionally developed to send a signal of college and career readiness. The current versions of these tests do not, however, include open-ended items or performance tasks. As such, new development is required and included in the SOW. Please see pages 5 – 9 of the SOW.
- Please describe in more detail GaDOE's plans relating to the Request for Proposal and the Awarding of Contract(s), including the intended scope of work and the extent to which GaDOE intends to rely on contractors to complete this work.
 - The Statement of Work (SOW) was provided to US ED on March 12, 2104. It was released by the Department of Administrative Services (DOAS) on February 17, 2014. Proposals are due to DOAS on March 31, 2014. GaDOE anticipates seeking the approval of the State Board of Education for a contract award on May 8, 2014. The contract will begin on July 1, 2014.
- Please elaborate on the involvement of TCSG/USG in the development of these assessments.
 - As detailed in Georgia's Assessment Transition Plan, submitted to US ED on October 4, 2013, (and again on October 17, 2013, due to the shut-down) both USG and TCSG serve as key partners in the development and implementation of the new assessment. Both USG and TCSG have identified lead staff to work with GaDOE (provided above) and have been part of the planning process. Both have identified faculty members to be involved in item and test development tasks. Georgia has utilized postsecondary faculty from both agencies for several years – most recently on the standard setting panel for the Analytic Geometry EOCT in December 2013. Faculty members will continue to serve on development committees and have a voice in the development of the assessment system. And as previously detailed, USG and TCSG will serve as critical partners in the validation of the college- and career-readiness determination.

- The expectation and plan to include postsecondary faculty in the development of the assessment system is included in the SOW. Please see page 9 as an example. Another example includes the expectation to design the EOC reports in collaboration with postsecondary faculty – see pages 43-44 of the SOW.
- GaDOE periodically updates USG’s Chancellor and TCSG’s Commissioner at regularly scheduled Alliance of Education Agency Heads meetings. This is in addition to the updates provided by their lead staff members. The next Alliance meeting at which such an update is scheduled is March 24, 2014.
- Please detail the number of items currently available based on prior field testing, and the number of items necessary to build CCGPS-aligned assessments.
 - SOW Appendix A (pages 58 – 61) provides the number of currently available items. Bidders are to propose their best solution for a customized assessment system for Georgia. Ultimately, GaDOE will work with the successful contractor and Georgia educators (including postsecondary faculty) to finalize the test blueprint.
- Please clarify how and when GaDOE intends to determine whether the Fall Off-Grade Field Test will be necessary.
 - Once proposals are submitted and GaDOE is able to evaluate the solutions offered, we will be in a better position to answer this question. Georgia’s TAC will be involved in this decision and a meeting is scheduled in June.
- Please describe GaDOE’s plans for reporting the results of the new assessment system.
 - Requirements for the creation and distribution of scores, including reports, data files, and ancillary support materials, such as a score interpretation guide, are detailed on pages 40 – 44 and 47 of the SOW. Results will be reported at the student, class, school, district, and state levels. Parents will receive a printed score report detailing the achievement (and growth, through the growth model) of their student. Scores will be disaggregated by subgroup except when there are too few students to reliably report (historically Georgia has used an N size of 10 for reporting purposes). Appropriate interpretation and use of the scores will be a major focus of training for GaDOE in the first years of implementation of the new program. Appropriate interpretation will always be supported but will be a major focus the first several years of the new program. As discussed in the SOW, postsecondary faculty will be involved in the development of the EOC reports so that appropriate remediation can occur within the K – 12 system prior to enrollment at the postsecondary level. Results will be reported to the public and will be used to support the accountability system, including the identification of reward, focus, and priority schools.
- Please identify the funds that were used to develop the new test items that have already been developed.

- State and federal funds (6111) were utilized as part of Georgia’s on-going test development efforts. As indicated in our Assessment Transition Plan, new item development since 2012 has focused on the transition of the assessment program.
- Please describe how data from the new assessments will be incorporated in the Teacher and Leader Keys Evaluation System
 - Georgia’s TKES and LKES will utilize the growth measure as a key component of the Teacher Effectiveness Measure (TEM) and Leader Effectiveness Measure (LEM). Using the data from the new assessment system, growth for each student will be calculated using the Student Growth Percentile (SGP) as discussed above.
- Please provide any relevant documentation (including, to the extent possible, the RFP, any MOUs that have been established with other States, the Design Paper, the Test Blueprints for grades 3-8 in ELA/Literacy and Math, and ELA/Literacy high school)
 - The SOW was send to US ED on March 12, 2014.
 - The design paper has been incorporated into the SOW – please see pages 5 – 9 of the SOW: Georgia’s Plan for a New Student Assessment Program.
 - The GaDOE-developed sample test blueprint is provided on pages 62 – 65 of the SOW.
 - Georgia has finalized an item-sharing agreement with Kentucky. The MOU is included as a separate attachment. Georgia continues to have discussions with Florida as they proceed through their procurement process.

Attachment 6c: Amended Statement of Work

Georgia Student Assessment Program
eRFP# 41400-DOE0000021

Attachment B

Statement of Work (SOW)
Amended March 11, 2014

Purpose, Background, and Considerations

Purpose

The Georgia Department of Education (GaDOE) seeks a highly-qualified Offeror to provide services and products for a new customized, comprehensive, and cohesive (i.e., articulated) Georgia Student Assessment Program, beginning in the 2014-2015 school year. A paramount objective of this new program will be to signal students' preparedness for the next educational level (grade or course), ultimately culminating in a clear indication of students' preparedness for post-graduation endeavors, be it college or career. Additionally, the program must provide high-quality measurement of student achievement of the state-mandated content standards, provide teachers with actionable information to directly inform remediation and enrichment efforts, and assist school systems in identifying strengths and shortcomings of educational programs in order to inform priorities and planning.

This new Georgia Student Assessment Program will be comprised of end-of-grade (EOG) summative assessments in grades 3-8 and end-of-course (EOC) summative assessments in grades 9-12 (although some accelerated middle school students may participate in the EOC). To ensure a successful testing program, services and products are sought to create a seamless operational testing program consisting of high-quality, psychometrically sound, and secure items and test forms that are well-aligned with the state's academic content standards specified in the College and Career Georgia Performance Standards (CCGPS) in English Language Arts and Mathematics and the Georgia Performance Standards (GPS) in Science and Social Studies.

Specifically, the GaDOE seeks the following mandatory components:

1. End-of-grade (EOG) tests for grades 3-8
 - a. Administered in four content areas: Language Arts, Mathematics, Science, and Social Studies.
 - b. Administered in both computer-based and paper-based formats.
2. End-of-Course (EOC) tests for high school
 - a. Administered in eight courses: Ninth Grade Literature and Composition, American Literature and Composition, Coordinate Algebra, Analytic Geometry, Physical Science, Biology, U.S. History, and Economics/Business/Free Enterprise.
 - b. Administered in both computer-based and paper-based formats.

All items and test forms must reflect the high expectations inherent within the CCGPS and GPS. The Language Arts and Mathematics tests will consist of a variety of items types, including selected-response, constructed-response, and extended-response. The Science and Social Studies tests will consist of selected-responses (i.e., multiple-choice) items only.

The goal of this procurement is to identify a highly-qualified vendor to assist GaDOE with the design, development, and implementation of a new customized best-in-class assessment program aligned to the CCGPS in Language Arts and Mathematics and the GPS in Science and Social Studies. This new program must:

- be sufficiently rigorous to ensure Georgia students are well positioned to compete with other students across the United States and internationally;
- be intentionally designed across grade levels to send a clear signal of student progress/growth and preparedness for the next level, be it the next grade level, course, or college or career;
- be accessible to all students, including those with disabilities or limited English proficiency, at all achievement levels;
- support and inform educator effectiveness initiatives, ensuring items and forms are appropriately sensitive to quality instructional practices; and
- accelerate the transition to online administration, allowing – over time – for the inclusion of innovative technology-enhanced items.

Background

State Content Standards: As required by the Quality Basic Education (QBE) Act of 1985, Georgia must maintain a curriculum that specifies what students are expected to know and be able to do in each subject and grade level. The required state-adopted standards serve as guidelines for instruction and instructional practice. Therefore, the Georgia Department of Education is charged with the development of common expectations for each grade level and/or course and the assessment of those expectations. All other decisions regarding curriculum and instruction are determined by Local Education Agencies (LEA). State law §20-2-140; §20-2-141; and §20-2-142 (prescribed courses) provides that the State Board of Education (SBOE) shall establish a uniformly sequenced core curriculum and college and career readiness competency standards; provides for a process established by the SBOE for the review at least every 4 years of the adopted competencies and uniformly sequenced core curriculum; provides for prescribed courses. SBOE Rule 160-4-2-.48 provides for graduation requirements.

Georgia's standards-based instructional program began in 2004 with the development and phase-in of the Georgia Performance Standards (GPS) in all content areas. The development and implementation of the GPS allowed Georgia to be invited as a lead state in the discussions as the Common Core State Standards (CCSS) were being written.

In July 2010, the Georgia SBOE adopted the CCSS as the Common Core Georgia Performance Standards (CCGPS) in Mathematics, English Language Arts, and Literacy in Science, History/Social Studies, and Technical Subjects. These standards represent a common sense next step precision review of the Georgia Performance Standards (GPS). Georgia infused the CCSS

into the GPS – an infusion which allowed the state to examine the merits of CCSS while maintaining our commitment to Georgia’s local control disposition regarding curriculum.

The timeline for the implementation of the CCGPS was as follows:

- 2010-2011 School Year Communication and Resource Development/Alignment/Training
- 2011-2012 School Year Continued Communication and Resource Development/Alignment/Training
- 2012-2013 School Year Year 1 CCGPS Classroom Implementation

Adopting high academic standards, measuring student progress against those standards, and holding students and educators accountable for meeting them are essential components of increasing student achievement, and thus improving college and career readiness in Georgia.

Resources developed to support the implementation of the content standards include grade level and course specific standards, sample curriculum maps, teacher guidance and resource documents, unit frameworks and unit planning templates, formative assessment video lessons, templates, strategies, and quick access to articles for designing literacy-intensive units in science, social studies, and technical subjects, sample student work, wikis, teacher webcasts, recorded webinars and videos, glossaries, course overviews, and course descriptions.

Resources associated with the CCGPS for English Language Arts and Mathematics may be found at the following link:

<https://www.georgiastandards.org/Common-Core/Pages/default.aspx>

Resources associated with the GPS for Science and Social Studies may be found at the following link:

<https://www.georgiastandards.org/Standards/Pages/BrowseStandards/BrowseGPS.aspx>

Review and Revision of the CCGPS and GPS: Georgia’s Governor and State Board of Education have charged the Department with a review of the CCGPS in English Language Arts and Mathematics and with the review and revision of the GPS in Social Studies. This review, and any subsequent revision, will be conducted from January – December 2014.

Student Assessment: Georgia has a long and robust history of student assessment spanning multiple decades. The state’s current assessment program consists of a series of customized criterion-referenced tests, which include the Criterion-Referenced Competency Tests (CRCT) in grades 3 – 8; the End-of-Course Tests (EOCT) in grades 9 – 12 (although some accelerated middle school students also participate if enrolled in an assessed course); and the Georgia Writing Assessments (WA) in grades 3, 5, 8, and 11. Other programs that comprise Georgia’s current student assessment program include the Georgia High School Graduation Tests

(GHSGT) – which are being phased out; the Georgia Alternate Assessment (GAA) – which is the alternate assessment based on alternate achievement standards for students with significant cognitive disabilities; the CRCT-Modified – which serves as Georgia’s alternate assessment based on modified achievement standards and will no longer be administered after the 2013-2014 school year; and the ACCESS for ELLs – which is the state’s English language proficiency measure. Additionally, the state administers the Georgia Kindergarten Inventory of Developing Skills (GKIDS) as a formative tool to help teachers ascertain how kindergarten students are progressing through the state-mandated content standards, helping to identify areas where additional support may be warranted to ensure students have a firm foundation prior to entering first grade.

More detailed and specific information about Georgia’s current student assessment program may be found using the following link:

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Pages/default.aspx>

Several state laws (O.C.G.A. §20-2-281; §20-2-282 through §20-2-285) and SBOE Rules (160-3-1-.07: Testing Programs – Student Assessment; 160-4-2-.11: Promotion, Placement, and Retention; 160-4-2-.14: Statewide Passing Score; 160-5-1-.15: Awarding Units of Credit and Acceptance of Transfer Credit and/or Grades) set forth the governance, policy, and procedures for the state’s assessment program. While the code sections and board rules listed above are what the Department would consider the “main” assessment policy and procedure mandates, the list is not all inclusive. As is common of all state assessment programs, data stemming from the programs inform, both directly and indirectly, the majority of major educational initiatives, not the least of which is state and federal accountability.

Accountability: In 2013, Georgia launched a new accountability system, known as the College and Career Ready Performance Index (CCRPI). The CCRPI is a comprehensive accountability system designed to directly inform school improvement. As such, the CCRPI replaced the No Child Left Behind (NCLB) Adequate Yearly Progress (AYP) measurement in Georgia through a flexibility waiver granted by the U.S. Department of Education in February 2012. Importantly, the CCRPI is designed to help various stakeholders better understand how schools are performing in a more comprehensive manner than the pass/fail AYP system previously in place under NCLB. Each school receives a score out of 100 points, which is comprised of three major components: achievement; progress; and achievement gap. The CCRPI was designed around a comprehensive definition of college and career readiness, or the level of achievement required in order for a student to enroll in two- or four-year colleges and universities and technical colleges without remediation, fully prepared for credit-bearing college-level work and/or a life-sustaining career. This means that all students graduate from high school with both rigorous content knowledge and the ability to apply that knowledge.

The CCRPI supports the state’s core educational principles:

- exemplary student achievement that prepares all for success in college and careers;
- effective teaching and leadership in all schools;
- innovative school improvement, particularly in low performing schools; and
- reduction in the duplicative reporting requirements for local school districts.

More detail about the CCRPI, including Georgia's approved flexibility waiver, can be found using the following link:

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Accountability/Pages/default.aspx>

Georgia's Plan for a New Student Assessment Program: It is the intention of the Department (i.e., GaDOE) to develop and implement a new comprehensive assessment *system* rather a continuation of the series of tests that currently comprise the state assessment program. In this regard, the Department is moving away from a series of individual programs or tests (i.e., CRCT, EOCT, WA) that were developed and designed at various points in time to serve similar, yet different purposes. As an unintended artifact or result of the current series of tests, signals about student achievement of content mastery across the programs/tests, at certain points, can be incongruent or lack consistency.

In developing a new assessment *system*, it is the state's intention to develop a *cohesive* (i.e., articulated) assessment *system* that is rigorous and ensures Georgia's students are competitive with their peers, both nationally and internationally. Specifically, Georgia must work to explicitly increase its expectations for teaching and learning given the state currently has the lowest proficiency expectations in the nation according to several comparability studies (primarily examining NAEP expectations). Alignment of student achievement expectations is essential both within the assessment system (across grades and courses in the same content area) as well as with external measures such as NAEP, PSAT, SAT, and ACT. The paramount objective of this new *system* is to provide a consistent signal of students' preparedness for the next level of their educational matriculation, culminating in a clear signal of students' preparedness for postsecondary endeavors (be it college or career).

To accomplish this, Georgia must:

- continue the strong partnership between the K-12 and post-secondary educational systems (GaDOE; University System of Georgia (USG); Technical College System of Georgia (TCSG));
- transition from assessments that are solely multiple-choice to assessments that also include test questions that require students to demonstrate their understanding by *showing* what and how they know;
- significantly increase the rigor of its assessments and expectations for student achievement, while also ensuring the assessment system is accessible to all students at all levels of the achievement continuum; and
- create an assessment system that accurately measures the full continuum of achievement and progress over time for all students.

It is important to note that since the 2011-2012 school year, Georgia has been developing and field testing items aligned to the CCGPS in language arts and mathematics as well as continuing to develop and field test items aligned to the GPS in science and social studies. The Department anticipates that there is a sufficient pool of selected-response items to work from in refining the science and social studies EOG and EOC assessments. In language arts and mathematics,

however, while there is a sizable initial pool of items from which to select, the pool does not include any constructed- or extended-response items. The number of aligned items within Georgia's current item banks is included in SOW Appendix A. To address this situation, Georgia is actively pursuing cross-state partnerships to share proven, secure test items. It is also anticipated that for the first (and possibly second) year's administration of the new system, Georgia may need to augment its bank with proven items developed and field tested by the selected contractor or other entities, provided those items are high-quality, aligned, and secure.

To clarify, Georgia is not seeking a shelf-product solution, but recognizes the fact that additional items will be needed for the first (and possibly second) year's administration after which the ongoing item development schedule should allow for sustainability. It is understood that the selected contractor will retain ownership of any proprietary "borrowed" items, granting Georgia rights to use such items.

Within its new comprehensive assessment system, Georgia is interested in a solution that provides for the comparability of results with other states and/or the nation. Georgia's adoption of the CCSS to augment its GPS opens the door for such comparability in language arts and mathematics in particular. The state is open to viable, creative solutions and desires a solution that embeds a sufficient number of aligned nationally norm-referenced test (NRT) items within the instruments to augment the criterion-referenced information provided about student achievement. The purpose of including aligned NRT items is to provide parents with an indication of how their student is progressing academically in comparison to their peers across the nation. Such a blended (NRT/CRT) approach should be proposed and should include all content areas (language arts, mathematics, science, and social studies). Offerors should detail the strengths and limitations of their proposed approach to embedding NRT items in their solution to this procurement. Additionally, the Department recognizes that other entities are building common assessments. As such, the Department is open to solutions that can provide such additional comparative information while maintaining tight alignment to the content standards assessed. It is understood that the selected contractor will retain ownership of any proprietary NRT items. The ownership of items developed by other entities should be addressed in the Offeror's proposal. The Department will be responsible for securing permissions to use any items from states in which it has entered into item sharing agreements.

The Offeror's proposed solution must include a sufficient number of aligned NRT items.

Given Georgia's interest in establishing comparability, the Department may elect to partner with other states. Offerors agree, by submitting a reply, that any other state or school district in the United States may purchase the services provided in the resulting contract, upon the same terms and conditions, and price, as contained in the contract, or as permitted under the laws of that jurisdiction.

Within the development of its new comprehensive assessment system, Georgia seeks to utilize several components of its previous programs, but also consolidate where appropriate. For instance, Georgia's current CRCT assesses five content areas: reading, English language arts, mathematics, science, and social studies. Additionally, the Georgia Writing Assessment is mandated in grades 3, 5, 8, and 11. To align more succinctly with the CCGPS, Georgia's new

system will assess language arts and include items that measure reading, conventions, research, and writing. In this regard, the EOG summative assessments for grades 3 – 8 will be comprised of four content areas (language arts; mathematics; science; and social studies) and will include writing as a component of the language arts assessment. Inherent within the CCGPS is the expectation that students write in response to text. Georgia has an interest in a measure of extended-response writing at every grade level and course assessed in the content area of language arts. At a minimum, each language arts assessment must provide information on students' writing skill, through constructed responses to text-dependent questions, while extended-response writing opportunities must be provided in at least one elementary and one middle grade as well as both language arts EOCs. Extended-response items/prompts in writing should require students to produce opinions/arguments, develop informative/explanatory responses or narratives, citing evidence from text(s) in response to paired or multiple texts. Because Georgia has not, to date, field tested writing prompts of this nature, potential contractors should propose the inclusion of such items in their response for the first and second years of operation. It is expected that on-going field testing will provide the necessary prompts and psychometric data for sustainability in future years.

The Department has a long-standing partnership history with the University System of Georgia – specifically with the Georgia Center for Assessment (GCA) at the University of Georgia. Under this partnership, GCA has developed and managed several current tests, including the Georgia Writing Assessments, the CRCT-M, GKIDS, as well as provided a variety of other state assessment activities either directly to the Department or through subcontractor status. Offerors should note that the Department, at its sole discretion, may elect to enter into a separate contract with GCA to score the extended-response writing component of the new assessment system. Should the Department elect to exercise this option, Offerors must be willing to work collaboratively with both the Department and GCA to ensure successful, accurate, and reliable scoring as well as the successful integration of the resulting score points into the overall score results for the language arts tests. Given the successful Offeror will be responsible for the overall design, implementation, scoring, and reporting of the assessment system, Offerors must provide GCA sufficient support and expertise to ensure the extended-response writing components are scored according to the protocols and procedures established in consultation with the Department. Such support and expertise envisioned would include having a scoring director on site at GCA during training, qualification, and initial scoring, auditing during scoring to ensure calibration, and notifying the Department immediately of any concerns. This will be especially important during the first years of implementation given the Department anticipates the need to utilize proven, aligned extended-response writing items/prompts from the Offeror's item bank or other states' item banks. Should the Department exercise this option, it agrees to facilitate all necessary interactions and trade-offs between the successful Offeror and GCA and commits to working to ensure any identified risks are mitigated. Offerors should note that it is not the intention of the Department for the Offeror to assume liability for GCA's work, with the exception of errors resulting from the Offeror's failure to provide sufficient support and expertise to GCA and the Department, as previously described.

The mathematics EOG and EOC must consist of selected-response, constructed-response, and extended response (at least one) items for each grade and course assessed. The CCGPS mathematics content has been designed to allow for a balance among concepts, skills, and

problem solving, while maintaining an emphasis on computational and procedural skills. Problem solving, reasoning and proof, communication, representation, and connections are the critical dimensions of mathematical proficiency that all students need. As such, the items and test forms developed for Georgia's new assessment system must reflect both mathematical content and practice.

A *sample* test design for the EOG and EOC are provided in SOW Appendix B. To protect instructional time, each EOG or EOC must be able to be administered over the course of a single school day within two test sessions. In language arts, for those grades/courses which also include an extended-response writing item/prompt, a third session will be needed which will occur on a separate school day so as not to overly fatigue students. As such, administration of EOGs should be possible within four school days (one for each content area test), with grades requiring the extended-response writing needing five days. As is currently the practice, districts and schools may select either a one- or two-day administration schedule for each EOC, provided specific administration protocols are followed. And as with the EOGs, for the two language arts EOC that include an extended-response writing item/prompt, a third session will be needed which will occur on a separate school day.

In designing Georgia's new assessment system, it is essential that the legislated and identified purposes be addressed.

Results of the EOG must:

- provide a valid measure of student achievement of the state content standards across the full achievement continuum;
- provide a clear signal of the student's preparedness for the next educational level;
- allow for the detection of the progress made by each student over the course of the academic year;*
- be suitable for use in promotion and retention decisions at grades 3 (reading), 5 (reading and mathematics), and 8 (reading and mathematics);
- support and inform educator effectiveness measures; and
- inform state and federal accountability measures at the school, district, and state levels.

Results of the EOC must:

- provide a valid measure of student achievement of the state content standards across the full achievement continuum;
- serve as the final exam for the course, contributing 20% to the student's final course grade;
- provide a clear signal of the student's preparedness for the next course and ultimately post-secondary endeavors (college and career);
- allow for the detection of the progress made by each student over the course of the academic year;*
- support and inform educator effectiveness measures; and
- inform state and federal accountability measures at the school, district, and state levels.

Additional uses of the EOC include: (1) certifying student proficiency prior to the awarding of credit for students enrolling from non-accredited private schools, home study programs, or other

non-traditional educational centers; and (2) allowing eligible students to demonstrate competency prior to taking the course and earn course credit (e.g., ‘test-out’). In both cases, students are allotted one administration.

Additional guidance and procedure for the EOC may be reviewed using the following link:

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Pages/EOCT-Guidance-Letters.aspx>

*It should be noted that Georgia uses the Student Growth Percentile (SGP) as its growth measure. Offerors are not expected to calculate the SGP but are expected to ensure the technical quality and associated scaling undergirding the new assessment system are sufficiently robust so as to allow each student’s growth and progress over the course of the academic year to be reliably calculated with validity.

Considerations

This SOW defines the requirements for Georgia’s new student assessment system. The selected Offeror will work closely with the Department and with committees of Georgia educators (both K-12 and postsecondary) to complete all tasks. Information about anticipated meetings with Georgia educators is provided in SOW Appendix C. Offerors should use their expertise and experience in developing assessment programs of a similar scope and magnitude when proposing details surrounding committee meetings.

All procedures, processes, and products used by the Offeror to complete the work associated with this SOW must be approved by the Department. Throughout the contract period, the selected Offeror will confer with the Department on a continuing and consistent basis and will be involved in frequent face-to-face meetings or teleconferences with the Department, as necessary.

Georgia’s public school system is comprised of 198 state-funded local education agencies (LEA). This includes 180 school districts, 3 state schools, and 15 state charter schools operating more than 2,263 schools. In general, grade enrollment ranges from approximately 129,000 to 132,000 in grades 3 through 8. The Department administered approximately ~~908,000~~ 990,000 EOCTs during the 2012-2013 school year, with approximately one-third of those administrations being computer-based. Additional information about the numbers and types of schools as well as student enrollment may be found at the following link (under the heading ‘Reports’):

<http://www.gadoe.org/Technology-Services/Data-Collections/Pages/Home.aspx>

All passages, stimuli, resources, and related test items that are developed under this contract will be considered work for hire and as such shall be the sole property of the Department. Passages must therefore be commissioned, public domain, or copyright free. Any materials developed under this project shall not appear in other publications outside the state of Georgia without the prior written approval of the Department.

- ✓ All passages, stimuli, resources, and their related items developed as a result of this procurement must be able to be used in perpetuity at no additional cost to the Department.

This requirement does not include any proprietary material owned by the Offeror or other entities, such as NRT or other proven items, for which license for use is granted to the Department.

The fundamental purpose of Georgia's student assessment system is to provide accurate information on student achievement. The selected Offeror will utilize every means required to ensure that information created by the project is accurate. The selected Offeror will be responsible for correcting, at the Offeror's expense, any errors arising from activities that are the responsibility of the Offeror. This may involve activities such as conducting analyses to identify the cause and extent of errors; reprogramming or reproducing products or other materials; replacing data files; reproducing reports; and shipping replacement products or reports to the Department or districts using expedited shipping services.

All services related to test design, item development and review, item banking, test production, scoring and reporting, and technical quality are the responsibility of the selected Offeror. Respondents should propose a customized assessment *system* solution, that may include products and services derived from existing products developed and published by the contractor (e.g., aligned NRT items), or developed as part of other initiatives (e.g., proven aligned items). The Department's primary goal with respect to the test design is ensuring that the assessment measures student mastery of the state-mandated content standards, allows for the determination of student progress/growth over the course of the academic year, and accomplishes this in the most cost-effective way without significantly increasing testing time.

News releases, public announcements, or comments pertaining to this RFP, a contract award resulting from the RFP, or work completed under a contract will not be made without prior written approval from the Department.

As a final note, it is important to note that Georgia has the highest of expectations relative to test security. This is a critical component of all trainings the Department delivers in preparation for test administration and all manuals and other pertinent documents produced for test administration. The Offeror must have proven processes in place that allow Georgia to continue its work to further this emphasis before, during, and after all test administrations.

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Georgia Student Assessment Program Technical Plan

Within its proposal, the Offeror shall outline its technical plan for all aspects of design, development, validation, administration, scoring, and reporting of Georgia's new assessment system. The tests comprising this new system must be computer-based as well as paper-based. It is the intention of the Department to transition to computer-based administration as quickly as possible given the infrastructure and hardware available throughout the state. The Department anticipates a transition of 80% to computer-based testing in three years, with a complete transition (with the exception of the small number of students with disabilities who will require paper-based administration) anticipated in five years, if not sooner.

- ✓ The Offeror's proposed solution must include both computer-based and paper-based administration.

As previously outlined, the intent of this procurement is to develop:

1. Summative End-of-Grade (EOG) program for grades 3-8 in Language Arts, Mathematics, Science, and Social Studies;
2. Summative End-of-Course (EOC) program for high school for the eight identified core courses.

Technical Approach

The Offeror should provide a detailed description of the approach to be taken in the design, development, and implementation of a new customized assessment system comprised of both EOG and EOC. Offerors should take note that lengthy proposals clearly repurposed from other projects or filled with non-essentials (company advertising materials, laudatory publications and the like) are distracting to the evaluators. The Offeror's response should describe their solution in sufficient detail, so that the quality, efficiency, and effectiveness of the proposed approach can be appraised.

As previously described, discussed results of the EOG must:

- provide a valid measure of student achievement of the state content standards across the full achievement continuum;
- provide a clear signal of the student's preparedness for the next educational level;
- allow for the detection of the progress made by each student over the course of the academic year;
- be used for promotion and retention decisions at grades 3 (reading), 5 (reading and mathematics), and 8 (reading and mathematics);
- support and inform educator effectiveness measures; and
- inform state and federal accountability measures at the school, district, and state levels.

Results of the EOC must:

- provide a valid measure of student achievement of the state content standards across the full achievement continuum;
- serve as the final exam for the course, contributing 20% to the student's final course grade;

- provide a clear signal of the student's preparedness for the next course and ultimately post-secondary endeavors (college and career);
- allow for the detection of the progress made by each student over the course of the academic year;
- support and inform educator effectiveness measures; and
- inform state and federal accountability measures at the school, district, and state levels.

ASSESSMENT SYSTEM DESIGN

The Offeror will be responsible for the design, development, implementation, scoring and reporting of a new customized assessment system that is comprehensive, cohesive, and sends a clear signal of student's preparedness for the next educational level.

All items and tests developed must be aligned to the state-mandated content standards both in terms of the knowledge, content, and skills inherent in the standards, but also in terms of the achievement expectations. The language arts assessments shall include reading passages that expose students to grade-level text of appropriate complexity. Texts should reflect a balance of literature (stories, drama, poetry, etc.) and informational text/literary nonfiction, which would include passages that address the literacy standards for history/social studies, science, and technical subjects. Selections should include a combination of single text passages and paired passages of sufficient complexity for close, analytical reading which would allow students to discern and locate evidence from the text to support assertions in multiple-choice items and writing responses. All passages, stimuli, and related resources developed under this contract must be able to be used in perpetuity. Therefore, they must be either commissioned, public domain, or copyright free.

The Offeror should propose passage specifications that address the range of reading expected in the CCGPS and meet industry standards for quality and content and grade appropriateness. Georgia has a history of using the Lexile Framework in association with assessments, and reporting the Lexile score on the summative reading assessment student report. In addition to using the Lexile Framework, the Offeror should propose procedures and/or methodology for considering the reading demand/difficulty of proposed passages. The Offeror must provide a surplus of passages to allow for attrition.

Passages selected for consideration by the Department shall be well written, interesting to read, well organized, use helpful transition words, have appropriate vocabulary, and, where needed, have useful supplemental explanatory features such as definitions of technical terms or topographical features.

Passages shall represent a variety of genres, including, but not limited to fiction, nonfiction, poetry, history and scientific texts. Other resources developed or selected may be a combination of materials commonly used by students in performing research for personal and academic projects and may include, besides literary and informational texts, items such as tables of contents, indexes, appendices, glossaries, advertisements, charts, graphs, maps, tables, articles, or web pages.

Especially in the selection of informational texts, the degree of content elaboration will be an important criterion for passage selection. Sufficient elaboration of new concepts is needed if students are to gain sufficient information to respond to questions. Whether text is briefly written or presents fully elaborated content is particularly important with topics that may be beyond the background knowledge of some students or for which direct instruction in the subject matter has not occurred in the content area tested (i.e., language arts). The Offeror shall propose development of passages that address content from across the curriculum, as described in the CCGPS.

Expert judgment will be the primary method for evaluating and selecting passages for inclusion on the assessment. Passages will be thoroughly reviewed for potential bias and sensitivity issues by the Georgia Department of Education; however controversial passages should not be proposed. The Offeror shall describe how bias and sensitivity will be attended to in passage creation/selection.

The new assessment system shall be comprised of selected-response, constructed-response, and extended-response items for language arts and mathematics and selected-response items in science and social studies. As previously discussed, language arts items must require close analytic reading. Students should be presented with the opportunity to compare and contrast ideas, themes, etc., as well as synthesize ideas and concepts across multiple texts. Mathematics items should require students to solve problems involving the supporting content for the grade or course and express grade- or course-level mathematical reasoning. Problems should be real-world based with a degree of difficulty appropriate for each grade or course. All items must reflect both mathematical content and skill/procedure. In science, items must allow students to demonstrate an understanding of both science and the Characteristics of Science, such as the Habits of Mind and the Nature of Science. Social studies items should allow students to demonstrate their comprehension of the past and how the past influences the present and future. They should encourage the consideration of multiple perspectives of events and engage students in considering the motives of historical figures. Social studies items should refrain from assessing trivia.

Offerors should note that the Department does not view a complete redevelopment of the science and social studies EOG and EOC as necessary. Rather, Offerors should outline how they will thoroughly review these components of the assessment system, including test and item specifications, blueprints, achievement level descriptions, etc., and refine the assessments to ensure they meet the purposes and uses of the new assessment system as outlined in this SOW. Such a review must include a policy review of student achievement expectations so that any adjustments in cut scores that may prove necessary can be made.

Following the adoption of the CCGPS, two new mathematics courses, Coordinate Algebra and Analytic Geometry were developed and implemented. The development of the EOCTs for these two courses sought to address the new purposes and uses, including sending a signal of college and career readiness. As such, the Department does not view a complete redevelopment of these two EOC as necessary although the current editions of the tests include only selected-response items. As such, Offerors should outline how they will thoroughly review these components of the assessment system, including test and item specifications, blueprints, achievement level

descriptions, etc., and augment the assessments with constructed-response items as well as otherwise refine to ensure they provide coherent information within the new assessment system and meet the purposes and uses as outlined in this SOW. Such a review shall include a policy review of student achievement expectations.

The Offeror must follow national industry standards and best practices in developing the assessment system. All work must be conducted according to the most recent version of the *Standards for Educational and Psychological Testing*, as promulgated by the American Psychological Association (APA), the American Educational Research Association (AERA), and National Council of Measurement in Education (NCME). It is expected that all best practices and evidence-based procedures be demonstrated and applied at all levels of the work.

- ✓ The Offeror's proposed plan must follow national industry standards and best practices, ensuring all work is conducted according to the most recent version of the *Standards for Educational and Psychological Testing*.

Offerors should propose a detailed plan for the development of the overall specifications for the new comprehensive assessment system, in consultation with the Department and Georgia educators. The assessment system specifications are essential, serving as the blueprint for the assessment system and directly informing item development and form construction as well as the reporting structure for student results. Specifically, the specifications will outline how the content standards will be represented on each EOG and EOC, serving as the basis for constructing test forms and reporting scores. The specifications must include information about the criteria for item selection, content representativeness, design of the assessment, evaluation criteria for reviewing the statistical characteristics of the items and other target characteristics of the assessment system, including criteria for selecting link or anchor items. The achievement measured by the assessment system must reflect the knowledge, concepts, and skills that are inherent in the content standards for each subject area.

- Describe how the assessment system specifications will be developed, in consultation with the Department and Georgia educators, and what steps will be included to ensure a comprehensive system that is cohesive (articulated) across grades and courses results. The proposed solution should: (1) describe how the extent of content coverage will be determined and the types of items that will be utilized and included in the final assessment system specifications, including how the progressive levels of achievement within the content standards will be addressed to ensure the full continuum of achievement is assessed; (2) describe how content assessed will be organized into reliable reporting structures for student, class, school, district, and state results, and provide for the development of achievement level descriptions; (3) describe how the test length and overall characteristics, including but not limited to the specifications for passages, graphics, artwork, and items, will be determined and the steps to be taken to ensure the assessment system goals, as outlined in this SOW, are achieved; and (4) describe how the key technical attributes of reliability and validity will be ensured within the final system specifications.

The Offeror shall provide a detailed plan for the development of item specifications for each EOG and EOC to be developed. The item specifications should outline the procedures for

writing test items, including but not limited to the types of items, the format and style of the item stems, distractors, prompts, passages, stimuli, and graphics. Further, the item specifications should explicitly define all parameters regarding the construction of items for each standard assessed and ensure adequate coverage at varying levels of cognitive demand across the achievement continuum. All items developed must be of high-quality and represent high-level, challenging content and skills.

→ Describe the procedures for developing item specifications for each EOG and EOC that is part of the assessment system, including the types of items to be developed and all related parameters in consultation with the Department and Georgia educators. In addition, the proposed solutions should describe how the item specifications will ensure items of varying levels of cognitive demand will be developed to ensure both accessibility for all students as well as sufficient measurement across the full achievement continuum.

ITEM DEVELOPMENT AND ITEM REVIEWS

Newly developed items and associated stimuli should possess evidence of high quality for use on a high-stakes assessment. The items must reflect the range of cognitive demand inherent in the content standards to be assessed. High quality, acceptable items are aligned with the state content standards, clearly worded, supported by high quality graphics, artwork, or text (if applicable), reflect the *AERA/APA/NCME Standards For Educational and Psychological Testing*, are free of insensitive content, irrelevant language, possible sources of bias, and are cognitively appropriate for students in the grades and courses assessed. The cognitively rich items expected to be developed under this procurement must not only assess the skills inherent in the curriculum, but also the depth of knowledge.

New items must be accessible to diverse groups of students and function appropriately across a broad range of test administration accommodations. Universal design (UD) principles must be followed ensuring all items are designed to allow the largest number of students an opportunity to demonstrate mastery of skills and understanding of concepts contained in educational goals and objectives. Offerors must detail how UD will be incorporated into the new item development process.

The Offeror must also provide a detailed plan for assessing item bank strength and propose a plan for bank replenishment on an annual basis. Such a plan shall include how the current banks will be reviewed and evaluated. Bank evaluations should not only include the quantity of items but must carefully distinguish between those items that have classical and item response theory (IRT) statistics that meet the agreed upon criteria for test construction and those that do not. Particular attention must be given to evaluating items associated with reading passages; passages that do not have sufficient items meeting test construction standards are not truly viable candidates for use in building future test forms.

Augmentation of the current selected-response item banks with other item types, specifically constructed-response and extended-response items, is critical. Plans should include the number of items to be developed, item types, distribution by standard and reporting structure by year, and prior use, and should reflect the unique strengths and weaknesses of each content and grade or course. Plan should also include how items will be apportioned to embedded field-test slots and

how many field-test forms will be required; consideration of the potential student population and number of responses needed per item along with the Department's desire to minimize total testing time shall be the driving forces in the Offeror's plan for bank replenishment. Finally, the Offeror's plan should account for item attrition and/or rejection so that the requisite number of items ultimately is banked and available for use on operational test forms.

→ Describe the procedures and guidelines for item development, including the procedures for ensuring alignment (both content and cognitive), the process of internal review to ensure item clarity, content accuracy, adherence to the developed item specifications, and detection of potential bias or insensitivity. The proposed solutions also should: (1) describe how UD will be incorporated throughout the development process in a deliberate manner to ensure all items developed under this contract are accessible to students at all levels of the achievement continuum; (2) describe the qualifications and experience of item writers and the process by which writers will be trained on the specifics of this project; (3) describe the Offeror's approach to the annual review and replenishment of the item bank, ensuring the requisite number of items is delivered; and (4) provide a detailed plan for item development and field testing with a representative sample of Georgia students, including the number, type, and distribution.

Offeror shall provide a detailed plan for the review of all items developed to ensure curricular relevance, alignment, and fit to the newly developed item specifications. Items developed must be reviewed by committees of Georgia educators prior to field testing and after, in concert with all appropriate item-level data. All items developed under this contract must be field tested with representative groups of Georgia students. Historically, Georgia has used an embedded field test approach.

The Offeror must plan, organize, and conduct item review sessions (prior to field testing and after, referred to as new content and data reviews, respectively) with Georgia educators in Atlanta or **another** Department-approved location. These meetings require careful planning to ensure representation of Georgia's diverse geographic and ethnic groups. For each meeting, the Offeror will be responsible for assembling and training, with Department approval and support, a minimum of 15 teachers per content area and grade or course. Educators with experience serving special populations (e.g., students with disabilities and English learners) must be represented on each committee. The Offeror will provide summary reports of all meetings documenting all recommendations and decisions reached.

Each review meeting will require a large room suitable for meetings of the entire group and additional smaller rooms for use in the individual content area/grade/course reviews. The Offeror must ensure that the facilities are amenable to maintaining security of the tests throughout the meetings. The Offeror will be responsible for planning and conducting all aspects of these meetings in coordination with GaDOE, including selection of site, communication with districts soliciting nominations, identification and invitation of educators, preparation of training and work materials (including agendas, sign-in sheets, name tags, etc.), detailed documentation of committee membership (including system demographics, content expertise, etc.), all audio/technological needs, meals, and reimbursement of eligible expenses according to state travel regulations.

At the new content review meetings, the items will be reviewed for content area appropriateness and alignment, curricular relevance, cognitive demand, and bias and sensitivity.

At the data review meetings, the items will be reviewed in concert with all relevant item performance data to consider the items from a psychometric perspective, although alignment and content appropriateness may also be considered. Item performance data to be reviewed include data such as p-values, difficulty indices, point biserials, and differential item functioning (DIF).

The Offeror must plan for conducting a data review meeting for items that were field tested on the spring 2014 CRCT and EOCT forms. The Offeror must collaborate, through the Department, with current vendors to ensure a smooth transfer of all information necessary for such reviews, including item images, item meta-data, and student performance information on the items. Timing of the data review meeting must take into consideration the Department's desire to infuse as many new items as possible on all forms being used in 2014-2015 school year as a test security measure.

- Describe the procedures for planning, organizing, and conducting a new content review meeting on an annual basis, including the recruitment of representative committees of Georgia educators. Procedures should include the actions to be taken before, during, and after the meeting and include details on how the Offeror will appropriately staff the meeting.
- Describe the procedures for planning, organizing, and conducting a data review meeting on an annual basis, including the recruitment of representative committees of Georgia educators. Procedures should include the actions to be taken before, during, and after the meeting and include details on how the Offeror will appropriately staff the meeting. Offerors should explicitly detail plans for the review of items field tested in Spring 2014.

TEST CONSTRUCTION AND ADMINISTRATION

The Offeror must provide for the annual administration of the assessment system (both EOG and EOC). The Offeror is responsible for the construction, review, validation, equating, and scaling as well as all other necessary operations and activities related to the administration of the assessment system in both computer- and paper-based modalities.

The Offeror is responsible for the construction and administration of the assessment system, including:

- The EOG for grades 3 through 8 in language arts, mathematics, science, and social studies must be administered in April of each year, with a retest administration in the promotion and retention grades and content areas (grade 3 – reading; grades 5 and 8 – reading and mathematics) opening in May of each contract year.
- The EOC for the eight (8) identified courses must be offered in three main administration windows (winter, spring, and summer). Because the EOC will serve as the final exam for the course, administration must occur as close to the end of the course as possible. Historically these have occurred in December and May. Mid-month windows must be offered in August, September, October, November, January, February, and March of each year for students who complete course work or credit recovery on a non-traditional schedule. Mid-month

administrations historically have consisted of a single recycled form (one for the fall mid-months and one for spring mid-months) and been offered online only (although a small number of paper-based and/or Braille and large-print editions will be needed for students whose disabilities prevent them from interacting with a computer).

Given the uses of the scores resulting from the assessment system, including promotion and retention considerations (EOG) and associated retest requirements as well as contribution to each student's course grade (EOC), the timely return of student level scores is critical. Due to the economic constraints in recent years, the majority of districts have offered the promotion/retention retest during the school year in an effort to eliminate the cost of summer school. Historically, Georgia has reported student scores on an expedited schedule, with CRCT scores being reported five (5) days after receipt of answer documents (following a post-equate check) and EOCT scores being reported in one (1) to three (3) days. The introduction of performance-based items makes such return schedules challenging. Offerors must consider the uses of the scores and propose viable solutions to ensure timely return of student scores. While the Department is open to creative, yet technically sound solutions, it acknowledges that scores resulting from the first year's administration may be delayed due to the technical work, including post-administration calibration and standard setting, which must occur. This should not be the case, however, in subsequent years. It is the Department's desire to retain the testing windows in their current timeframes; given that the purpose of the assessment system is to evaluate student mastery of content, students must be afforded the opportunity to learn. Furthermore, it is the Department's desire to protect instructional time and mitigate disruption to school schedules to the degree possible. Thus, multiple windows are not preferable; however, the Department will consider administration of the writing component on the language arts tests on a slightly different schedule if this is determined to be a viable option to ensure timely return of student scores. Offerors must propose a scoring and reporting solution that meets the needs of the state and ensures the scores may be used in the manner mandated by state law and State Board rule. Importantly, Offerors should note that Georgia does not have a mandated school start date or close date. As a result, there is a wide variety of local school system calendars which necessitates the offering of state testing windows within which local systems have some degree of flexibility. The Offeror is responsible for the summer administrations of both the EOG (retest) and EOC (main and retest) for all contract years.

The Offeror must produce, publish, and disseminate materials for administration of the assessment system, including but not limited to Examiner's Manuals (EOG and EOC); School/System Test Coordinator Manuals; test booklets; answer documents; administrative materials (such as school and system security checklists; packing lists; additional order protocols; certification forms of proper test administration, etc.); Braille and large-print editions; and all other necessary materials. These materials must be distributed in sufficient quantities for each district. Additionally, non-secure materials (such as test administration manuals) must be provided to the Department in PDF format for inclusion on the GaDOE webpage. All materials, without exception, must be reviewed and approved by the Department prior to mass production and distribution.

Transition to Computer-Based Administration. The Offeror must work with the Department to schedule the phase-out of paper-based administrations over time (the only exception being for

those few students with disabilities who require paper administration) given the technology constraints and expansion plans of the state and its school districts. The Department anticipates a transition of 80% to computer-based testing in three years, with a complete transition anticipated in five years, if not sooner. Given Georgia's experience with computer-based testing, it is anticipated that approximately 30% of tests administered in the first year will be electronic.

- ✓ The Offeror's plan must describe the development of a transition plan that phases-out paper-based administration (except for a small number of students who cannot access the test via a computer). Include previous experience in transitioning large-scale summative assessment programs, lessons learned, barriers encountered and overcome, examples of communication plans utilized, and plans to augment technical support at key points in the transition.

Test Form Construction. The Offeror is responsible for the construction of high-quality summative assessments that are reflective of the content specifications, content weights, and blueprints established by the assessment system specifications. Test forms must be built to support the assessment system goals, ensuring alignment of achievement expectations both within the system (across grades and courses in the same content area) and with other external measures or barometers of the achievement of Georgia students (such as NAEP, PSAT, SAT, ACT). As previously articulated, the paramount object of the assessment system is to provide a consistent signal of students' preparedness for the next level of their educational matriculation.

Forms must be built to ensure sufficient coverage of the content to be assessed, to ensure robust measurement of the full achievement continuum – allowing students at all levels of the continuum to demonstrate what they know and can do, and to allow student progress over the course of the academic year to be determined via the state-adopted growth model. It is imperative that the items and test forms developed under this procurement be accessible to students at all levels of the achievement continuum, including but not limited to those students who were formally assessed via the CRCT-M, Georgia's AA-MAS.

For each EOG, two parallel, equated forms must be developed annually. A pre-equated retest form must be developed for the promotion and retention grades of 3 (reading), 5 and 8 (reading and mathematics). The Department will consider a retest solution that allows for expedited scoring and does not include open-ended items provided the overall test characteristics mirror those of the main administration test forms. To inform promotion and retention decisions in reading, the Department intends to use the Lexile score associated with the reading component of the language arts EOG. Offerors should outline the technical considerations, including merits and any potential shortcomings, of such an approach. Offerors may suggest other solutions provided they are technically sound and meet the requirements of Georgia statute.

For each EOC, two parallel, equated forms must be developed for the Winter and Spring administrations. One form, typically recycled, must be available for the Fall mid-month administrations (August – November), with a different recycled form available for the Spring mid-month administrations (January – March). Historically, the Summer administration has utilized a recycled form. Students who fail to achieve proficiency are allowed a single retest after focused remediation. Retests are offered during the mid-month and summer administrations on specific retest-designated forms. The Department will consider a retest

solution that allows for expedited scoring and does not include open-ended items provided the overall test characteristics mirror those of the main administration test forms.

All forms should be pre-equated and must be accompanied by a complete test map that details all item meta and performance data.

In building forms for the first year's administration, it is acknowledged that Georgia's item bank must be augmented with other proven aligned items, either borrowed, with appropriate permissions secured by the Department or the Offeror, from other states or from the Offeror's secure item bank. Offerors who propose to augment Georgia's bank with secure items must provide a full and complete description of the types of items, their development history, including evidence of field testing with large samples of students as well as evidence of alignment. Offerors must ensure that any items considered for use on Georgia's EOG or EOC are secure and, while such items may be used on other products or programs, they remain secure during the course of their use in Georgia. The Offeror must demonstrate that all proposed items are technically sound and appropriate for inclusion on a high-stakes test.

- ✓ ~~The Offeror must provide a minimum of three (3) sample items for each grade/course and content area. Sample items should include all associated stimuli and ancillary materials, including but not limited to scoring rubrics and student exemplars. A variety of items should be provided in order to demonstrate the Offeror's competency in developing high-quality items aligned to state content standards.~~
- ✓ The Offeror must provide a *minimum* of three (3) sample items by grade band (3 – 5; 6 – 8; high school) for each content area. Sample items should include all associated stimuli and ancillary materials, including but not limited to scoring rubrics and student exemplars. A variety of items should be provided in order to demonstrate the Offeror's competency in developing high-quality items aligned to state content standards. To the extent possible, items submitted should show the progression of content and skill across grades/courses.

It is understood that utilization of proven aligned items that have not been field tested with Georgia students may require a post-equate approach. If necessary, the Offeror should propose a post-equate solution with a sufficient, representative sample of Georgia students so as not to delay release of scores any more than necessary. Should an Offeror propose, Georgia will consider a small, off-grade field test in Fall 2014 provided the Offeror follows the full item development protocol outlined in this SOW.

- Describe the approach for construction of test forms that meet the test specifications and are designed to achieve the goals of the assessment system.
- Describe the plan to augment Georgia's item bank with a sufficient number of high-quality, proven, aligned, and secure items, including embedding a sufficient number of aligned NRT items. Specific and detailed information should be provided about the origins and technical quality of the NRT items. Details should include the steps to be taken to ensure the technical quality of the forms for the first year is sufficient to achieve the goals of the assessment system.

Online Management System. To facilitate administration of the assessment system, the Offeror must provide a secure online management system to serve as the primary resource for all data management, administration, and reporting tasks. The online management system must be a secure site that requires usernames and passwords and accounts should be customized based on the access a user will have (state, district, or school levels, etc.). Depending on the access level, a user should be able to view other lower organizations in the system and make changes or alter data in those organizations. The system should allow districts to upload enrollment counts, place additional orders for materials, enter testing dates, view and edit student registration information and register new students into the enrollment system if necessary for the purposes of test administration, etc. Only the official state-provided district and school codes, provided by the Department, will be used to prepopulate the system. Components of the online management system must be submitted to the Department for review of content, layout, aesthetic quality, and functionality. The Offeror will be expected to make any requested change to the management system to ensure the needs of the state of Georgia are met.

Computer-Based Test (CBT) Administration. The online management system should also accommodate computer-based test delivery. The Offeror should anticipate that as updates to the system become available, either for improvement to the system and/or maintenance of the system, such updates and improvements will be provided to the Department at no additional cost. Such a computer-based delivery system must ensure accurate assessment of students possessing a diverse range of physical, sensory, and cognitive abilities. The system should ensure adherence to universal design principles and should be designed such that a minimal amount of scrolling is necessary to view items in their entirety. The system should be intuitive, easy to use for all participants, and possess a consistent “look and feel,” including navigation tools, item formats, and item layouts. Additionally, the system should allow for test administration accommodations including, but not limited to, a screen reader, increased font size (large-print and zoom); font and background color (color contrast); and assistive devices. The Offeror should describe the ability of the CBT administration system to interface with assistive/adaptive devices. The reply should include a description of specific devices that may be used and known devices that are not supported, as well as any special requirements necessary for use, and should describe how options for use are set for a student.

- ✓ Offerors must submit a demonstration (demo) of the proposed computer-based test administration system in an electronic format (CD, DVD, flash drive, link to fully functional online demo cite, etc.). The system demo provided should not exceed twenty-five (25) slides or thirty (30) minutes of presentation. This demonstration information should be provided with the Offeror’s technical response and should *not* include any pricing information.

The Offeror should describe the screen reader proposed for the CBT administration system. The Offeror should propose a method for reading text within the computer-based system that does not require additional, proprietary software installed on the user’s computer. The screen reader should be able to read all text and/or text descriptions of graphics or pictures, including graphics or pictures used as answer options. The system should also have the capability to use modified text if necessary (e.g., reading an algebraic equation with grouping symbols), and allow user

control of the reading speed and volume. The screen reader should be designed for use by both sighted and visually impaired students. The Department recognizes that the contractor may have different types of screen readers for these two purposes, but this difference should be transparent to the user. The Department must approve the usability and voice of the screen reader. In addition, the Offeror must ensure that the pronunciation of the screen reader is accurate, consistent across forms and subject areas, and would be recognizable to students. If the screen reader does not have accurate, recognizable pronunciation, it must be modifiable to meet the Department's standards. In addition, the Offeror must check the pronunciation on every form to ensure it is correct, is tracking properly, and is understandable prior to it being provided to the Department for review. The Department will work with the Offeror to develop screen reader specifications to ensure consistent performance of the screen reader.

During the test session, automated backup, recovery, and restart procedures for the system must be in place. The system must be capable of recovering data from any unforeseen test interruption and return the test-taker to the point of interruption. The system must also show student status and progress with the items on the test. The Offeror's staff and identified Department staff must have the ability to restart a submitted test. Test forms may only be available during the specified administration windows.

Security of the system, including the tests themselves and resulting test data, must be maintained at all times. Access to secure information must be restricted to authorized Department staff and school district personnel based on a secure, encrypted, password protected system. The ability to make changes to data or processes in any part of the system must be based on a password-protected, hierarchical permissions structure approved by the Department. The system must have security provisions that would prohibit any party from reentering a student's test session/test form to alter their original responses. For instance, during a two-day administration of the EOC, no party should be able to reenter the first section of the online test form to either review and/or to edit responses. Further, the system must have the capability for the Offeror to audit for any such activity upon the request of the Department.

As discussed, the proposed plan for computer-based testing must address mitigation of risk to ensure successful continuation of the assessment, as well as procedures in place for addressing problems immediately to avoid disruption to the test event. The Offeror is responsible for providing technical support to districts regardless of whether the interruption in delivery is the result of contractor error or malfunction or a school/district error.

In terms of hardware and software requirements, the system should:

- Support both wired and wireless connections to the system and all eligible devices that meet the specifications in Table 1. The respondent should also commit to continued support for future updates similar to those made available on the latest version of Partnership for Assessment of Readiness for College and Careers' (PARCC) Technology Guidelines that can be found at <http://www.parcconline.org/technology>. Other assistive technologies may be needed for students requiring accommodations.

- Support eligible devices with capabilities to “lock down” the device to temporarily disable features, functionalities, and applications that could present a security risk during test administration. Features that will need to be controlled during test administration include, but are not limited to, unrestricted Internet access, cameras (still and video), screen capture (live and recorded), email, instant messaging, Bluetooth connections, application switching, and printing. The contractor will develop, deliver, and continuously improve capabilities to “lock down” the device for the applicable operating systems and browsers.
- Support the current version within six months of release and two prior versions of the web browsers listed below (as of June 2013):
 - Apple Safari
 - Google Chrome
 - Microsoft Internet Explorer
 - Mozilla Firefox

The system must demonstrate and report that it can meet the following performance requirements in a controlled Internet access environment, requiring a bandwidth connection of no more than five (5) kilobits per second (kbps) per simultaneous test taker using a caching solution or fifty (50) kbps per simultaneous test taker without caching:

- deliver less than one second mean screen refresh rate for 90% of all users; and
- ensure that no users have a refresh rate of greater than five (5) seconds.

The Offeror should describe the ability to support a substantial number of simultaneous online users of the system (up to fifty percent (50%) of the current enrollment in Georgia Public Schools). Offerors should consider existing and planned communications infrastructures when proposing its system. Preferably, school, district, and Department technology architecture and computing hardware should not have to be replaced. The most recent technology inventory survey conducted by the Department can be located at the following link:

<http://www.gadoe.org/Technology-Services/Instructional-Technology/Pages/Dashboard.aspx>

Offerors should consider any services provided to other states when presenting this information. The contractor must continually monitor and report to the Department the number of simultaneous online users of the system during testing windows. The Offeror must provide a technical architecture proposal that demonstrates the system’s ability to support the number of users outlined in this SOW. The proposal should also demonstrate the system’s ability to expand or balance during peak loads.

The Department must have access to a system performance dashboard to monitor the assessment system during operational test windows. The dashboard should provide overall system performance reports that include services related to other states (without breaching security protocols). The Offeror should describe the metrics that will be included in the dashboard and viewed by the designated Department staff.

The Offeror's platform for computer-based testing should be able to perform, at a minimum, on devices that meet the specifications in Tables 1 and 2. The Offeror's platform should provide a variety of tools and features for students to utilize during testing. Table 3 provides the list of tools and features required and preferred.

The online computer-based delivery system must provide a 'practice center' in which test administrators and students may enter the delivery system in advance of a testing window in order to acquaint themselves with the system. The system must provide authentic views and functionality that replicates a true operational administration, including accommodations, but does not allow access to any secure sectors or materials. The practice center must be available year-round (12 months) and clear instructions on how to access and use the center must be provided.

Within the 'practice center,' Offerors should specify a plan for delivering computer-based practice tests, including accommodated computer-based assessments. The purpose for these practice tests is to familiarize students with the computer-based testing system and to provide students with an opportunity to practice answering various item types. All practice tests will include items similar to test format and content. Practice sessions will include approximately six (6) to twenty (20) items per subject and consist of the same types of items the student will encounter on the operational test. The 'practice center' must include tools and functionalities listed in Table 3.

All student tutorials/practice sessions must be reviewed and approved by the Department. In addition, the Department reserves the right to request updates to the practice sessions to reflect any changes in CBT platform functionality or necessary changes to the practice questions throughout the life of the contract. The Offeror must anticipate that these updates may occur and must be prepared to provide these updates, regardless of their frequency, at no additional cost.

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Table 1. Device Specifications for Desktop, Laptop, Netbook, and Thin Client/VDI¹ Computers

Operating System	Specifications
Windows	Windows 7 or newer
Mac OS	Mac OS X 10.7 or newer
Linux	Linux:Ubuntu 11.10, Fedora 16 or newer
Chrome OS	Chrome OS 19 or newer
Memory	1 GB RAM or greater
Connectivity	Computers must be able to connect to the Internet via wired or wireless networks.
Screen Size	9.5 inch screen size or larger
Screen Resolution	1024 X 768 resolution ² or higher
Input Device Requirements	<p>Keyboard Mouse or Touchpad or Touchscreen</p> <hr/> <p>The input device must allow students to select/deselect, drag, and highlight text, objects, and areas. The input device must allow students to enter letters, numbers, and symbols and shift, tab, return, delete, and backspace. To meet security guidelines, each Bluetooth/wireless keyboard must be configured to pair with only a single computer during assessment administration.</p> <p>Other assistive technologies may be needed for students requiring accommodations.</p>
Headphone/Earphone and Microphone Requirements (some student accommodations may require headphones/earphones (e.g., text to speech)).	<p>Headphones/Earphones</p> <p>Microphone</p>
Additional Guidance	<p>¹Each computer operating in a thin client environment must meet or exceed minimum hardware specifications, as well as bandwidth and security requirements.</p> <p>²Computers must accommodate the 1024 x 768 screen resolution minimum without panning. Some netbook computers may have screen resolutions slightly less than the 1024 x 768 minimum, yet may meet all other minimum requirements. Depending on netbook model specifics, school technology administrators may be able to reset screen resolution to meet guidelines.</p>

Table 2. Device Specifications for Tablets

Operating System	Specifications
Android	Android 4.0 or newer (with 1 GB RAM or greater)
Apple iOS	iPAD 2 or newer running iOS 6 or newer (with 512 MB RAM or greater)
Windows	Windows 8 or newer (with 1 GB RAM or greater)
Memory	By operating system
Connectivity	Tablets must be able to connect to the Internet via wired or wireless networks.
Screen Size	9.5 inch screen size or larger
Screen Resolution	1024 x 768 resolution ² or higher
Input Device Requirements	<p>Keyboard Touchscreen or Mouse</p> <hr/> <p>Due to onscreen space occupied by a tablet’s virtual keyboard, assessments will require external keyboards for test takers using tablets so as not to limit or obscure the view of test item content and related functionalities when text input is required.</p> <p>External keyboards must allow students to enter letters, numbers, and symbols and shift, tab, return, delete, and backspace. Tablet touchscreen interfaces can be used for student interactions with the assessments other than text input, including to select/deselect, drag, and highlight text, objects, and areas. To meet security guidelines, each Bluetooth/wireless keyboard must be configured to pair with only a single computer during assessment administration.</p> <p>Other assistive technologies may be needed for students requiring accommodations.</p>
Headphone/Earphone and Microphone Requirements (some student accommodations may require headphones/earphones (e.g., text to speech)).	<p>Headphones/Earphones</p> <p>Microphone</p>

Table 3. Computer-Based Test Presentation Requirements for Tools and Features

Tool	Description
Required Features	
Calculator	Computer-based calculators will be available to students for the mathematics tests. Numbers and functions on the on-screen calculator will be activated by mouse-click on the displayed button, or by keystroke of the appropriate keyboard key. User-acceptance testing will be required to assure that calculations are performed in the same sequence and with the same rounding rules applied as the hand-held calculators. Offerors should describe proposed functionality and features of calculators to be included in computer-based test forms.
Reference Sheet	The system must be capable of displaying a pop-up reference sheet for mathematics tests. This will be capable of being enlarged and the Department prefers that, when open, the reference sheet does not obscure portions of the test item.
Ruler	If it is determined that some mathematics test items require the use of a ruler, a pop-up ruler will be available to students. The ruler will be easily moved and rotated on-screen by the student.
Preferred Features	
Straight Edge	A pop-up straight edge, without measurements increments. The straight edge will be easily moved and rotated on-screen by the student.
Option Eliminator	A feature for eliminating options. However, the feature cannot eliminate the option by placing any mark on or in close proximity to the bubble that would be used for marking a response. It must allow the student to easily read the option after it has been eliminated. Students must be able to undo the elimination.
Bookmark	Mark test items for review and navigate easily to return to previous items, including those bookmarked for later review. Bookmarked items should be visible on an item summary page at the end of the assessment.
Highlighter	Highlight text on all tests and to erase the highlighting. If a student highlights in a reading passage, the highlighting should remain through all items related to that passage until the student erases it.
Notes	Allow students to create electronic notes for reading passages if desired. These notes must not hinder reading of the passage. Notes should travel for each passage and item associated with that passage, then refresh with each new passage.
Footnote Pop-Up	Reading items require a pop-up footnote. That is, if the student clicks on a footnote number occurring in the passage, the text for the footnote appears. Footnotes must also appear at the end of the passage.
Student Tutorials/Practice Sessions	Each student that takes the computer-based test must have the opportunity to learn how to use the tools, select/enter responses, and navigate the system in a short practice session with instructions that may be either teacher-directed or independently conducted. The Offeror will produce

	and make available a web-based practice test for each assessment. The Offeror must also provide access to a selectable practice test at the beginning of any test session within the platform.
Tool	Description
Accommodated Features (Required)	
Variable Font	The system must be able to display items and text using variable font sizes. For example, footnotes for words in passages must appear smaller at the end of the passage than the text used in the passage.
Administrator-Selectable Zoom	The system must be able to Zoom in increments from approximately 12 point to approximately 72 point available for the student to zoom or for the administrator to preset. Graphics must be able to be enlarged also. Any buttons, tools, the pointer/cursor, and the scrollbar must also enlarge based on the zoom level selected.
Administrator-Selectable Large-Print Font	The system must allow for selection of a large print font of at least 14 point font and up to 72 point font. The student must then be able to zoom as indicated above.
Administrator-Selectable Variable Font and Background Colors	The system must allow for selection from a pallet of colors for font and background colors. The Department prefers fonts of black, dark blue, light blue, pink, and yellow with backgrounds of white, black, brown, or dark blue. Other colors may be recommended. Any buttons, tools, the pointer/cursor, and the scrollbar must also change based on the colors/fonts selected.
Administrator-Selectable Screen Reader	Provide an integrated (preferably password-enabled) selectable screen reader capable of reading via headset to the student, all text, mathematical symbols, and text within graphics. The Offeror must ensure that the screen reader has one consistent voice and is not operating-system specific. The Offeror must run quality control checks on all products, test forms, graphics, and items to ensure the screen reader pronounces words correctly.
Administrator-Selectable Assistive Devices Integration	Support assistive/adaptive devices commonly available to support computer input and interaction to persons with disabilities.

The Offeror must propose thorough test site set-up and certification requirements. The Offeror will be responsible for assisting schools in certifying that computers are properly prepared and can make the necessary Internet connections to successfully deliver tests. The contractor will develop and make available an infrastructure test, consisting of mock items, that replicates the size of an operational test form and is run on the actual testing platform (i.e., users log in to the testing platform as if they were logging into a live test). The contractor will assist the Department in developing a guide to walk users through running the trial on machines that will

be used for testing to help them identify technical issues and make adjustments prior to live testing.

→ Describe in detail the computer-based test delivery platform, including all functionality, features, and tools. The Offeror must demonstrate the testing system's ability to support the number of users anticipated and demonstrate the system's ability to expand or balance during peak loads. The proposed solution should also: (1) describe the security function of the system and auditing functionality concerning the security of users, levels of access, item banks, and results; (2) describe the Offeror's business continuity plan that addresses system outages at the following logical levels: Offeror's testing system; district; and school. The plan must also include how the Offeror will provide technical support, including response times at each level and escalation protocols; and (3) describe the proposed test site set-up, certification, and system check measures to be implemented, including experience with such measures in other states. The Department reserves the right, at its discretion, to require an Offeror to provide an in-person demonstration of its computer-based delivery platform at the Department offices in Atlanta. Offerors will be notified during the evaluation process if such a demonstration is deemed necessary.

Paper-Based Test Administration. In addition to computer-based administration, the Offeror must allow for paper-based test administration. Test booklets and customized answer documents, that are color-coded, labeled by grade (EOG) or course (EOC) and form, and contain a matching number of items per section for each content area test or course, are required. Test booklets and answer sheets must break at even intervals, and the document design should ensure that examinees will have a clear understanding of where corresponding sections of the test booklet and answer document end and begin. The Offeror must include explicit directions in the Examiner's Manuals indicating where a student should end a section of the test and begin a subsequent section of the test.

Test booklets must have unique bar codes allowing for the tracking of each individual book and include security seals preventing exposure to test content prior to administration. Depending on the number of forms developed to field test newly developed items, test forms should be spiraled within a school. A security checklist which includes the list of all security barcode numbers for all secure materials in ascending order by product must be provided to each district and school with space to indicate assignment and return.

The Offeror must provide districts and schools with student pre-id bar code labels, using data transmitted by the Department to the successful Offeror in an electronic format that is mutually agreed upon. Transmission of data must be in a secure manner, following industry standards. The Department must review and approve both the content and the format of the label. At a minimum, the label must include the following viewable information: student name; Georgia Test Identification number (GTID); gender; date of birth; district and school name and code.

The materials must be distributed to districts in a timely, secure, and trackable manner. All boxes must be addressed to the System Test Coordinator and must be packaged for easy

distribution to schools within each district. Test materials should be packaged by school and grade/course unless otherwise specified. Materials should be packaged in uniformly sized boxes (not to exceed 30 lbs.), allowing for easy transport by school personnel, and must contain appropriate packing material to minimize potential damage or destruction to the boxes and/or materials during shipping. Test booklets must be shrink-wrapped with no more than 15 booklets per package. Test materials must be palletized and shrink-wrapped prior to shipping to districts. For the large districts, identified by the Department, the Offeror should work to accommodate packing organization to assist in the internal dissemination via local shipping/delivery routes. All boxes and materials must be labeled appropriately and contain a shipping/packing list detailing all contents. Materials must arrive in districts two weeks prior to each district's testing window. Shipping dates must take into account each district's holidays such as Thanksgiving, winter, and spring breaks.

The Offeror is responsible for the printing and distribution of sufficient materials to accommodate each district's enrollment plus an overage of 5% to 10%. Districts should have the flexibility to select the amount of overage needed at the school and district level based on historical need. Overage amounts to be offered at district and school level, within the online management system, include 5%, 7% or 10%.

The Offeror is responsible for the production of accommodated tests including Braille and large-print editions. For the 2012-2013 school year, approximately 65 Braille and 1300 large-print booklets were ordered for the CRCT across grades 3 – 8. For the EOCT, approximately 25 Braille and 500 large-print booklets were ordered across all assessed courses. The Offeror's online management system must include a process by which systems specify, in advance, how many Braille and/or large-print forms they will need for each administration.

Braille editions and associated services must be provided in accordance with the same standards and timelines as non-Braille editions. Use of universal design should facilitate comparable editions of each test form and reduce the need to eliminate items from Braille editions of a test form. Georgia educators who work with visually impaired students and the Department must be involved in the review of Braille forms prior to their production and distribution. As such, the Offeror should propose the best, most efficient and defensible solution for the development, production and review of Braille forms for each test. The proposed solution should include use of industry-leading methods and organizations (e.g., American Printing House) to accomplish this task. The most current, industry-standard Braille formats, in consultation with the Department, must be employed. Should industry standards and/or methods relative to materials for visually-impaired students change during the course of time addressed in this proposal, the Offeror will keep the Department abreast of such changes and proposed approaches/solutions will be provided by the Offeror.

Following the identification of items suitable for use on a Braille test form, the Offeror will arrange to produce one Braille form for each main administration and assume all related costs for the review and subsequent production and distribution. The Offeror must also prepare a revised administration manual, as an addendum, for Braille test users.

→ Describe all processes and protocols that will be established for printing and distributing paper-based test materials in a secure manner, including all materials to be provided.

Test Administration Accommodations. The assessment system must be accessible to all students, including those who may require test administration accommodations in order to access the test and show what they have learned. Georgia’s current student assessment program offers a variety of test administration accommodations to students with disabilities, including those served under Section 504, and English learners. Current accommodation policies are included in the *Student Assessment Handbook*, posted on the GaDOE Testing webpage, as are a variety of other resources detailing the policies and protocols for accommodations. It is the Department’s philosophy that accommodations:

- facilitate the accurate demonstration of what the student knows and can do as a result of instruction through the elimination of any construct-irrelevant variance introduced by a specific disability, combination of disabilities, and/or limited English language acquisition; and
- do not provide the student with an unfair advantage or interfere with the validity of the test.

The Offeror must work collaboratively with the Department to develop a comprehensive and cohesive policy on test administration accommodations for eligible students regardless of mode of administration (computer- or paper-based). As previously discussed, all items and forms must be developed using universal design principles in an effort to ensure accessibility to the widest range of students possible. Test administration accommodation policies must be designed to augment student access and must clearly reflect consideration of the constructs inherent in the content standards measured on each test. Offerors must demonstrate their capacity, including past experiences with other programs, to directly inform the development of a comprehensive and cohesive policy surrounding test administration accommodations, including the conduct of empirical studies designed to establish the appropriateness of specific accommodations. The Department views this work as critical, given the primary goal of the assessment system is to provide a clear and consistent signal about each student’s mastery of the state content standards at all levels of the achievement continuum. The ability of each student to access the test to demonstrate his or her knowledge and skills is essential in achieving this goal.

→ Describe the Offeror’s capability and experience with informing and developing test administration protocols and policies, including a description of empirical evidence collected to substantiate the appropriateness of accommodations. Include the steps and actions to be taken in assisting the Department with the development of a comprehensive and cohesive accommodations policy for the new assessment system that is in compliance with federal regulations and expectations.

Student Resource Policies. The role of calculators in the mathematics EOG and EOC and select science EOC must be considered. The Offeror must work collaboratively with the Department to develop a comprehensive policy covering the use of calculators (including the type of calculator allowed) and any other resource(s) that may be needed by students on the

assessments. Policy considerations must take into account the constructs measured at each grade or course as well as test security. Such policies will directly inform various aspects of item development, form construction, and administration procedures and protocols, and must protect the integrity of the assessment system.

Test Administration Manuals. The Offeror must provide customized administration manuals to guide and govern the administration of the assessment system. All manuals must be printed and provided to districts and schools regardless of mode of test delivery (computer-based or paper-based administration). The following administration manuals must be provided separately for the EOG and EOC components of the assessment system:

- Test Examiner’s Manual – one addressing administration procedures and protocols unique for computer-based administrations and another addressing procedures and protocols for paper-based administration.
 - The Test Examiner’s Manual must be provided at a ratio, manual to students, 1:15, plus 10% overage.
- School/System Test Coordinator’s Manual – addressing administration protocols for both computer- and paper-based administrations.
 - The School/System Test Coordinator’s Manual must be provided to every district and school, plus 10% overage.
- Technology User’s Guide – addressing technology requirements, browser compatibility, site readiness and installation/maintenance processes, troubleshooting guides, quick start guides, and all other necessary/required procedures for district and school technology coordinators.
 - The Technology User’s Guide must be provided to every district and school, plus 10% overage.

Administration requirements, protocols, and procedures must be explicitly outlined in the test administration manuals. The Examiner’s Manual should include explicit directions and scripts for all content area/course tests, including information regarding the beginning and ending of each test section. Manuals must include, but are not limited to, audience-appropriate information about the security of materials, receipt, inventorying, and distribution of materials for administration, protocols for completing student demographic information, and packing and returning materials. Information in the manuals must be congruent with administration protocols promulgated annually by the Department in the *Student Assessment Handbook*. Test administration procedures and policies must be clearly and thoughtfully articulated within all manuals as failure to follow protocols can result in the suspension or revocation of an educator’s certificate. District superintendents and principals must sign and submit certification forms attesting to proper test administration. In every respect, the test administration manuals are critical to the success of the assessment system and must be of the highest of quality. The Offeror must work with the Department in a collaborative fashion to develop high-quality manuals.

Test Administration Preparation. The Offeror will prepare, in consultation with the Department, pre-administration training materials, to include all administration manuals, prior to

each administration. The Department will conduct pre-administration training webinars (hosted by the Department), with the Offeror's assistance (as needed), to review the procedures, requirements, materials, and timelines associated with the administration of the EOG and EOC. The pre-administration webinars must include thorough direction, guidance, and key considerations to assist System Test Coordinators in planning for a smooth and successful administration. This will necessitate the readiness of all applicable manuals and other documentation based upon a schedule to be determined by the Department.

Additionally, the Offeror must provide training materials to support computer-based administrations, including system readiness checks and certification protocols. These training materials should outline the key issues to be covered during school and district technology coordinator training of critical elements of the online management system.

→ Describe the protocols and procedures the Offeror will follow in the development of high-quality test administration procedures and related manuals, resources, and tools, including but not limited to the test administration preparation training materials and procedures to be conducted and the intended audience, including experiences in providing such services and products in other states.

Post-Administration Requirements. Following each administration, the Offeror will provide a security report to the Department listing the number and types of materials not returned, including the district and school to which the material was originally sent. The Offeror will notify districts when materials are not returned and assist the Department in reconciling records. The Offeror will provide a secure-material report to the Department, provided notification of missing materials to districts, and maintain reconciliation records.

SCORING AND REPORTING

The Offeror will propose a plan for how the assessment system will be scored and reported. Such a plan shall include a variety of activities that occur pre-administration and post-administration to ensure that student scores are accurate and reliable. The plan shall encompass the creation of written documentation for scanning, scoring, and reporting; standard setting; psychometric activities precursory to testing as well as post administration; and creation and distribution of reports.

The scoring and reporting plan shall include how the Offeror will work with the Department in preparing a detailed document outlining each step of the scoring and reporting process and how the Offeror will provide verification that scores are accurate, reliable, and ready for release. The Offeror must develop a scanning, scoring and reporting (SSR) document to ensure that quality control procedures are in place, that data **are** accurate and verifiable through replication by the Department or its designee, and that districts can receive student assessment results in electronic format in a timely manner. Included in the documentation must be a description of processes to help ensure that testing irregularities and invalidations can be reconciled with Department records during and after test administrations. The SSR document must meet Department approval.

The SSR must provide specifications (inclusive of content and timing) for all test result reports and data files including, but not limited to a description of the report; an analysis of how the data on the report **are** generated; when the report will be generated; a sample report based on early return or mock data; what data files (system and state) will be produced; what elements will be included in the data files; and file layout with specifications for the data files. The Offeror must clearly indicate the intent of each report, the information to be included, and the language and graphic methods to be utilized; indicate exactly which population of students is included in each report; and ensure that resulting scores are reported on the scale that has been approved by the Department.

The Department will specify the information that will be released to the districts electronically on an expedited schedule; historically, this has included class roster summaries and reports of students who did not achieve proficiency for promotion and retention grades for CRCT and class rosters that include the grade conversion score (used in calculating final course grades) for the EOCT. Flat data files have also been provided.

Standard Setting. Critical to reporting is the setting of test performance or achievement standards (i.e., cut scores). Setting achievement standards is a critical step towards providing definition to the reporting scale for the assessment system and facilitating interpretation. Historically, Georgia has used the modified-Angoff methodology. Given the purposes of the new assessment system, however, the Department is open to other methods or approaches provided the method or approach proposed is technically sound and results in the desired attributes of the assessment system (e.g., coherent signals about student mastery of the content standards; clear signals of students' preparedness for the next educational level; and consistency with well-respected external measures of student achievement such as NAEP, SAT, ACT, etc.). The Offeror's proposed solution for standard setting for the EOG and EOC must include a detailed and thorough plan for conducting standard setting.

To ensure the legal and psychometric defensibility of the achievement standards, the plan must include, but is not limited to:

- technically sound standard-setting methodology(ies) and procedures that are well documented, open to public scrutiny, and psychometrically defensible;
- involvement of stakeholders familiar with the content standards, including educators and post-secondary faculty of the content assessed as well as other content experts or policy makers;
- an explicit link between the state content standards and the assessment on which the standards are to be established;
- careful consideration of impact data for all students, including key subgroups;
- vertical articulation of the recommended achievement standards that can be reviewed across grades and course to ensure coherency; and
- procedures for analyzing and validating the quality, accuracy, and reliability of student performance information reported using the resulting achievement levels.

As previously mentioned, standard setting must occur for the EOG in language arts and mathematics and the EOC in language arts. Given recent development efforts, a policy review may be warranted for the EOC in mathematics. The Department will consult with its Technical Advisory Committee (TAC) to determine if such a policy review is sufficient or if a full standard setting process should ensue. For the content areas of science and social studies, an achievement level policy review, in which the established achievement levels and cut scores are reviewed in conjunction with other pertinent information about student achievement and key policy considerations, will be taken into account. Offerors should propose solutions accordingly, keeping in mind the current programs consist of three (3) achievement levels and not four (4). Advisory panels composed of 15 to 20 individuals who are considered a diverse group of stakeholders must be convened for each new test. The Offeror will be responsible for arranging and incurring all expenses for these meetings, including but not limited to facility arrangements, recruitment and notification of participants, participant accommodations, travel, and per diem following state travel regulations, providing necessary equipment, development and provision of necessary technical calculations or analyses, development and provision of all materials to train the panel on the standard-setting process, preparation of items and data for review by the panel, collection of detailed information about the committee participants, facilitation of the meetings, and requisite technical documentation. Offerors must have the technical capacity to produce impact data on the spot at standard setting.

The Offeror will be responsible for using statistical techniques proposed, identified by the Department, and/or its TAC, to adjust and align the various passing standards among the content areas and within a content area across grades to make a well-articulated set of achievement expectations across the assessment system. The Offeror is responsible for all articulation meetings or activities following standard setting. In addition, the Offeror is responsible for the production of a technical report detailing the standard setting event and outcomes and any other support the Department may need in presenting the standards to the State Board of Education.

An essential component of any standard setting is the use of achievement level descriptors that capture and fully describe the knowledge and skills a student possesses who has achieved that achievement level. It is anticipated that there will be four (4) achievement levels for each test comprising the assessment system. The Offeror must propose a plan for developing these achievement level descriptors, ensuring the descriptions are well articulated across the four achievement levels for each grade or course as well as across grades and courses within the same content area. Descriptions for proficiency must reflect the high expectation for student achievement inherent in the content standards and must position Georgia students to compete with their peers nationally and internationally. Offerors must ensure the descriptors reflect the knowledge and skills inherent in the content standards that signal preparedness for the next educational level. All achievement level descriptors must be approved by the Department prior to their adoption and use in the standard setting process. Georgia educators, both K-12 and postsecondary, must be involved in the development and review.

- Describe the development of robust, meaningful achievement level descriptors that are clear, concise, aligned to the content standards assessed, and accurately reflect the achievement expectations in those standards.
- Describe the standard setting methodology(ies), including articulation, to be employed. The descriptions must include the technical merits of the proposed approach and include how the proposed approach will ensure the purposes and uses of the assessment system, as outlined in this SOW, will be achieved and supported.

Scoring and Associated Psychometric Activities. In general, with respect to scoring and the associated psychometric work undergirding the assessment system, the Offeror is responsible for:

- accurately scoring all items, including hand scoring of constructed-response and extended-response items;
- all psychometric activities related to the calibration of items, and the equating and scaling of test forms;
- verification of scores prior to the release of any assessment results
 - accuracy of the results must be ensured by checking data in three steps: mock data, early return, and final data;
- providing the Department with complete documentation indicating the exact data verification and quality control procedures followed; and
- providing the Department with an assurance letter verifying the accuracy of the data.

The scoring process must address the quality and accuracy of procedures used to scan answer documents for paper-based administrations. Calibration of scanners should be included. For computer-based administrations, Offerors must detail how student responses are captured and prepared for scoring. Critical to the scoring of selected-response items is the verification of the answer key. Offerors must include the process by which answer keys are verified in their proposals. The scoring process must address how selected response items will be scored against the answer key. The Department requires that all data files contain both student response fields as well as the scored response fields.

The Offeror must provide details on how the constructed-response items will be scored. Hand-scoring refers to the processes necessary for determining the rating of a student's response on the constructed-response or extended-response items in language arts and mathematics. Both paper-based and computer-based tests will contain such items; therefore, the Offeror must have the capability to score both hand-written and key-entered student responses. The Offeror's scoring plan should include information about contractor staffing that sets forth minimum education and experience requirements for various roles such as scoring directors and team leaders, the number of personnel needed, timeline for scoring, etc. The scoring plan must include location where scoring will take place and how the security of test items and student responses during hand-scoring will be maintained.

The scoring plan also should explicate the range-finding component of scoring, including staffing, procedures, validation of rubrics, and creation of student exemplars with annotations. The Offeror must work collaboratively with the Department during range-finding, including the creation of training, qualification, and calibration materials. When practical, it is the Department's desire to involve Georgia educators in the range-finding process.

One of the most critical features of hand-scoring is the use of readers or raters. This section of the scoring plan must detail the minimum qualifications of potential reader applicants (Georgia requires a college education and knowledge of the content area to be scored) and address how these candidates will be trained and qualify to be readers. The Department will evaluate such aspects of the proposed plan such as training procedures, including the use of training sets, practice sets, qualifying sets of student responses, and scoring fidelity throughout the scoring event. Once readers qualify to rate student responses, the Offeror should outline the procedures that will be put into place to ensure the raters remain calibrated. Calibration of raters through interim monitoring for their accuracy (validity) and reliability (inter-rater agreement) are crucial to this portion of the scoring process. In addition, scoring team leaders must "read behind" each reader to determine the accuracy of their scoring. The Department desires independent rating by two raters that includes resolution/adjudication process when scores are not adjacent and requires such a solution for the EOC components of assessment system. At a minimum, Offerors must propose a twenty-five (25) percent second read for the EOG components. Should the minimum approach be proposed, Offerors must establish a formal resolution process, should the two raters' scores not match. The Department requires hand-scoring processes yield reliable and valid results in addition to being efficient in terms of time and expenditure.

The Department requires that the Offeror provide a report of the hand-scoring process and an assurance of accuracy before integration of the constructed-response scores with the selected-response scores. This report shall include such features as: 1) item details (i.e., item ID, form number, sequence number, and number of reads for each item; 2) inter-rater reliability statistics including number and percentage of perfect, adjacent and non-adjacent agreement; 3) validity statistics including the number of validity reads, number and percentage of perfect, adjacent and non-adjacent agreement; 4) distribution of scores and nonscorable codes; 5) mean, median, modal score, and score variance and standard deviations for scorable responses; and 6) final quality assurance monitoring reports from the hand-scoring system that include rescoring and retraining rates. The Department may elect to be onsite during training and/or scoring. The Offeror will be responsible for all travel arrangements and associated expenses for Department staff following state travel regulations.

The Offeror's scoring and reporting plan must entail how the results from the selected-response portions for a student are integrated with a student's open-ended portions of the test. The Offeror must demonstrate what processes will be in place to ensure that a student's total test score is truly comprised of only that student's responses from the two portions. Such a plan must explain what happens when there are students missing portions of the test and how to resolve such issues.

The Offeror must explain, in detail, the associated psychometric activities that are related to the assessment system, including the development and maintenance of test construction specifications which include the content and psychometric guidelines for building equivalent forms. Item selection will be based on matching target test characteristics, test information functions, and standard error curves in addition to meeting other content and psychometric requirements.

The Offeror must outline the specific steps it will take to calibrate items and equate and scale test forms. Historically, the Department has utilized the Rasch model; however, the Department is open to other models that best meet the needs of the assessment system. Offerors should propose their best thinking in consideration of the assessment system conceptualized in this SOW.

Georgia has used a pre-equate model once a test has been established, with a post equate check based on a representative sample of early returns for the CRCT and a pre-equate model for the EOCT. Item calibration and robust item bank maintenance are essential to maintaining the psychometric health of the program and in particular the item bank. The Offeror will work with the Department and its TAC to establish routine item parameter updates to maintain a healthy and robust item bank. The Offeror must describe the process, considering both content coverage and psychometric characteristics, by which anchor/link items will be selected and embedded on the test forms. Additionally, the Offeror should outline how new field tested items will be embedded to ensure an adequate, representative sample of Georgia students respond, are subsequently calibrated, reviewed, and placed into the item bank, if approved by the data review committees, for possible use on future editions of the test.

Georgia will utilize the expertise of one or more of its TAC members to review equating procedures and outcomes, including replication and feedback. The Offeror is responsible for remuneration of such services, which have required approximately two days of work in the past. The Department will select the TAC member(s) to conduct such work.

The Offeror should propose a detailed plan outlining the procedures to be taken in scaling the assessment system given the four achievement levels. It is the Department's intention to adopt a new scale for the assessment system so as to send a clear message about the new and increased expectations for student achievement. The scaling approach must be sufficient to support the four achievement levels. In building the assessment system, the Offeror must ensure all components of the system in each content area are well articulated, setting the ground work for the construction of a vertical scale. The Department recognizes that the use of vertical scales is debated within the measurement community for a variety of reasons. Whether the Department elects to build and implement a vertical scale for the assessment system remains to be determined. Nonetheless, the Offeror should propose a plan and provide costs for building a vertical scale. Such a plan should describe the process of determining the hierarchical common content across grades, the data collection procedures, and how, by whom, and by when such work will be completed. The vertical scale plan must be approved by the Department and informed its TAC prior to work commencing. The timing of the studies necessary to build the vertical scale should be carefully considered to ensure optimum information and scale stability.

All raw score to scale score tables, grade conversion tables, and norm-referenced scores, if applicable, shall be made available to the Department in advance of reporting for replication.

The Department will continue to report Lexile scores with the EOG in Language Arts and the two EOC in language arts. With the change in the structure of the language arts EOG and EOC tests to include constructed-response items and the development of a new reporting scale, it will be necessary to establish the relationship between these scores and the Lexile Framework. The Offeror shall propose a plan for collaborating with the Department and MetaMetrics, Inc., to link the EOG and EOC scales to the Lexile Framework. While MetaMetrics will conduct the linking study, for contextual purposes it should be anticipated that MetaMetrics will develop a parallel test form for each EOG and EOC to be linked, using the Lexile scale and administer this test to a representative sample of Georgia students. As soon as available, the Offeror must transfer, in a secure manner with Department oversight, the EOG and EOC data for the sampled students so that the linking study can be conducted and correspondence tables between the Lexile Framework and the EOG/EOC scales can be established. The Department will continue to maintain a separate contract with MetaMetrics for the licensure use of the Lexile measure. The Offeror will be expected to provide key information about item and form characteristics, as well as data, to the Department and MetaMetrics to facilitate the development of the linking study. Furthermore, the Offeror will include the corresponding Lexile score, and supporting information, on all relevant reports developed and produced for the new assessment system.

The Offeror must provide a sound psychometric plan for using embedded aligned NRT items to generate nationally comparable information. It is the Department's desire to utilize the most recent norms available. Offerors must provide sufficient technical detail in their solutions to allow the Department to evaluate the technical strength of the normative data proposed, including the quality of the items to be embedded.

The Offeror may be required to perform additional data analyses, as directed by the Department, in order to ensure the accuracy of the test scores or to provide data for programmatic review, evaluation, federal peer review, or other inquiries into the functioning of the assessment system.

In the determination of student scores, there are certain situations that must be addressed both psychometrically and via Departmental policy in order to determine a valid score; in other words, which students should receive a valid and reliable score and which ones will not. Such instances include situations like invalidations (IV), participant invalidations (PIV), did not attempt (DNA), present did not attempt (PTNA), and test exemptions (such as EL-deferred). For the EOC, student results should also denote form number and administration (main, retest, mid-month, and test-out) to fully clarify each student's test score.

→ Describe the scoring process for both selected-response items and constructed-response items, including 1) steps and equipment for machine-scoring and staff expertise and 2) experience and all activities related to the implementation of a sound hand-scoring system, and how these procedures ensure the accuracy and reliability of student scores.

→ Describe all psychometric activities, including the expertise and experience of assigned staff, which reflect industry best practice and are designed explicitly to result in a robust and technically sound assessment system which produces valid and reliable student scores. Such description must include the Offeror's plan to embed aligned NRT items and discuss the technical merits of the proposed plan.

Creation and Distribution of Reports. The Offeror will be responsible for the creation and distribution of a variety of reports (both printed and electronic) as well as electronic data files. For both the EOG and EOC, reports are to be produced at the student, class, school, district, and state levels. Individual Student Reports are to be produced in both hard-copy (i.e., paper) and electronic (e.g., PDF). A reporting plan should encompass types of reports and data files, mode of delivery, and time of distribution. Electronic data files at the system and state levels are to be delivered for both the EOG and EOC following each operational administration.

Reports must be straightforward, easy to interpret, accurate, and complete. While both the CRCT and EOCT programs have produced a variety of reports, the Department is seeking to improve the reporting design and information provided at all levels of reporting. At a minimum, reports must provide numeric, narrative, and graphic representations of assessment results and must effectively communicate with intended audiences including students, parents, teachers, administrators, school boards, press, and the general public. Importantly, reports will comply with all requirements of state and federal laws and regulations by providing both aggregated and disaggregated data at the school, system, and state levels.

✓ The Offeror must include example reports illustrative of their best efforts in developing creative and highly informative score reports.

To provide context, the following reports have been historically provided for the CRCT and EOCT programs. However – and importantly – the Department is interested in improving the reporting system as a whole, including streamlining and reduction of redundancy.

CRCT/Grades 3 – 8:

- Student Score Label
- Individual Student Report (contains Lexile measures with Language Arts results)
- Performance Level I Roster (produced in electronic format only and designed to assist schools and systems in identifying which students need remediation and a retest opportunity for the promotion/retention grades and subjects)
- Class Roster Report (list of individual students)
- Class Roster Summary (appears on the above mentioned roster report)
- Performance Summary Reports (School, System, State)
- Summary Reports of All Student Populations (School, System, State)

EOCT/High School:

- Student Score Label

- Individual Student Report (contains Lexile measures with Language Arts results)
- Class Roster Report (list of individual students)
- Class Roster Summary (appears on the above mentioned roster report)
- Summary Reports of All Student Populations* (School, System, State)
- Content Area Summary Report* (School, System, State)

*Note that Mid-Month administration results are currently aggregated into summary data for main administrations.

The Offeror is strongly encouraged to propose a new and improved set of complementary reports that fully reflects the identified purposes and uses of the new assessments system rather than simply propose to produce reports similar to those issued for the current CRCT and EOCT. The Department highly desires reports that increase the quality of information provided about student achievement and provide relevant information to educators, students, parents, and other stakeholders. Reports should contain information that is clear, concise, and directly informs educational practice.

The Offeror will produce electronic data files at system and state levels for both the EOG and EOC following each operational administration. Electronic data must be in a format (e.g., flat ASCII file) and include the fields approved by the Department that can be readily imported into local databases for use. Further, for the EOC program the data must be provided in such a manner that systems can rapidly process it for loading into their local student information systems for grade reporting/report card generation purposes. Plans for the creation and delivery of electronic data files must also address how the Offeror will update state and system data files when such issues as late invalidations, late scoring, and rescoring surface following the close of administration windows. All electronic reports and files are to be delivered securely to the Department for dissemination through the agency's secure Portal, known as the MyGaDOE Portal. To facilitate such delivery the Offeror will have to conform to the Department's file naming conventions and file folder structure conventions. The Offeror may propose an alternate or redundant method of delivery of electronic reports directly to systems, and if so, the Offeror must provide direct customer support to systems relative to the transmission and receipt of electronic data. Regardless, all data files must be accompanied by detailed layouts with clear and comprehensible data field descriptions.

Within the context of the Department's desire to improve upon reporting in appearance, content, and delivery, the Offeror must provide a suggested list of scores to report. Currently, a student's individual score report provides scale scores, standard error of measure (SEM), achievement level, achievement level description, domain scores in terms of items correct out of number possible, Lexile scores (where applicable), and grade conversion scores (GCS) for the EOC. The reporting of Lexiles has been customized for Georgia and includes the Lexile score, as well as the student's Lexile range and sample book titles that fit within a Leisure Reading and Challenging Reading range based on his/her own Lexile score and Lexile range. In addition, the Offeror should provide details about how to report NRT results to allow parents an

understanding of how their student is achieving compared to his/her peers nationally.

Student level information reported in data files should capture and reflect the various sources (i.e., pre-ID, coding on answer document, and resolved). The rules for resolving conflicting information must be documented in the SSR document so it is clear which source is used for reporting such critical information as FTE, GTID, gender, SWD status, EL status, school number, system identifier and teacher/class identifier, etc.

Summary reports should include such data as number of students by type of administration; mean scale scores; standard deviations; number and percent by performance level; number of Present, Test Not Attempted (PTNA), Did Not Attempt (DNA); number of students exempted where applicable (e.g. first year in U.S. EL deferred); domain scores as number of items possible, mean correct, percent correct; etc. The reports and data referenced above should be considered as a guide and not exhaustive as the Department is looking to improve reports to enhance communication to all stakeholders.

Relative to the timing of distribution of reports and data files, school systems in Georgia have come to expect quick turn-around time of student results and delivery of reports electronically. The Offeror must employ procedures to ensure that systems and schools that test early in the testing window receive their results before schools that test late in the testing window. Further, it is anticipated that use of computer-based testing will allow for a more rapid provision of results for the first set of reports that appears below. The Offeror may propose improvements or modifications to improve upon the timelines that are currently in practice, taking into consideration that some tests will include constructed-response items that will require hand-scoring.

Current practices are summarized here to provide the Offeror a picture of what Georgia has provided and to allow the Offeror to consider possible improvements to the reporting system.

Current CRCT reporting practices include:

The following reports are provided within five days of receipt of answer documents via paper or computer-based testing (and after post-calibration/equating check activities have been completed) in electronic format:

- Performance Level I Roster
- Class Roster Report (list of individual students)
- Class Roster Summary (appears on the above mentioned roster report)

The following are provided no later than the last week of June annually in the formats noted:

- Individual Student Reports
- Performance Summary Reports (School, System, State)
- Summary Reports of All Student Populations (School, System, State)

The Department desires a similar reporting schedule and seeks a creative, viable, and technically

sound solution to allow the retest administration to occur after conclusion of the main administration of the EOG within the school year. All reports, with the exception of the individual student report, are to be provided in an electronic format. Only individual student reports are to be provided in hardcopy (paper) format; two (2) copies should be provided. A single electronic copy of the individual student report must also be provided.

Current EOCT reporting practices include:

- On-demand reporting within 24 hours of student completing an online test, noting that scores are considered preliminary.

The following reports are provided typically within one to three days of receipt of answer documents via paper or computer-based testing (and once calibration and post-administration checks have been concluded):

- Class Roster Report (list of individual students)
- Class Roster Summary (appears on the above mentioned roster report)

The following are provided no later than four weeks following the close of main administrations in the formats noted:

- Individual Student Reports
- Summary Reports (School, System, State)
- Content Area Summary Report (School, System, State)

The Department desires a similar reporting schedule and seeks a creative, viable, and technically sound solution to address the use of the EOC in course grade calculations. All reports, with the exception of the individual student report, are to be provided in an electronic format. Only individual student reports are to be provided in hardcopy (paper) format; two (2) copies should be provided. A single electronic copy of the individual student report must also be provided.

The Offeror must propose realistic timelines for producing and reporting scores for both EOG and EOC with constructed-response items/sections while being cognizant of a school's need for student information in a timely manner to make remediation and/or placement decisions or final course grade determinations. As previously mentioned, it is understood that post-administration activities such as item calibration and standard setting may delay the reporting of results the first year. Nonetheless, Offerors should propose solutions that address the needs of the assessment system in a timely manner. While a delay in reporting for the first year may be necessary, it is the Department's expectation that results will be reported prior to the opening of the 2015-2016 school year.

Offerors should consider the purposes and uses of each component of the assessment system (EOG and EOC) in their design of score reports. Of particular importance is ensuring the reports proposed and ultimately produced provide actionable information to educators so that appropriate enrichment or remediation opportunities can be planned for individual students. The EOC student-level reports must be designed in collaboration with postsecondary faculty to

highlight critical concepts and skills students must demonstrate mastery of to be considered college and career ready. The identification of those critical concepts and skills, followed by high-quality reporting of student mastery, must facilitate and enable any needed remediation to occur in high school, prior to graduation and post-secondary entry. The Offeror should explicitly outline their approach to ensuring such reports are designed and produced.

Following all test administrations, the Offeror will be required to provide electronic copies of ALL reports to the Department in PDF format.

Further, a method must be proposed for handling re-score requests, including collection of a fee approved by GaDOE. Offerors may not charge a re-score fee if a change in score results. Re-score fees will be paid by the requesting party as invoiced through the local system. The Offeror should also propose a method for updating state and system data files when such issues as late invalidations, late scoring, and rescoring surface following the close of administration windows.

→ Describe the development of a detailed score report creation and distribution plan commensurate with details included in the SOW, including capabilities, experience, and proposed timelines. The plan should include consideration of any potential barriers that might arise as well as proposed solutions/mitigation strategies. The proposed solution must ensure all federal and state laws and guidelines for reporting student academic information are fulfilled and address reporting timelines, including the provision of electronic data files.

TECHNICAL DOCUMENTATION AND ASSISTANCE

Technical Documentation. The Offeror must produce a technical report, on an annual basis, documenting the technical quality and characteristics of the assessment system. The Offeror is responsible for collecting, analyzing, and synthesizing all aspects of the technical work that goes into the design, development, and implementation of a large-scale, high-stakes assessment system. Technical documentation must address all other research activities conducted for the assessment system, including special studies addressing a range of topics such as comparability, dimensionality, equating, scaling, item drift, etc.

The Offeror will work with the Department and Georgia's Technical Advisory Committee (TAC) to ensure the technical documentation and annual technical report meet the needs of the state and are guided by industry best practices and the *Standards for Educational and Psychological Testing*. At a minimum, technical reports provide an overall summary and analysis of the year's administrations and should include:

- for each item: sample size and conventional descriptive statistics (e.g., means, standard deviations, p-values, biserial and point-biserial correlations);
- information on reliability of scores to include, but not be limited to: standard error of measurement, conditional standard errors of measurement for all scale points, and Cronbach's alpha coefficient;

- information on validity of scores which must include content and curricular validity, criterion validity, construct validity, consequential validity, and validity of evidence for different student populations;
- reliability and validity information must be produced for subgroups to include: all ethnic groups, gender, EL, and SWD;
- a detailed description of quality control and security procedures used in scoring the assessment and managing data files;
- IRT and classical statistics to include: item difficulty estimates, DIF, standard errors, fit indices, score conversion tables, and item and test characteristic curves;
- a detailed description of procedures used for equating, scaling (including all raw to scale score conversion tables and other equating tables), assessing DIF, and assessing dimensionality;
- a detailed description of procedures used for establishing or adjusting standards, if applicable;
- an analysis of the item banks, including a count of items available for operational use, a count of retired items, findings of item drift, evidence of scale stability, etc.;
- a detailed description and record of the procedures and protocols used in the test development and validation process, to include, but not be limited to, assessment specifications and blueprints, item development and review process, and details about committee membership; and
- description of procedures for determining and validating appropriateness and effectiveness of testing accommodations for EL and SWD. This should address the validity of inferences from scores obtained under accommodated conditions.

All technical reports will be submitted to the Department for review prior to finalization. The Department will provide feedback and may involve the Georgia TAC, as needed. The reports are not considered final until the Department gives approval.

It should be noted that some of the information contained in the annual technical report may be needed by the Department prior to the planned submission deadline. The Offeror should be prepared to provide such ad hoc information as needed. For example, the reliability information may be required immediately following an administration.

The Offeror may be required to perform additional data analyses, at no additional cost, as directed by the Department, in order to ensure the accuracy of the test scores, or to provide data for programmatic review, program evaluation, federal peer review, or other inquiries into the functioning of the assessment system. Depending on the need identified by the Department or its TAC, the Offeror may be asked to prepare technical briefs addressing special topics that directly impact the technical underpinnings and quality of the assessment system.

The Offeror will provide summaries of all meetings such as content reviews, data reviews, and standard settings. These reports shall be submitted within two weeks after such meetings. The Department may determine that such report is needed sooner; for example, a report of a standard

setting may be needed as supporting evidence for State Board approval of cut scores. These documents will contain such details about participants and representativeness of panels, results, training materials, agenda, evaluation forms, confidentiality forms, consent forms, etc.

The Offeror will also be responsible for providing notes following each TAC meeting for Departmental review. Such notes should capture the nature of the discussion, key points and/or considerations, and any resulting recommendations. The Offeror and the Department will collaborate on which action items are considered critical and shall be incorporated into the testing program.

The Offeror must be prepared and willing to support the Department with explaining or defending the test to constituencies, the press, or in court, as needed.

On an annual basis, the Offeror will provide the Department with an analysis of the item bank, including a count of items available for operational use, a count of items field tested but not meeting criteria for use – including rationale (poor statistics or committee rejection), items retired due to overuse, etc.

The Offeror must provide all raw (case level) data files in electronic (e.g., ASCII) format with no delimiters, accompanied by a clear file layout defining the positions and values of all variables to the Department following each administration. All control or command files used in analyses must also be provided. The Offeror must transfer files to the Department in a secure manner. At a minimum, security procedures for this electronic transmission of results must be based on current industry standards.

→ Describe how item banks are maintained and updated on a regular basis, including but not limited to findings of item drift and scale stability. Offeror should outline their approach(es) should defects in the stability of the item bank or scale stability occur. The proposed solution should also describe the plan to ensure appropriate and thorough technical documentation is collected throughout the design, development and implementation of the assessment system, including the resources and expertise to be provided by the Offeror in the collection, analysis, and synthesis of the technical efforts that underpin and directly impact the technical quality of the assessment system.

Special Studies. The Offeror will be required to conduct special studies designed to directly inform and evaluate the technical quality of individual components or of the assessment system as a whole as directed by the Department and/or recommended by the TAC. The Offeror must demonstrate sufficient technical capacity, expertise, and experience in the conduct of such special studies. All such studies shall culminate in a technical report provided to the Department. In some instances, the Offeror will be required to contract with an independent third-party, of the Department's choice, to conduct a study – such as an independent alignment study of the individual tests that comprise the assessments system. The Offeror must work collaboratively with the Department and efficiently transfer any necessary data or information as directed by the Department in a timely manner. Special studies to be conducted include:

- an independent alignment study (to be conducted by a third-party entity selected by the Department);
- comparability studies designed to (1) ensure consistency of signals both within the assessment system (across grades and courses) and with other external measures (such as NAEP, PSAT, SAT, ACT, etc.); and (2) link Georgia's assessment system to other assessments measuring the same content standards, such as those planned by the national consortia or other similar assessments; and
- a study assessing the strength of signal provided by the assessment system regarding the students' preparedness for the next educational level, be it the next grade, course, or postsecondary endeavor (college or career).

→ Describe the capacity, expertise, and experience conducting special studies designed to inform and evaluate the technical quality of assessment programs and outline the steps to be taken in the design and conduct of such studies including the resources (human and material) assigned.

Communication Tools and Resource Materials. The Offeror will be responsible for producing communication tools specifically designed to inform various stakeholders about the assessment systems. These tools and resource materials include, but are not limited to: annotated sample items; test administration manuals; Test Content Descriptions; general information brochure(s); Score Interpretation Guides; Student Study Guides; Scoring Guides for Constructed-Response Items; quick start guides related to computer-based testing; and other ancillary materials as needed. Examples of the current communication tools and resource materials may be found on the current CRCT, EOCT, and Writing webpages. The Offeror should plan to improve upon the resources currently available to stakeholders; the Department is interested in creating high-quality communication tools to help educators and the public understand the new assessment system. Offeror should propose their best solution rather than simply proposing to recreate updated editions of the Department's resource materials. All tools and resource materials must be updated on an annual basis and approved by the Department.

Communication tools and resource materials must contain clear, concise, and easy to understand information about the assessment system explicitly designed for the specific intended audience of each tool/resource. Such information should include general information about the assessment system, its purpose, students to be tested, content to be assessed, and uses of the resulting scores. All tools and resource materials must be provided to the Department in an electronic format, to include both Word and PDF. All materials created under this contract are the property of the Department and may not be used in any other fashion without the written authorization of the Department.

→ Describe the development of high-quality assessment system-related communication tools and resources designed explicitly to meet the needs of various stakeholders.

Customer Service. The Offeror must maintain a fully staffed toll-free number dedicated to Georgia and an email address for problem resolution. The toll-free number must be staffed from 6:30 a.m. to 6:30 p.m. EST, Monday through Friday throughout all active testing windows – beginning three (3) weeks prior to the opening and concluding one (1) week following the close of the window, and from 8:00 a.m. to 5:00 p.m. EST, Monday through Friday outside designated testing windows. The Offeror must respond to all telephone and email inquiries within one (1) hour of receipt, issue resolutions within twenty-four (24) hours, and maintain an accurate resolution log that is to be submitted to the Department electronically every month or upon request.

Customer service staff must document all communications in a log that is accessible to the Department on an ongoing basis. The contractor will develop a topic matrix, with the Department's guidance, to ensure that reported issues are responded to in a consistent and appropriate manner. It is highly desirable that the issue tracking process employ a Department auditable job-ticket method of tracking issue types, status, and individual client trouble calls/emails/chats/posting including current aggregate status information for resolution. An ideal option would be some type of web-based issue tracking application with mailbox integration. A system that offers the ability for a job-ticket to be entered at the district (as appropriate), department, and vendor level and monitored at the Department and vendor level is preferred. If the issue tracking system allows reporting/viewing capabilities that include sorting, filtering, and exporting to a spreadsheet at the Department level, then this capability can stand in lieu of, upon the Department's approval, the requirement to submit periodic reports on the status of and resolution of help-ticket issues.

Beginning not less than three (3) weeks before and extending through one (1) full week after the close of each test administration window, the contractor must use additional customer service personnel to handle test administration calls, and personnel who are able to provide advanced technical support must be immediately available for any issues related to online testing that cannot be resolved by call center staff. The Offeror must ensure that all customer service personnel assigned to the Georgia program are fully trained in all appropriate aspects of the assessment system in order to provide accurate, timely, and courteous service.

Georgia Technical Advisory Committee. The Offeror must assume all fiscal responsibility for the three (3) annual Georgia Technical Advisory Committee (TAC) meetings, including honoraria, travel, per diem, and meeting expenses. Georgia's TAC consists of six (6) members. For budgeting purposes, honoraria for TAC members is \$1,300 for each meeting day as well as for an additional day to cover travel and advanced preparation (total of \$3,900) for each two-day meeting. Both the frequency of meetings and the rate of compensation are subject to change at the sole discretion of the Department. The Offeror shall augment the Georgia TAC with additional expertise should the Department identify the need. The Offeror must work collaboratively with the Department in setting the agenda for each TAC meetings and is responsible for preparing meeting materials, including any data analyses required.

- ✓ The Offeror's plan assumes fiscal responsibility for TAC meetings as well as responsibility for preparing meeting materials, including any analyses required.

ADDITIONAL REQUIREMENTS AND CONSIDERATIONS

The Offeror must formulate and adhere to systems of quality control and test security in keeping with the high-stakes nature and expectations of state testing programs. Security must be maintained in all aspects of test development, administration, scoring, and reporting. Protection of student-level data is critical. The Offeror's security protocols must address how student-level data will be protected and access restricted only to those authorized. Such protocols must include steps to be taken in the event a breach in security is discovered.

- ✓ The Offeror must disclose any instances in which a security breach of student-level data or test information has occurred in the last five (5) years. The Offeror must include details that summarize of the root cause of the breach and the steps taken to rectify the situation.

The Offeror's must ensure all services provided take into account and comply with all federal laws, including, but not limited to, IDEA, ADA, Section 504 of the Rehabilitation Act of 1973, Title I, ESEA, and FERPA. Offerors should detail the commitments and steps they will take to ensure compliance with such laws and associated regulations.

The Offeror may not release any data files or documents containing secure information of any sort without the express written approval of the Department.

- Provide detailed procedures on how security of all features of the assessment system will be maintained. Procedures and policies must address security requirements for all subcontractors and temporary staff, including those who will read and rate student responses.

Quality assurance of the work, both in progress and completed, is a top priority of the Department. The Offeror is responsible for proofreading documents during all stages of production. The Offeror should propose well-defined procedures to ensure drafts are checked and proofed for complete accuracy by qualified proofreaders on the Offeror's staff before any document is sent to the Department for review. Additionally, the Offeror is responsible for checking the quality of all data, calculations, and resulting reports according to the highest industry standards. All data must be provided to the Department for replication.

- Describe all the quality control and assurance policies, procedures, steps, and checks that will be conducted to ensure only the highest quality of work and services will be provided to the State of Georgia. A detailed plan for undertaking quality control and assurance (e.g., flow charts, work plans and processes) should be included in the proposal. Procedures and policies must address quality control and assurance policies and procedures for all subcontractors.

The Offeror should provide details regarding how the item bank(s) will be securely stored and preserved at a back-up site as an added security measure in case of some catastrophe at the primary storage location.

The Offeror will be required to provide the Department with an annual extraction of the item bank(s) at the end of each fiscal year. The extraction should contain all images, metadata, and statistical performance information for each item. The format for item images and spreadsheets for metadata and statistical data extractions will be mutually decided upon execution of contract and must follow best-practice industry standards.

- ✓ The Offeror must provide for the security of item bank(s) and for annual extraction and transfer to the Department.

The Offeror must work with the Department to develop a retention, storage, and destruction plan for certain test material such as used test booklets and answer documents, digital records of student responses gathered through CBT administrations, data files, reports, etc. The Offeror's plan should include the type and location(s) of storage facilities, how climate is controlled to protect contents, and how security of the facilities is managed. The storage system must be inventoried in such a manner that, should the need arise (i.e., rescore requests, open-record requests, etc.) to access a document or file from storage, retrieval can be done quickly and efficiently. The Offeror should include how the security of materials and information will be maintained once permission for destruction has been granted by the Department.

- ✓ The Offeror must plan for retention, storage, and destruction of test materials and other related secure documentation that ensures quality preservation and security of such material and information while offering access when required.

Upon completion or termination of the contract awarded as a result of this procurement, the Offeror will use its best efforts to assist the Department in completing a seamless transition to any successive vendor and/or the Department. Such best effort must be provided whether the termination is a result of cancellation or expiration of the contract. This shall include, but not be limited to, assisting the Department in developing and implementing a feasible transition plan as much in advance of the anticipated expiration, cancellation, or termination of the contract as possible. The Offeror agrees to cooperate fully with any successive vendor and the Department and refrain from activity that would interfere with the successful implementation of the transition plan and a seamless transition. The Offeror shall provide all items, reports, materials, data, and equipment owned by the Department in the Offeror's possession as well as any information reasonably useful to and requested by the Department in developing a Request for Proposal for a procurement, prior to the expiration, cancellation, or termination of the contract. The Offeror will work with the Department to determine the optimum format of providing data and information that will optimize the use of these data and information by any successful vendor. Additionally, the Offeror will provide the Department with a list of all computer programs and software tools necessary to allow an end user to read and export any data provided by the Offeror under this contract.

To complete the transition, the Offeror will conduct a review of all items available in the assessment system item bank before being turned over to the Department. This includes items in

the following categories: items currently on a form; items currently available for a form (i.e., items field tested and reviewed by a committee of Georgia educators); items developed but not field tested; items developed and field tested but not yet reviewed by the data review committee; and items developed but rejected by a committee of Georgia educators that have not been revised and re-field tested. All items must be clearly identified and all ancillary information such as associated stimuli, graphics, and data included. The Offeror must use current state of the art methods for transferring all items, item images and associated stimuli, and metadata.

Deliverables. All deliverables, timelines, deadlines, and communications shall be based on Eastern Standard Time. The Department's standard working hours are from 8 a.m. to 5 p.m. Eastern Standard Time. As such, all deliverables must be received by the Department on or before the due date during GaDOE's standard (EST) working hours.

A summary of the services and products anticipated and/or required as well as approximate due dates is provided in SOW Appendix D for the first year of the project. The dates, services, and products listed in this table are intended to denote major milestones and serve as a guide for the creation of the initial project work plan, to be delivered with the proposal and are *not* intended to be all inclusive. Importantly, Offerors should note that the information provided in SOW Appendix D is not a comprehensive listing of all work products/services and the submission dates are for illustrative purposes only. The specific date for submission of the product or service will be decided collaboratively with the Department and the successful Offeror; however, certain key dates are non-negotiable. The project plan should specify each product or service and the delivery date associated with the specific product or service proposed by the Offeror. The final project work plan shall be decided collaboratively by the successful Offeror and the Department.

The Department acknowledges the ambitious timelines set forth in this SOW and commits to working collaboratively with the successful Offeror to ensure the goals of the new assessment system are successfully met given the implementation timelines. As such, the Department is open to creative, technically sound solutions designed to mitigate timeline challenges. With this said, it is the Department's expectation that the major components of the assessment system be implemented in the 2014-2015 school year.

Qualifications, Experiences, and Capabilities

The Offeror should provide a description of qualifications, experiences, and capabilities of performing tasks similar in scope and magnitude to those required in this SOW. The discussion should include a description of the Offeror's background and relevant experience that qualifies it to provide the products and services required by this SOW. Experience with educational agencies and schools related to the design, development, and implementation of assessment systems should be highlighted.

- ✓ Offerors must submit evidence of the company's financial stability, including the most recent Dunn and Bradstreet report or other equivalent financial rating.
- ✓ Offeror must disclose all litigation, within the last seven years, of which the Offeror was a party and provide a description of the outcome of such litigation.

- ✓ Offeror must disclose all instances in which liquidated damages were assessed against a contract, within the last seven years, including the incident/issue and amount assessed.
 - ✓ Offeror must outline the legal form of the Offeror's business organization, the state in which incorporated (if a corporation), the types of business ventures in which the organization is involved, the office location that will be the point of contact during the term of any resulting contract, and a chart of the organizational structure, including reporting relationships as they related to this RFP.
 - ✓ If subcontractors are to be used for any portion of the work activities, a separate chart must be used to identify all of the subcontractors proposed to be involved in the project and the services they are expected to provide. The Offeror also must provide examples of materials that demonstrate the quality of the work done by subcontractor on similar projects.
- Describe the contracted services for previous state assessment projects and programs of similar scope and magnitude to the one described in this RFP and any other projects the respondent believes will demonstrate its corporate capability, including experience with educational agencies. For each project, the documentation should include a description of the services and products delivered; and the contract period. If subcontractors are to be used for any portion of the work activities, the Offeror must name the subcontractor(s) and document the experience and qualifications of the subcontractor(s) in performing tasks identical or similar to those they will be asked to do.
- Provide references, including the name, title, address, email, and telephone number of two current contact persons for each reference agency. It is understood that during the evaluation process, Department staff will contact previous clients of Offerors for reference checks.

The proposal should include information sufficiently descriptive to permit the proposal evaluation committee to consider the qualifications, experience, and capabilities of the prime contractor as well as any and all subcontractors. The Offeror should demonstrate sufficiency of experience (capability) and resources (capacity) to meet the project timeline and deliverables.

Management Plan: Project Oversight and Staffing

The successful Offeror will be selected for award based on the demonstrated quality of the overall proposal as evidence by, not only the technical approach and expected project outcomes, but also on the work plan, timelines, and staffing assignments.

The Offeror must submit thorough documentation demonstrating assigned staff experience, capabilities, and expertise congruent with the requirements of this RFP. The Offeror's project manager and all other key personnel assigned to this program must be identified in writing and are subject to the approval of the GaDOE. The Offeror should not label any key positions as "to be determined." Failure to name key staff members may result in disqualification. Any change to proposed personnel, before or after award, is subject to approval by GaDOE and may not be made without approval.

The work described in this RFP constitutes a large, complex, challenging program that requires year-long and close attention to overlapping tasks for different years and the impact on project resources. The contractor is expected to provide a sufficient number of highly-qualified personnel to work closely with the Department to manage the contract. Offerors should carefully consider whether they have sufficient and knowledgeable human resources to complete the work activities outlined in the SOW and should demonstrate in their proposals that they have sufficient and knowledgeable human resources to complete the work. Companies should consider bidding only if they are committed to assigning the number and quality of staff and staff time required to design, develop, and implement a program of this magnitude.

The successful Offeror must assign professional staff members who are qualified, experienced, and capable of providing technical assistance to the Department. Managers proposed should be members of the regular organization staff with experience within the company in coordinating the types of activities outlined in this SOW. Offerors are expected to demonstrate that the individuals identified as managers have sufficient authority across departments within the organization to ensure the work of the contract has the necessary priority to be completed with the highest of quality and on time.

- ✓ Offeror must provide resumes for all key personnel assigned and include time commitments (percent FTE) associated with work proposed under this procurement as well as all other assigned projects.

Project Management Staff: The Offeror will designate one or more full-time Senior Project Managers to be the central point of contact with the GaDOE Project Manager. Although a Master's Degree is preferred, the project manager(s) must hold a Bachelor's Degree, and have a minimum of five (5) years' experience (not combined) in managing large, complex programs of a similar scope. Experience managing state assessment system(s) is preferred as is project management certification through the Project Management Institute (PMI) as a Project Management Professional (PMP), or other recognized project management certification. Resumes must be provided for all project management staff proposed.

The successful Offeror's project manager(s) should have a history of project rescue and sufficient drive to take on and effectively resolve project challenges, including advocating for the customer's needs. Vendor management and customer relationship expertise with a drive for excellence is expected. Experience leading K-12 public education projects is highly desirable.

More specifically, requirements for the individual(s) proposed as the Offeror's Senior Project Manager(s) include:

- at least five (5) years of experience (not combined) managing large and complex programs and/or projects from conception through completion following industry recognized project management methodology. Preferably, the majority of this experience is from large-scale student assessment programs and/or projects. Experience must have involved independent decision-making, problem solving, management of multiple and often overlapping deadlines,

and the utilization of written, oral, and interpersonal communication skills involving diverse units and organizations;

- proficiency and skill working with executive management and leading a diverse team of consultants and employees representing multiple organizations in a political, visible, and changing project environment;
- demonstration of extensive experience in successful execution of formal project management methodologies, disciplines, and tools;
- expertise to influence or guide project stakeholders to achieve project success;
- significant breadth of experience in business matters, finance, planning, forecasting, and personnel in order to manage team staff and business issues;
- ability to facilitate a positive and collaborative working environment leading individuals to perform at high levels;
- establishment and maintenance of clear mechanisms to communicate project status and progress with the project team and project stakeholders;
- ability to effectively communicate resource needs and project issues with management to negotiate appropriate project resources; and
- demonstrated skill with successfully ensuring that projects remain within specified scope and are within time, cost and quality objectives while achieving customer satisfaction.

Responsibilities and duties of the Offeror's project manager(s) include, but are not limited to:

- coordinating and participating in weekly status meetings and conference calls to discuss the status report and any issues related therein;
- maintaining accurate, up-to-date information on the current status of all Offeror and any subcontractor(s) work and providing timely communication to the GaDOE Project Manager(s) of any delays or risks;
- negotiating all details of project implementation with the GaDOE Project Manager(s) on behalf of the Offeror, and committing the Offeror to the decisions reached;
- developing and submitting an annual detailed project plan to the GaDOE Project Manager(s) for review and sign-off;
- submitting all deliverables and other work products to the GaDOE Project Manager(s) in the manner designated by GaDOE for review and approval prior to any release or distribution by the Offeror according to a mutually-agreed upon timeline;
- assuring all materials (especially test booklets, manuals, and scorable documents) are provided free of any errors or typos;
- being available to communicate with the GaDOE Project Manager(s) during peak times (December – July) 24 hours a day, 7 days a week, via email or telephone;
- responding to the GaDOE Project Manager(s) within four hours of an inquiry during non-peak times;
- working, as necessary, with other GaDOE personnel in coordination with the GaDOE Project Manager(s);
- notifying the GaDOE Project Manager(s) immediately of critical information or data needed from the GaDOE in order to proceed with work;
- ensuring that the Offeror and any subcontractor comply with designated timelines as

- outlined in the project plan; and
- maintaining communication with any subcontractors to ensure timeliness and quality of all project deliverables.

The Senior Project Manager(s) will report to the designated GaDOE Project Manager(s). The GaDOE Project Manager(s) will be responsible for all aspects of project oversight and management of the assessment system, in consultation with the Director of Assessment Administration, Director of Assessment Research and Development, and ultimately the Associate Superintendent for Assessment and Accountability. The GaDOE Project Manager(s), at his or her discretion, may require onsite visits at the Offeror's facility or at any subcontractors' facilities, at the Offeror's expense, at any time during the term of the contract to ensure compliance with the terms of the contract and RFP.

The GaDOE Project Manager(s) will:

- serve as the Offeror's Project Manager(s) immediate point of contact for all communication with the GaDOE;
- review and approve the arrangements and scheduling of all assessment system meetings and workshops (note that this does not apply to internal meetings of Offeror's staff);
- review all deliverables, documents, and all other materials for accuracy, completeness, and quality for approval or acceptance;
- serve as a liaison with all other GaDOE personnel and contract staff; and
- provide timely appraisals of Offeror's performance on such things as Offeror's communication, timeliness, and quality of project deliverables; in the event of a negative appraisal, the Offeror will have 5 business days to reconcile any unsatisfactory performance by Offeror.

The GaDOE Project Manager(s) shall have approval authority over all aspects of this project including, but not limited to:

- all materials, products, and services, produced by Offeror;
 - This includes, but is not limited to, all test forms (test booklets – including large print and Braille – and answer documents) and related ancillary materials such as Examiner's Manuals, School/System Test Coordinator's Manuals, Content Descriptions, Student Guides, and any and all other printed or electronic materials produced.
- all development and operational plans for field-testing items and testing related therein;
- all development plans and timelines for item development, replenishment, scoring and reporting;
- all schedules, including but not limited to, item development and review schedules, rollout schedules, implementation schedules, scoring and reporting schedules, etc.;
- all reports, including but not limited to, technical briefs and reports (ongoing and post-operational), score reports and field test reports;
- all new and revised assessment items developed by Offeror to ensure alignment to

- content standards and test/item specifications;
- any changes to staff, including subcontractors, assigned to the program, including the Offeror's Project Manager(s), on and after award and commencement of work for the duration of the contract (note that this shall not apply to staff members that completely leave the employment of the Offeror although replacements must be approved); and
- any adjustments to services, deliverables, or timelines; significant changes may require additional approval including that of the State Superintendent and the State Board of Education and will be handled through a change-order process that is mutually agreed-upon.

Throughout this SOW, there have been multiple references to the Department's requirement for the review and approval of various products and services. It should be duly noted and acknowledged by the Offeror that such reviews by the Department do not relieve the Offeror from any responsibility in terms of the accuracy and appropriateness of the work conducted by the Offeror. Upon receiving the Department's review, the Offeror shall make all necessary edits to ensure the work products and services provided meet the Department's high standards. Furthermore, the Department's review and approval of various aspects of the scoring and reporting process do not relieve the successful Offeror from any responsibility in ensuring that psychometric support yields accurate, reliable, and valid assessment results.

- Describe how the proposed full-time Senior Project Manager(s) has sufficient experience and qualifications to be responsible for all aspects of project oversight and management given the qualifications, role, and responsibilities outlined in the SOW.
- Describe the qualifications and experience of all project management support personnel assigned to this work, including time commitments (percent of full-time equivalency (FTE)) allocated to this project and list other projects and associated FTE commitments assigned to each individual.

Other Key Staff: The content, technology, psychometric, scoring, and other key staff expertise required to be performed as part of this contract will play an integral role in all phases of the work and are vital to the program's success. The Offeror's response must explicitly describe the qualifications and experience of the key staff members assigned to conduct design, development, and implementation activities. Resumes must be provided for all personnel proposed.

The Offeror must provide content expertise sufficient to ensure the items and test forms fully reflect the knowledge, concepts, and skills inherent in the state's content standards. The content experts assigned to this project must have extensive experience in state testing programs. The content experts will oversee the development of high-quality items and test forms, ensuring alignment to the standards and specifications, including blueprints. Proposed content staff should have demonstrated experience in direct instruction of the identified content as well as the development of high-quality test items.

The Offeror must provide technology expertise sufficient to ensure the development, management, and maintenance of an administration platform of the size and scope required by

this project.

The Offeror must provide psychometric direction and oversight for all aspects of the assessment system. The psychometricians assigned to this project must have extensive experience in state assessment programs. The psychometricians will plan, conduct, analyze, and report on test construction, scaling, equating, and special studies to establish the validity of the assessment system.

The Offeror must provide scoring direction and oversight for all aspects of the assessment system, including hand scoring. Scoring Directors assigned to this project must have extensive experience in scoring state assessment programs, including content knowledge and expertise (for hand-scoring).

- Describe the experience and qualifications of each named staff member assigned directly to the specific activities associated with the content work required of this project, including reporting structure.
- Describe the experience and qualifications of each named staff member assigned directly to the specific activities associated with the development, management, and maintenance of the technology platform required for the size and scope of this project, including reporting structure.
- Describe the experience and qualifications of each named staff member assigned directly to the specific activities associated with the psychometric work required of this project, including reporting structure.
- Describe the experience and qualifications of each named staff member assigned directly to the specific activities associated with the scoring work required of this project, including reporting structure.
- Describe the experience and qualifications of each named other key staff member assigned directly to the specific activities associated with the design, development, and implementation work required of this project, including reporting structure.
- List the time commitments (percent of full-time equivalency (FTE) allocated to this project) and list other projects and associated FTE commitments assigned to each key staff member – the named content, technology, psychometric, scoring, and other key staff – assigned to work on this project. The list must include all other projects and associated FTE commitments for each named individual.

SOW Appendix A

Table 1A. CRCT Item Bank Counts

	<u>Operational Total:</u> Total number of operational items that <i>meet or exceed</i> the statistical threshold	<u>Spring 2014 Field Test:</u> Number of items to be field tested in Spring 2014	<u>Grand Total*:</u> All Items in Item Bank
Reading			
Grade 3	22 passages; 128 items	10 passages; 100 items	32 passages; 271 items
Grade 4	18 passages; 116 items	6 passages; 60 items	24 passages; 190 items
Grade 5	23 passages; 149 items	10 passages; 100 items	33 passages; 269 items
Grade 6	17 passages; 101 items	6 passages; 60 items	23 passages; 181 items
Grade 7	16 passages; 105 items	6 passages; 60 items	22 passages; 183 items
Grade 8	19 passages; 134 items	10 passages; 100 items	29 passages; 259 items
ELA			
Grade 3	157	80	282
Grade 4	142	80	282
Grade 5	133	80	282
Grade 6	142	80	287
Grade 7	136	80	275
Grade 8	151	80	269
Mathematics			
Grade 3	134	90	275
Grade 4	131	90	271
Grade 5	184	150	425

	<u>Operational Total:</u> Total number of operational items that meet or exceed the statistical threshold	<u>Spring 2014 Field Test:</u> Number of items to be field tested in Spring 2014	<u>Grand Total*:</u> All Items in Item Bank
Grade 6	113	90	272
Grade 7	128	90	289
Grade 8	158	150	399
Science**			
Grade 3	415	90	568
Grade 4	424	90	624
Grade 5	452	90	606
Grade 6	419	90	605
Grade 7	426	90	554
Grade 8	348	90	514
Social Studies			
Grade 3	515	90	885
Grade 4	509	90	847
Grade 5	517	90	875
Grade 6	433	90	637
Grade 7	453	90	654
Grade 8	486	90	866

*Grand Total reflects all passages/items that are developed, including those that may not meet the statistical threshold for test construction.

**Science counts represent items dually-aligned to Characteristics of Science and a Content Standard.

Table 2A. EOCT Item Bank Counts

	<u>Operational Total:</u> Total number of operational items that <i>meet or exceed</i> the statistical threshold	<u>Spring 2014 Field Test:</u> Number of items to be field tested in Spring 2014	<u>Grand Total*:</u> All Items in Item Bank
ELA			
Ninth Grade Literature	1,120 (820 passage-based; 300 stand-alone)	216 (167 passage-based; 49 stand-alone)	1,652 (1,221 passage-based; 431 stand-alone)
American Literature	1,116 (882 passage-based; 234 stand-alone)	192 (145 passage-based; 47 stand-alone)	1,660 (1,273 passage-based; 387 stand-alone)
Mathematics			
Coordinate Algebra	319	208	606
Analytic Geometry	167	256	604
Science			
Biology	1,015	0	1,353
Physical Science	928	0	1,234
Social Studies			
U.S. History	1,153	0	1,299
Economics/Business/ Free Enterprise	1,081	0	1,295

*Grand Total reflects all passages/items that are developed, including those that may not meet the statistical threshold for test construction.

Table 3A. EOCT Passage Bank for English Language Arts

	<u>Operational Total:</u> Total number of operational passages with items that <i>meet or exceed</i> the statistical threshold	<u>Spring 2014 Field Test:</u> Number of passages to be field tested in Spring 2014	<u>Grand Total*:</u> All Passages in Item Bank
Ninth Grade Literature	190 passages (820 items)	26 passages (167 items)	220 passages (1,221 items)
American Literature	207 passages (882 items)	22 passages (145 items)	233 passages (1,273 items)

*Grand Total reflects all passages/items that are developed, including those that may not meet the statistical threshold for test construction.

Appendix B: Sample Test Designs

Table 1B: Sample Test Design: End-of-Grade (EOG)

Content Area	Specification	Session 1	Session 2	Session 3
LANGUAGE ARTS	Time	70 minutes	70 minutes	90 minutes
	Domains for Grades 3-8	Reading – Informational Reading – Literary Language Conventions Writing/Research		Writing
	Item Types	Selected Response (including aligned NRT) Short Constructed Response Embedded field-test (FT) Items		Passage(s) + Extended Writing (type of text and writing genre will depend upon the emphasis at grade level in CCGPS)
MATHEMATICS	Time	70 minutes	70 minutes	
	Domains for Grades 3-5	Operations & Algebraic Thinking Numbers & Operations – Base 10 Numbers & Operations – Fractions Measurement & Data Geometry		
	Domains for Grades 6-7	Ratios & Proportional Relationships The Number System Expressions & Equations Geometry Statistics & Probability		
	Domains for Grade 8	The Number System Expressions & Equations Functions Geometry Statistics & Probability		
	Item Types	Selected Response (including aligned NRT) Short Constructed Response (including Gridded) Extended Response		

Content Area	Specification	Session 1	Session 2	Session 3
		Embedded field-test (FT) Items		
SCIENCE	Time	70 minutes	70 minutes	
	Domains for Grades 3-5	Earth Science Life Science Physical Science		
	Domains for Grade 6	Geology Hydrology & Meteorology Astronomy		
	Domains for Grade 7	Cells and Genetics Interdependence of Life Evolution		
	Domains for Grade 8	Structure of Matter Force and Motion Energy and Its Transformation		
	Item Types	Selected Response (including aligned NRT) Short Constructed Response Embedded field-test (FT) Items		
SOCIAL STUDIES	Time	70 minutes	70 minutes	
	Domains for Grades 3-8	History Geography Government/Civics Economics		
	Item Types	Selected Response (including aligned NRT) Short Constructed Response Embedded field-test (FT) Items		

Table 2B: Sample Test Design: End-of-Course (EOC)

Content Area	Specification	Session 1	Session 2	Session 3
LANGUAGE ARTS	Time	60 minutes	60 minutes	90 minutes
	Domains for Ninth Grade Literature & Composition (three)	Reading – Informational Reading – Literary Language Conventions Writing/Research		Writing
	Domains for American Literature & Composition	Reading – Informational Reading – Literary Language Conventions Writing/Research		Writing
	Item Types	Selected Response (including aligned NRT) Short Constructed Response Embedded field-test (FT) Items		Passage(s) + Extended Writing (type of text and writing genre will depend upon the emphasis at grade level in CCGPS)
MATHEMATICS	Time	70 minutes	70 minutes	
	Domains for Coordinate Algebra	Geometry Expressions, Equations, & Functions Number & Quantity Statistics & Probability		
	Domains for Analytic Geometry	Algebra & Functions Algebra Connections to Geometry Algebra Connections to Statistics & Probability		
	Item Types	Selected Response (including aligned NRT) Short Constructed Response (including Gridded) Extended Response Embedded field-test (FT) Items		

Content Area	Specification	Session 1	Session 2	Session 3
SCIENCE	Time	60 minutes	60 minutes	
	Domains for Physical Science	Chemistry: Atomic and Nuclear Theory and the Periodic Table Chemistry: Chemical Reactions and Properties of Matter Physics: Energy, Force, and Motion Physics: Waves, Electricity, and Magnetism		
	Domains for Biology	Cells Organisms Genetics Ecology Evolution		
	Item Types	Selected Response (including aligned NRT) Embedded field-test (FT) Items		
SOCIAL STUDIES	Time	60 minutes	60 minutes	
	Domains for US History	Colonization through the Constitution New Republic through Reconstruction Industrialization, Reform, and Imperialism Establishment as a World Power Modern Era		
	Domains for Economics/Business/Free Enterprise	Fundamental Economic Concepts Microeconomic Concepts Macroeconomic Concepts International Economics Personal Finance		
	Item Types	Selected Response (including aligned NRT) Embedded field-test (FT) Items		

SOW Appendix C

Meetings with Georgia Educators

Meetings with committees of Georgia educators, content specialists, and post-secondary faculty will be conducted to review work and products produced by the selected contractor and to participate in the development of specifications and other activities. The Department may designate Georgia educators, and in some instances may recommend consultants from outside the state, to participate in the meetings.

All meetings will be held in Atlanta or a central Georgia location approved by the Department. All meeting costs, including meeting rooms and equipment rental, provision of meeting materials, substitute reimbursement (\$125/day on average; districts must be reimbursed the actual amount), travel, and per diem expenses of participants will be paid by the contractor. Reimbursement for participants will be at the rates authorized by the GaDOE and in accordance with the State of Georgia Travel Regulations, available at the following link: <http://sao.georgia.gov/travel-regulations-and-forms> . Currently, mileage is reimbursed at \$.56 per mile and the maximum per diem reimbursement is \$36.00 (breakfast: \$7.00; lunch: \$9.00; and dinner: \$20.00). Reimbursement may not include meals provided during the meeting (such as breakfast and lunch). Honoraria for educators participating in meeting and not under contract (e.g., during summer months) must be paid at the rate of \$125.00 per day. Educators under contract during summer months may not be paid honoraria.

The contractor shall be responsible for planning all aspects of these meetings, including: securing a location (with Department approval); preparing communications to districts soliciting nominations; identifying and inviting educators (with Department approval); preparing materials (including agendas, sign-in sheets, name tags, etc.); furnishing all audio and technical needs; and preparing materials for review by the committee. Committee meetings require careful planning to ensure representation of Georgia's diverse geographic and ethnic groups and to ensure there is sufficient time provided for adequate consideration of the task at hand. The contractor shall be responsible for keeping the minutes of each meeting and reporting the outcomes of each meeting to the GaDOE.

Information about the minimum number of meetings related to program tasks and activities is provided. Offerors should use their expertise in developing assessment programs of a similar scope and magnitude when proposing details surrounding committee meetings. The Offeror must propose a satisfactory number of educators for all committee meeting. Some meeting may be best served by convening a content area panel of educators across grade levels (such as grades 3 – 5; 6 – 8; and high school); other meeting may require grade-level specific committees. While unexpected, the number of participants and meetings is subject to change over the duration of this contract to meet program needs and demands.

<u>Meeting Purpose</u>	<u>Anticipated Number of Meetings</u>
Development of Test Specifications	1
Development of Item Specifications	2
New (Item) Content Review	1 annually
Data Review	1 annually
Standard Setting/Policy Review - to include vertical articulation	2 (EOC and EOG)
Braille Review	1 annually

SOW Appendix D

Summary of Major Deliverables

All deliverables, timelines, deadlines, and communications shall be based on Eastern Standard Time. The Department's standard working hours are from 8 a.m. to 5 p.m. Eastern Standard Time. As such, all deliverables must be received by the Department on or before the due date during GaDOE's standard (EST) working hours.

A summary of the services and products anticipated and/or required by this SOW is provided below. The approximate due date for each service or product is also provided in this table. The dates, services, and products listed in this table are intended to serve as a guide for the creation of the initial project work plan, to be delivered with the proposal. This table is not a comprehensive listing of all work products and the submission dates are for illustrative purposes only. The specific date for submission of the product or service will be decided collaboratively with the Department; however, certain key dates are non-negotiable. The project plan shall specify each deliverable product or service and the exact date associated with the product or service. The final project work plan shall be decided collaboratively by the successful Offeror and the Department. The table below denotes major deliverables/milestones associated with Year One, but is not intended to be all inclusive.

Deliverable	Preliminary Date
Initial Project Planning Meeting	July 2014
Finalization of Project Plan for Year One	August 2014
Development of Test Specifications/Item Specifications	August – September 2014
Availability of enrollment count collection within the online management system for Winter 2014 EOC	Mid-August 2014
EOC key communications resources, such as Test Content Descriptions, Student Study Guides, etc.	August 2014
EOG key communication resources, such as Test Content Descriptions, Student Study Guides, etc.	September 2014
Winter 2014 EOC Administration	December 1, 2014 – January 9, 2015
Availability of enrollment count collection within online management system for Spring 2015 EOG and EOC	December 2014 – January 2015

Deliverable	Preliminary Date
Standard Setting/Policy Review (EOC)	January 2015
Spring 2015 EOC Mid-Month & Retest	January – March 2015
Finalization of Project Plan for Year Two	March 2015
Spring 2015 EOG Administration	April – Early May 2015
Spring 2015 EOC Administration	April 27 – June 5, 2015
Summer 2015 EOC Main & Retest Administration	Mid-June – Mid-July 2015
Standard Setting (EOG)	June 2015
Summer 2015 EOC Main & Retest Administration	Mid-June – Mid-July 2015
Content and Data Review Events	July – August 2015

The timelines for the delivery of score reports will be determined, collaboratively, with the successful Offeror – particularly, but not exclusively for year one – given the development and technical work that must take place. All Offerors should propose their best solution with their scoring and reporting plan, keeping in mind the goals and uses of the scores emanating from the assessment system for both year one and beyond. The Offeror must demonstrate consideration of the specifications set forth in the SOW. The Department desires a viable, creative, and technically sound solution to anticipated challenges to reporting timelines.