

SECTION 1: INTRODUCTION

The Massachusetts Department of Education is seeking a contractor to assist in the continuing operation of the Massachusetts Comprehensive Assessment System (MCAS). As described in this RFR, the contractor will be responsible for accomplishing tasks in areas that include design, item development and test construction, production, administration, processing, scoring, and reporting related to

- a. the standard MCAS tests in English Language Arts, Mathematics, Science and Technology/Engineering, and History and Social Science (grades 3-8 and 10)
- b. MCAS focused retests in English Language Arts and Mathematics

The contract is scheduled to be awarded during winter 2003 and will run through December 2008. There will be an overlap of approximately one year between the contract awarded under this RFR and the current contract for the operation of the standard MCAS tests. Accordingly, the initial year of this contract will focus on

- a. the development of new MCAS tests
- b. the design and implementation of procedures and systems to enhance the efficiency of the program
- c. if necessary, a transition of operations from the current contractor (See Appendix A for an overview of work that falls under the current and new MCAS contracts.)

The time period covered by the contract awarded under this RFR includes the completion of the first decade of administration of the standard MCAS tests. As described in the following paragraphs, the evolution of MCAS since its inception in 1994 and initial administration in 1998 will continue over the course of this contract. In addition to the introduction of new MCAS tests, changes in education, assessment, and technology will necessitate changes to MCAS. The response to this RFR must demonstrate the contractor's understanding of the purpose and history of MCAS and the contractor's readiness and capacity to assist in its evolution.

1. Purpose of MCAS

MCAS is the Commonwealth's student assessment program for students educated with public funds. It was developed to fulfill requirements of the Education Reform Law of 1993. The MCAS tests measure the performance of students, schools, and districts on the learning standards in the *Massachusetts Curriculum Frameworks*. The *Massachusetts Curriculum Frameworks* and MCAS together create a statewide system designed to support students, parents, teachers, and schools by uniformly promoting high academic standards for all students and evaluating the performance of all students against those standards.

The primary goal of Education Reform in Massachusetts is to improve students' academic performance. MCAS serves two main purposes that focus on achieving that goal. First, it is designed to improve classroom instruction and assessment by

- a. providing specific feedback that can be used to improve the quality of school-wide, classroom, and individual student instructional programs
- b. modeling effective assessment approaches that can be used in the classroom

Second, it serves as an accountability tool for measuring the performances of individual students, schools, and districts against established state academic standards.

For student accountability purposes, the Education Reform Law requires that, in addition to fulfilling local graduation requirements, students must earn a Competency Determination by passing the state's tenth grade tests (or retests) in English Language Arts and Mathematics as a condition for high school graduation. In January 2000, the Board established that, beginning with the class of 2003, students must attain the *Needs Improvement* level or higher on the grade 10 MCAS tests in English Language Arts and Mathematics in order to earn a Competency Determination. Students who do not earn the Competency Determination on their first attempt in the tenth grade have multiple opportunities to retake the necessary test(s) during the eleventh and twelfth grades. After the class of 2003 graduates, it will be necessary to provide additional retest opportunities beyond high school. During the course of this contract it is possible that the Board of Education may raise the standard for passing and/or add MCAS tests in History and Social Science and/or Science and Technology/Engineering to the Competency Determination requirement.

Results from the MCAS tests are used for the Commonwealth's school and district accountability program as well as for determining adequate yearly progress (AYP) of schools and districts as required by the *No Child Left Behind Act of 2001 (NCLB)*.

2. History of the MCAS Tests

The first MCAS tests in English Language Arts, Mathematics, and Science and Technology were administered to students in grades 4, 8, and 10 in the spring of 1998. History and Social Science tests at grades 4, 8, and 10 were added in the spring 1999 MCAS administration. For the spring 2001 administration, the following changes were made to the program:

- a. The Grade 3 Reading test was introduced.
- b. A Grade 6 Mathematics test was added.
- c. Science and Technology/Engineering and History and Social Science tests at grade 4 were moved to grade 5.
- d. The English Language Arts test at grade 8 was moved to grade 7.
- e. Science and Technology/Engineering testing at grade 10 was suspended to enable a transition to discipline-specific high school science tests.

In 2002, the Massachusetts Board of Education (BOE) approved a revision to the *Massachusetts History and Social Science Curriculum Framework*. In 2002 the BOE also voted to change the focus of the high school History and Social Science MCAS test from world history to U.S. History, while providing districts the option of administering the test in either grade 10 or grade 11. To permit school districts the necessary time to adjust to the new *Framework*, the Department of Education (DOE) suspended the grade 10 History and Social Science MCAS test in 2002, and all History and Social Science MCAS tests in 2003.

Test	1998	1999	2000	2001	2002	2003
Grade 3 Reading			FT	✓	✓	✓
Grade 4 English Language Arts	✓	✓	✓	✓	✓	✓
Grade 4 Mathematics	✓	✓	✓	✓	✓	✓
Grade 4 History and Social Science		FT				
Grade 4 Science and Technology/Engineering	✓	✓	✓			
Grade 5 History and Social Science			FT	P	P	
Grade 5 Science and Technology/Engineering			FT	P	P	✓
Grade 6 Mathematics			FT	✓	✓	✓
Grade 7 English Language Arts			FT	✓	✓	✓
Grade 8 English Language Arts	✓	✓	✓	✓		
Grade 8 Mathematics	✓	✓	✓	✓	✓	✓
Grade 8 History and Social Science	FT	✓	✓	✓	✓	✓
Grade 8 Science and Technology/Engineering	✓	✓	✓	P	P	✓
Grade 10 English Language Arts	✓	✓	✓	✓	✓	✓
Grade 10 Mathematics	✓	✓	✓	✓	✓	✓
Grade 10 History and Social Science	FT	P	P	P		
Grade 10 Science and Technology/Engineering	✓	✓	✓			
Grade 10 Discipline Specific Tests in Science					FT	FT
✓ indicates that the test was operational with full performance level reporting. P indicates that the test was piloted with only student-level item analysis reporting. FT indicates that the test was a field test of newly developed items; no reporting of results to schools.						

3. MCAS Testing Overview

This section provides information about MCAS test design; item development; test form construction; test administration; scoring; reporting; analysis; and standard setting. Additional information about the MCAS tests is available on the Department's website at www.doe.mass.edu/mcas.

Test Design

The standard MCAS tests are constructed using a common/matrix design. Each content area test (with the exception of retests, which are based on one form and include only common items), consists of multiple test forms that include a set of items common to all test forms (common items) and a set of matrix-sampled items that differ from form to form (matrix items). On average, the common items comprise 80 percent of each test form, and matrix items comprise 20 percent of each test form. The number of test forms varies across grade levels and tests. A breakdown of the number of test forms to be developed is provided in Appendix B.

Only common items are used to generate performance level and scaled score results. In the past, all common items have been released publicly immediately following test administration. The contractor's response should be based on the release of all common items but must discuss options for item release that will maintain the openness of the program while increasing its efficiency.

The matrix items are primarily used for two purposes:

1. To link tests from year to year
2. To field test newly developed items

Content strand subscores are the only reported scores based on both common and matrix items. These subscores are reported to schools and districts as raw scores and provide additional information about performance on specific content strands. Content strand subscores do not impact school or district performance level results.

All matrix items are kept secure following testing.

Item Development

Although the contractor is responsible for the development and delivery of high-quality items, item development for the MCAS tests represents a combined effort of the contractor, the Department, external advisory committees, and expert content reviewers identified by the Department. The contractor is responsible for the final development and field-testing of all MCAS test items, item-specific scoring guides, related scoring materials, and benchmarked papers for training qualifying scorers. All MCAS items and scoring materials are developed according to strict criteria established for the program and must meet the highest quality standards. All items and scoring materials developed for the MCAS tests are subject to final approval of the Department.

Item Types

Each MCAS test form (with the exception of the ELA Composition test) includes a combination of multiple-choice and constructed-response items.

Each multiple-choice item offers four response options, including a single correct response. Students are expected to spend approximately one minute per item, on average, to respond.

Constructed-response items include open-response items that are used on all MCAS tests except the ELA Composition test, short-answer items that are used exclusively on the Mathematics test, and a writing prompt that is used for the Composition portion of the English Language Arts test.

Open-response items require students to provide a response in writing or in the form of a chart, table, diagram, or graph. For each open-response item, students are provided approximately sixty percent of an answer sheet and are expected to spend 8-10 minutes, on average, to record a response. Open-response items are scored on a 0-4 scale using an item-specific analytic scoring rubric.

Short-answer items require students to provide a numeric solution to a problem or a very brief statement regarding a problem. Short-answer items allow for flexibility in student responses, and are scored on a 0-1 scale using an item-specific scoring guide.

The Composition portion of the English Language Arts test consists of a single (common) writing prompt administered across two 45-minute test sessions.¹ In the first session, students organize their responses and prepare initial drafts. In the second session, students prepare final drafts that are scored. Students' compositions are scored on a 1-6 scale for Topic Development and on a 1-4 scale for Standard English Conventions using the Annotated Holistic Scoring Method.

The Department will consider the use of new item types for the locally-scored high school science and U.S. History tests and for the local writing component described in Section 4: Scope of Work, 12.2 through 12.4.

Committees and Item Review

- Assessment Development Committees
For each subject area test (for example, Mathematics) the Department assembles an Assessment Development Committee (ADC) with grade-specific subcommittees of approximately 10-12 members. Subcommittee members are Massachusetts educators who have expertise in the content area being assessed. Each subcommittee is responsible for the review of items and related materials developed for its tested grade level and content area. Committees are directed by the Department's test development staff and supported by the contractor. Future subcommittees may review materials and items for more than one grade level (e.g., grades 3 and 4 Mathematics).
- Bias Review Committee
The Department convenes a committee of educators to review passages and test items for potential bias -- anything that may disadvantage a student for reasons that are non-educationally relevant. The committee is convened for four two-day meetings during the year to review passages and items prior to field-testing. The committee meets a final time for a single day after field testing to review items that have been flagged for differential item functioning. Bias Review Committee meetings are conducted by the Department's Administrator of Student Testing with support from the contractor's test development and measurement staff.
- External Expert Content Reviewers
The Department engages External Content Experts—specialists in the content areas assessed by MCAS—to review newly developed items for content accuracy. These expert reviewers work independently and are not convened as a group. Each item is critiqued by two Content Experts. The contractor distributes materials for review and collects materials and comments directly from individual reviewers.

¹All references to the duration of test sessions are intended to provide estimates for the amount of time, on average, required for completion. All MCAS tests are untimed.

Test Form Construction

After items have been developed and reviewed by the various committees and Content Experts, and a pool of items has been recommended for inclusion on MCAS tests, the contractor and the Department select the common and matrix items for each MCAS test. Item selection is based on test blueprints developed for each MCAS test. The item selection process includes a review of the psychometric properties of the proposed set of items, both as individual items and as a group of items, to form a test.

The contractor is responsible for the design, construction, and production of all test forms, answer documents, test administration manuals, and all ancillary assessment materials and forms. A list of MCAS assessment materials is provided in Appendix D.

In addition to the standard version of the MCAS test materials, the contractor is responsible for the development and production of special forms—Braille, large-print, and Spanish²—for each MCAS test. In addition, the contractor must produce all appropriate ancillary materials to accompany these special forms (for example, math rulers, protractors, reference sheets, and test administration manuals). Following each test administration, the contractor must provide the Department with additional copies of each Braille and large-print test to be used by visually impaired students as practice tests.

Test Administration

Keys to the successful administration of the MCAS tests include effective organization and planning, on-time delivery of error-free materials, and high quality technical support prior to, during, and following test administration. The importance of organization and planning is a theme running throughout the RFR and must be reflected in the contractor's response. The on-time delivery of error-free materials is a *sine qua non*. The level and quality of support provided to schools and school districts during test administration is essential to the success of the test administration.

Scheduling

The MCAS tests are administered during two testing periods in the spring. Preparation for the spring test administrations begins in the preceding spring with the development of the test administration schedule. The test schedule for Spring 2004 is posted on the Department website at <http://www.doe.mass.edu/mcas/cal.html>. The contractor may use this test schedule as a guide, with the understanding that the schedule may change in the future.

Delivery of Materials

MCAS tests are administered to all students receiving publicly funded education in the tested grades. In addition to students attending public schools and state-approved private schools serving students with disabilities, this population includes

- a. students with disabilities attending other in-state and out-of-state private schools using Massachusetts funds

² While the Department is currently administering Mathematics, Science and Technology/Engineering, and History and Social Science tests in Spanish, future administration of MCAS tests in Spanish is currently under consideration.

- b. students attending inter-district programs housed within existing school buildings (for example, students attending educational collaboratives or public schools in other school districts by special arrangement, and students taking advantage of a school choice program)
- c. students attending intra-district programs, housed outside of a traditional school, that serve students from one or more schools (for example, an alternative high school)

To maintain the security of MCAS test materials, the contractor must ship all MCAS materials directly to and have them returned directly from each designated testing site.

The Department will provide the contractor with an updated database containing all of its contact information for Massachusetts public school districts, public schools, state-approved private schools, and other special programs serving students with public funds. The contractor is responsible for establishing a system to contact school districts to determine whether the district enrolls any students attending schools or programs other than those included on the Department database.

Support

Test administration manuals, administration workshops, and the MCAS Service Center are the three primary support components provided to schools and districts for test administration.

The *Principal's Administration Manual* must provide clear, concise directions for completing all of the steps required to receive materials, administer the MCAS tests, and return materials to the contractor. Similarly, all test administrator's manuals must contain complete, accurate, and clear directions for the test administrators, including instructions for them to read aloud to students before and during test administration.

The administration workshops provide a face-to-face opportunity for the Department and contractor to provide an overview of the test administration process, explain changes to test administration from the previous year, and answer school administrators' questions (see "Professional Development/Training Workshops/Tools," for additional details).

The MCAS Service Center, described more fully under "Management and Staffing of the MCAS Project," will be the primary point of contact for school district personnel with questions about MCAS administration procedures. The contractor's response must demonstrate an understanding of the importance of the MCAS Service Center to the success of the program and fully describe plans for its operation and professional staffing.

Additional Testing Components

While the standard MCAS tests covered under this RFR represent the single largest component of MCAS, there are other significant testing and non-testing components to the system. Three additional testing components of MCAS are the MCAS Alternate Assessment, the English Proficiency Assessment, and the high school MCAS Retests. While the high school MCAS Restests are covered by this RFR, the MCAS Alternate and English Proficiency Assessments are not. Overviews of all three components are provided below.

MCAS Retests

The MCAS Retests are another major component of the MCAS system and were implemented statewide in 2001. High school MCAS Retests are offered in English Language Arts and Mathematics. Retests contain the same item types as their standard-test counterparts, but are issued in only one test form and contain only common test items. All item development and field-testing of items included on the MCAS Retests are carried out within the context of the standard grade 10 test item development and field testing process.

As described previously, high school students who fail to earn a Competency Determination on their first attempt in the tenth grade are provided multiple opportunities to participate in the MCAS Retests. In addition, retests are administered to students from another state or country who enroll in a Massachusetts school after grade 10. The initial MCAS Retests have been operating under the same contract as the standard MCAS tests. However, given planned changes to the retest schedule and the challenges associated with this program, the Department will consider awarding a separate contract for the administration, scoring, and reporting portions of the retest program.

Beginning in the fall of 2001, retained students in grade 10 and students in grades 11 and 12 who had not yet earned a Competency Determination were invited to participate in the MCAS Retest(s) in English Language Arts and Mathematics in December 2001 and 2002 and again in spring 2002 and 2003. Students could participate in one or both content area retests. The retests that have been administered in December are focused tests designed to distinguish between student performance at the *Failing* and *Needs Improvement* performance levels. Grade 11 students attempting to improve their MCAS test score to *Proficient* or *Advanced* to meet eligibility requirements for the state's Certificate of Mastery Award were not able to participate in the December MCAS Retests, but could participate in the spring retest administration.

Beginning in the 2003-2004 school year, MCAS Retests will be administered in November and March. (See Appendix O for an estimation of the number of students taking retests.) Both of these tests will be focused and designed to distinguish between the *Failing* and *Needs Improvement* levels. MCAS Retest items are released to the public after each test administration as is done with common items on standard MCAS tests.

Additionally, beginning in July 2003, the Department offered a special retest administration to students who have completed the twelfth grade, met all local graduation requirements, and participated in a state-sponsored summer remedial program. The test will be administered in

five locations throughout the state, and results will be reported by mid-September. Note that the summer retest forms are secure forms, and the items are not released after testing.

Beginning with the graduation of the class of 2003, there will be an additional group of individuals eligible to participate in the MCAS Retests – individuals no longer enrolled in a public high school who have not yet earned a Competency Determination. This pool of participants may include those enrolled in community colleges, adult education programs, and/or those not enrolled in any continuing education program. In its response to this RFR, the contractor must provide options for the participation of these individuals in future MCAS Retest opportunities.

As previously described, MCAS Retests are administered to students who have not met the requirements to earn a Competency Determination. During the course of the contract, performance thresholds may be adjusted by the Board of Education and additional content areas may be added to the Competency Determination requirement.

MCAS Retests are subject to all of the procedures and requirements described for the standard MCAS tests in Tasks 1-11, including the production of special forms. The contractor's response must include a proposed method for addressing those issues critical to the successful administration of the MCAS Retests.

The budget included in the response must list separately costs associated with MCAS Retests for each of the major task areas listed in Tasks 3-10. The budget for the MCAS Retests begins with Task 3 because retest item development and field testing are incorporated in the process for developing and field testing grade 10 items.

MCAS Alternate Assessment

The MCAS Alternate Assessment (MCAS-ALT) is a portfolio assessment administered to students who are unable to participate in the standard MCAS tests even when using the wide range of allowable accommodations. Implemented statewide in 2001, the MCAS-ALT is administered annually to approximately one percent of the students in the tested grades. The operation of the MCAS-ALT is managed under a separate contract from the standard tests. However, results from the MCAS-ALT are incorporated into the school and district reports covered under this contract, requiring coordination and communication between and among contractors.

English Proficiency Assessment

The English Proficiency Assessment (EPA) is a testing system being designed to measure the extent to which individual limited English proficient students have achieved proficiency in English over time. Consistent with the requirements of the federally mandated NCLB and of Question 2, the November 2002 Massachusetts ballot initiative, the EPA will measure student performance in listening, speaking, reading, and writing. (See <http://www.doe.mass.edu/ell/03news/060902faq.html> for more information on Question 2.) Although individual components of the EPA have been operational for several years, a statewide EPA was administered for the first time in spring 2003. As with the Alternate

Assessment, the EPA is administered under a separate contract. Results of the EPA are not incorporated into MCAS reporting.

Non-Testing Components

In addition to testing components, MCAS is supported by several non-testing components, including the following:

- a. on-line tutorials for students
- b. traditional and web-based professional development opportunities for teachers
- c. software to support the interpretation and use of MCAS test results
- d. dissemination of MCAS-related information to students, parents, and the general public

4. Scoring

The quality of the scoring of student responses to MCAS test items impacts all aspects of the MCAS program. The most immediate impact is in the computation and reporting of student-level and aggregate MCAS test scores. As described throughout this section, however, scoring also impacts the ongoing development of test items and the construction of future MCAS tests.

The scoring of constructed-response items (i.e., compositions, short-answer items, and open-response items) is one of the most complex, costly, and labor-intensive aspects of the MCAS program. A single scorer scores each open-response item on grades 3-8 tests. Two scorers independently score each open-response item on grade 10 tests and retests. Each student composition is scored independently by two scorers whose scores are combined to produce final scores that range from 2-12 on Topic Development and from 2-8 on Standard English Conventions. (Students receive a score of 0 only when their composition is considered illegible or off-topic.)

The Department anticipates that, in most cases, scoring will involve not only internal coordination among units within the contractor's organization (e.g., scoring, test development, psychometrics) but may also involve coordination with external scoring sites, possibly managed by subcontractors and staffed primarily with contracted scorers. The contractor's response to this RFR must demonstrate the contractor's understanding of all of the logistical, technological, and psychometric issues involved in scoring the MCAS tests; must include a detailed description of the contractor's scoring operations; and must indicate how these operations will ensure that scoring procedures conform to MCAS scoring procedures/specifications.

Although most of the focus of scoring is placed on the scoring of responses to constructed-response items, the accurate and efficient scoring of multiple-choice items is of equal importance. The contractor's response must demonstrate the organization's capacity to accurately capture, process, and score student responses to multiple-choice items.

The contractor's response must also indicate how the contractor's Scoring Services staff will interact with its Test Development staff on scoring matters, especially those regarding the development of scoring rubrics, scorer training materials, and the training of scorers.

5. Reporting

Performance Levels

The MCAS tests are designed to measure student performance against the learning standards contained in the *Massachusetts Curriculum Frameworks*. Consistent with this purpose, results on the MCAS tests are reported primarily according to four performance levels that describe student performance in relation to those standards: *Advanced*, *Proficient*, *Needs Improvement*, and *Warning (Failing at grade 10)*. Student performance earns a separate performance level classification on each content area test. There is no overall MCAS classification for individual student performance across content areas.

In addition to performance levels, MCAS test results are also reported as raw scores that are specific to a particular test administration, and as scaled scores that link performance across years. For purposes of Adequate Yearly Progress (AYP) the Department calculates a Proficiency Index across grade levels for each content area (see Appendix E for a description of the Proficiency Index).

Reporting Schedule

Student responses to all common multiple-choice, short-answer, and open-response items, and to the writing prompt are reported to students, parents, and schools. Student-level results for the Grade 3 Reading test, which are based exclusively on common multiple-choice items (although a limited number of open-response items are included on the test), are reported by the first week of June. Multiple-choice results for the grade 10 English Language Arts and Mathematics tests are reported electronically by the final week of June. All other results from the spring-administered MCAS tests are reported in mid-August, prior to the beginning of the next school year. The projected schedule for reporting results of tests administered in spring 2004 and of retests administered in November 2004 and March 2005 can be seen in Appendix F. The reporting schedule for the 2003 MCAS results can be viewed at http://www.doe.mass.edu/mcas/2003/news/rep_schedule.pdf.

Results of MCAS retest administrations must be reported no later than ten weeks following the completion of the administration period.

The Department would like results of the MCAS tests and retests to be reported as soon as possible following each administration. For the grade 10 English Language Arts and Mathematics tests and retests, the Department is also interested in exploring options for returning actual student responses to open-response and short-answer items. The contractor's response to this RFR must discuss issues related to reporting timelines, and must either present a rationale for maintaining the current reporting timelines or propose specific strategies for shortening the time between test administration and reporting.

Aggregated Results

MCAS test results are aggregated in a variety of ways at the student, school, district, and state levels, and are reported in both electronic and paper formats. In addition, the Department licenses *TestWiz* software to Massachusetts schools to enable further analysis of their MCAS test results and production of their own customized reports. Contractors who have notified the Department of their intent to bid by September 5, 2003 may obtain samples of current MCAS reports by calling the student assessment office at 781/338-3625.

Identification and Demographic Information

Reporting results of MCAS tests is based almost exclusively on information provided by students and school personnel on answer documents completed during testing. For those students enrolled in the same school for a full academic year, a majority of student identification and demographic information is obtained through the Department's Student's Identification Management System (SIMS) and printed on labels affixed to students' answer documents. (See Appendix G for SIMS data elements.) Despite efforts on the part of the Department, contractor, and schools to streamline the test administration process and minimize opportunities for errors in reporting of student demographic information, errors inevitably occur. Given the high stakes associated with student-, school-, and district-level results, the Department would like to provide schools with an opportunity, prior to the reporting of results, to review and make corrections online to the limited pieces of information (e.g., student's testing status, student's subgroup status) that directly impact school- and district-level results. The contractor's response to this RFR must include a discussion of the feasibility of providing this opportunity while maintaining or accelerating the reporting schedules previously described. If the contractor determines that this is feasible, the response must include a separate description and budget for the proposed process.

6. Analysis

Throughout the year, the Department and the contractor design, conduct, and report on a variety of analyses to support the development and evaluation of MCAS test items; the development and evaluation of MCAS tests; the reporting of MCAS results and linking of MCAS tests from year to year; and the use and interpretation of MCAS test results. These analyses range from simple counts of students to the application of complex item-response theory and other measurement theories and procedures. Similarly, the intended audiences of MCAS analysis data cover a wide spectrum, including the general public, educators, policy makers, researchers, and psychometricians.

Throughout this project, the timelines for analyses are tight and the deadlines are firm. In the area of item development, item statistics must be ready for scheduled summer and fall meetings. Analyses needed to guide test construction must be completed in time to allow for the production of millions of pages of test materials. Linking and scaling procedures must be completed in time for the production of student-, school-, district-, and state-level reports. The contractor's response must demonstrate an understanding of and a plan for meeting these deadlines. In

addition, the response must provide evidence of having met stringent timelines and deadlines in past work.

To achieve high-quality analysis, appropriate methods of analysis must be identified and those methods must be accurately applied. Consequently, the Department requires the contractor to produce detailed, written analysis specifications for each test administration. The primary methods of analysis currently used in the MCAS program are described in the *MCAS Technical Reports* available on the Department website (http://www.doe.mass.edu/mcas/tech_rpt.html). In their responses to this RFR, contractors are encouraged to identify and provide a rationale for additional or alternative analyses that they believe are necessary to support the development and evaluation of the MCAS standards-based, criterion-referenced tests.

7. Standard Setting

After the initial operational administration of each new MCAS test, threshold scores on that test for each MCAS performance level are established through a process that includes standard-setting meetings. For each test, a separate standard-setting panel of approximately 25 members participates in a three-day standard-setting meeting to identify and recommend threshold scores. Standard-setting panels use the *Body of Work* method to determine recommended performance level thresholds.

The contractor's response must include a discussion of the feasibility of conducting standard-setting meetings during the summer following the first test administration of a new test, while still reporting the test's results prior to the beginning of the school year. If the contractor believes that such a schedule is not feasible given the strict timelines for the reporting of MCAS test results, the response must include a discussion of alternatives that accomplish both tasks: setting standards and meeting the established reporting timelines.

8. Management and Staffing of the MCAS Project

The operation of MCAS is managed by the Curriculum and Assessment Services (CAS) unit of the Department of Education. Department staff, under the direction of an Associate Commissioner and Administrator for Student Testing, includes program administrators, support staff, content area specialists, specialists in the assessment of students with disabilities and of English language learners, data analysts, publication specialists, and a psychometrician. In addition, the CAS unit interacts with and draws support from other units within the Department (see Appendix H: Curriculum and Assessment Organizational Chart).

Throughout the course of the project, the contractor's project team will interact on a daily basis with the Department's CAS staff to coordinate the operation of the MCAS project. The following paragraphs describe Department expectations for the staffing of key positions on the contractor's MCAS project team.

Management Team

MCAS is a large and complex project. The contractor's MCAS management team must be adequate to manage the project both in terms of the number of people assigned to the team and in terms of demonstrated experience in project management and large-scale assessment.

At a minimum, the management team will include and be led by a full-time Project Director and full-time Project Manager. The Project Director will oversee the project and manage all services provided by the contractor, including those of subcontractors, and will serve as the contractor's primary liaison with the Department. The Project Manager will assist the Project Director in the operation of the contract and will serve as a backup to the Project Director during times when the Project Director is unavailable.

The Department values both skill and professional commitment to the project. The contractor must hire highly qualified staff for the project and, whenever possible, hire qualified staff who can commit to the contract for its duration. The Department must approve the replacement for any member of the management team who leaves the project.

Test Development Team

The contractor will provide a full-time Test Development Director to oversee item development in all content areas at the grade levels tested in each. Further, each content area will have its own Content Lead Developer who will be responsible for grade-level developers for each grade-level test. For example, a grade 5 English Language Arts developer will report to the ELA Lead who will in turn report to the Test Development Director. This staffing pattern parallels that of the Department, which has a Test Development Coordinator, content leads, and, in most cases, grade-level specialists.

The contractor's Test Development Director will serve as the primary liaison between the contractor and the Department's Test Development Coordinator on all test development issues. The Test Development Director is responsible for all technical item/test design and development matters and should have technical expertise and experience with large-scale item development and test construction, training in one or more of the content areas assessed, and facility in measurement principles. The contractor's Test Development Director will be responsible for scheduling meetings and deliverables; performing quality checks on all actual and proposed test materials; adhering to submission protocols; providing status reports on development; and preparing performance reviews of individual developers, editorial staff, graphics designers, and external expert reviewers. Consequently, the contractor must provide support that will enable the Test Development Director to carry out these key responsibilities. Further, the contractor's Test Development Director and other members of the test development team will participate in the meetings shown in Table 2. The Test Development Director will be required to spend more than 100 days each year at assessment meetings.

Table 2 Contractor /Test Development Team Participation in Assessment Meetings			
Meeting/Event	Test Development Director	Content Lead Developer	Grade Level Developer
Assessment Development Committee (ADC)	X	X	X
Bias Review Committee	X		
Item Selection/ Form Pulling	X	X	X
Monthly and Quarterly Management Meetings	X as needed		

Psychometric Staff

The psychometric staff assigned to the MCAS project must be proficient in the application of complex item-response theory techniques and procedures. Input from the contractor’s psychometric staff is necessary to almost all phases of the project, requiring interaction and coordination with other units within the contractor’s organization as well as with the Department. The contractor’s response must describe how the qualifications, organization, and commitment levels of the psychometric staff assigned to the MCAS project will meet the above requirements.

Scoring Staff

The Department does not require a particular staffing model for scoring staff. However, it is important for the test development staff and scoring staff to work collaboratively.

The contractor’s response must describe the proposed organization and composition of full-time and part-time scoring staff. The response must provide for scoring staff of sufficient numbers and qualifications to meet the logistical, technical, and psychometric demands of the project.

Qualifications of Scorers

The contractor must ensure, and provide evidence to support, if requested, that each scorer of MCAS test items possesses the following qualifications:

- a. two years of college completed (at a minimum), with a major in the content area being scored or in a directly related field of study; and
- b. a demonstrated ability to meet scoring quality requirements established by the Department

In addition, the contractor will demonstrate a commitment to recruit and hire scorers for each MCAS test who possess the following qualifications:

- a. a bachelor’s degree or higher with a major in the content area being scored or in a directly related field of study
- b. prior experience scoring a large-scale assessment
- c. prior professional experience in K-12 education

Service Center

The MCAS Service Center provides year-round, toll-free telephone support to Massachusetts school and district personnel. It is the primary point, and in most cases the only point, of direct contact between the contractor and Massachusetts schools and districts. The contractor must assign staff to the Support Services Center who are qualified to interact with school and district administrators and trained to correctly and efficiently answer questions related to the administration of the MCAS tests and the reporting of MCAS results.

Quality Control

The high quality of MCAS materials and services is critical to the successful operation of the MCAS project, and is the result of the staffing, design, and implementation decisions made by the contractor and the effectiveness of the contractor's monitoring and quality control activities throughout all phases of the project. The Scope of Work section (Section 4) of this RFR contains no individual line items devoted to the contractor's internal quality control procedures. The contractor's response, however, must clearly describe how quality will be assured across all sections and line items of this RFR.

9. Professional Development/Training Workshops/Tools

One of the primary objectives of education reform is to improve classroom instruction. Toward that end, professional development activities and materials designed to help teachers interpret and use assessment results are an integral part of MCAS.

Each year the contractor is responsible for planning, developing, and delivering professional development workshops. For each institute or workshop that is offered, the contractor is responsible for procuring a site within each region, pre-registering participants, and handling all other matters related to the workshops and institutes, including the development, preparation, and production of presentation materials and handouts.

For each year of the contract, the contractor will conduct MCAS administration workshops (introduced earlier under "Test Administration: Support") and reporting workshops at six regional sites across the state. Two half-day sessions (morning and afternoon) will be held at each site.

During the summers of 1998-2002 the contractor, in collaboration with the Department, conducted three weeklong MCAS Scoring Institutes, during which Massachusetts teachers and administrators scored student ELA Compositions. Although the Scoring Institutes have been suspended for summer 2003, the Department considers these a successful professional development activity and plans to offer them again in the future. In addition, the Department would like to expand the Institutes to include other content areas, for example, open-response mathematics test items.

The Department has also produced an *NCS Mentor CD-ROM*, an interactive tool that guides teachers on the MCAS scoring process for the ELA Composition. Currently under development

is a CD-ROM that simulates the scoring of mathematics and ELA open-response items and writing prompts. This tool will also be available to Massachusetts teachers on-line. The Department is interested in having the contractor assist with workshops to train teachers in the use of this tool, which is expected to be released to schools in fall 2003.

10. Future Directions

Additional MCAS Tests in Reading and Mathematics

The most substantial addition to the MCAS program over the course of the contract awarded pursuant to this RFR will be the development and implementation of additional MCAS tests to meet the requirements of the federal *No Child Left Behind Act of 2001*. New MCAS tests in reading at grades 5, 6, and 8, and in mathematics at grades 3, 5 and 7 are required.

As with the current MCAS tests, these new tests will be customized criterion-referenced tests aligned with the learning standards contained in the state's *Curriculum Frameworks*. The tests will also contain a mix of item types similar to those that appear on the current MCAS tests (i.e., multiple-choice, short-answer, open-response). For further information, see Appendix I: Overview of Quantitative Test Development Requirements.

The Department anticipates that statewide pilot testing of the new tests will be administered in the spring of 2005, followed by the first operational administration of the tests in 2006 (see Appendix J Test Implementation Schedule). If feasible based on the timing of the awarding of this contract, field-testing may begin on a small scale in the spring of 2004.

The contractor's response must discuss how new grade-level tests will be integrated to ensure consistency across new and existing tests.

Locally-Scored High School MCAS U.S History Test and Discipline-Specific Science Tests

The high school MCAS test in U.S. History implemented under this contract will be designed to serve both state and local assessment needs. Discipline-specific high school tests in science will be designed to serve local and state needs and comply with requirements for science testing required by *No Child Left Behind*. At the local level, school districts will have the option of using the tests as part of their local assessment and grading systems. At the state level, results from the tests will be used for school and district accountability. Ultimately, results from the tests will also be used for student accountability as part of the state's Competency Determination requirement for receiving a high school diploma.

The implementation of locally-scored science and history tests will present many challenges new to the MCAS program. It also presents opportunities for new design. Contractors are encouraged to propose creative options for local scoring, field-testing, equating, etc. The implementation plan for these tests may have to consider issues such as

- a. training teachers to reliably score responses to open-response items
- b. providing efficient and reliable methods for the local scoring of responses to multiple-choice items

- c. developing and disseminating scoring materials
- d. maintaining test security while allowing for local flexibility in administration and scoring
- e. efficiently obtaining results from schools following scoring
- f. designing and implementing a system for auditing results reported by schools following scoring
- g. integrating MCAS state scores with school-specific assessment and grading.
- h. field-testing new items to replace released items
- i. equating

The schedule for the full implementation of these tests (see Appendix J) provides additional time prior to the first operational administration to address these issues.

The contractor will submit two separate Task Budgets for this section: one for locally-scored Science tests and one for locally-scored U.S History tests (see p. 24).

Local Writing Component

The Composition section of the MCAS English Language Arts test uses a single task to measure a single type of writing per grade level (expository, narrative, literary analysis) under a single condition (responding to an on-demand task) in a single format (paper-and-pencil). For those reasons, the Department does not report a separate writing score for students or schools.

Under the contract awarded pursuant to this RFR, the contractor in collaboration with the Department will explore options for developing and implementing a local writing component to supplement the Composition portion of the English Language Arts test. Student performance on the on-demand Composition would be combined with writing scores obtained from schools to produce writing scores at the student and/or school levels.

Vertical Scaling of English Language Arts and Mathematics Tests

With implementation of additional MCAS tests in reading and mathematics at grades 3 through 8, MCAS will include annual measurement of students in those content areas across six consecutive grade levels. The contractor in collaboration with the Department will explore options for the development of vertical scales to supplement the reporting of MCAS test results across grade 3 through 8 (and possibly 10). The primary purpose of the scales will be to provide schools and districts with information about students' annual progress toward meeting the state's performance standards. The scale will provide information that will assist schools and districts in the design, implementation, and evaluation of programs to meet the needs of individual students.

Additional Uses of Technology

Through the course of contract awarded pursuant to this RFR, the Department intends to make use of available technology to improve the efficiency of the operation of the MCAS project. Contractors' responses should propose areas in which increased use of technology can improve the efficiency and effectiveness of the project, including but not limited to

- a. management of the project
- b. test item development/item selection/test form development and test production
- c. test administration and the processing of test materials
- d. scoring and reporting of tests
- e. reporting and resolving discrepancies in student identification/demographic information
- f. MCAS Support Center
- g. tracking item pools through development

In all cases, the contractor's response must demonstrate that the proposed use of technology will maintain the security of MCAS test materials and confidential student information.

In general, the Department will not consider proposals to replace the standard MCAS paper-and-pencil tests with computer-administered tests. However, the Department welcomes contractor responses that include proposals to integrate the use of computers into the administration of the following MCAS tests or components:

- a. grade 10 discipline-specific science tests
- b. grade 10 U.S History test
- c. local writing component
- d. provision of test accommodations for students with disabilities
- e. MCAS Retests

The Department will not consider proposals to score constructed-response items using computers rather than trained human scorers. However, the Department welcomes contractor responses that include proposals to improve the efficiency, reliability, and validity of the scoring process using available technology.

SECTION 2: RESPONSE GUIDELINES

Responses to the RFR must be clear, concise, and designed so that reviewers can easily cross-reference tasks specified in this attachment. The response must be organized according to the following six sections:

1. Introduction
2. Scope of Work/Contract Deliverables
3. Management and Staffing
4. Corporate Capabilities and Related Experience
5. Budget
6. Appendices and Work Samples

1. Introduction

In this section of the response, the contractor must briefly describe its approach for conducting the scope of work described in this RFR and indicate why this approach was selected. In addition, the contractor must demonstrate an understanding of the nature and purposes of MCAS, and of the nature and scope of work called for in the RFR. This section must provide

- a. a succinct overview of the proposed work
- b. highlights of the Scope of Work/Contract Deliverables and Management and Staffing sections
- c. examples of the contractor's and significant subcontractors' experience with high-stakes, standards-based student assessment programs
- d. an introduction to any additions or modifications it is proposing to the scope of work/deliverables outlined in this RFR

2. Scope of Work/Contract Deliverables

This section of the response must describe the contractor's specific approach and plans for accomplishing the work called for in the RFR. Descriptions must provide sufficient detail to permit the Department to fairly evaluate the merits of the response. In order to facilitate the review process, the contractor must respond to each task included in Section 4: Scope of Work/Contract Deliverables. In addition, cross-references within the response must be specific.

If the contractor proposes alternatives or modifications to specific tasks described in this RFR, each task must be fully described and clearly identified as an *alternative* or *addition*.

3. Management and Staffing

The success of MCAS is dependent upon the commitment, knowledge, and skills of qualified professionals. Consequently, the education and training, employment history, and relevant work experience of personnel assigned to this project will carry considerable weight in the Department's evaluation of responses to this RFR.

This section of the contractor's response must include the names, qualifications, and proposed responsibilities of each staff member to whom major responsibilities will be assigned for this

project. Changes to key contract staff, project management team staff, and other key personnel require prior approval by the Department.

Assignment of Staff

The contractor must provide resumes for the individuals proposed to fill the following full-time contract positions:

- Project Director
- Project Manager
- Test Development Director
- Content Lead Developers (English Language Arts; Mathematics; History and Social Science; Science and Technology/Engineering)

In addition, the contractor must provide resumes for proposed department managers and staff persons who will perform all key functions related to the contract, which will include at least the following areas:

- Item Development
- Test Construction
- Publications
- Psychometrics and Data Analysis
- Scoring
- Reporting

Finally, the contractor is encouraged to provide resumes for all other department managers and staff persons whom the contractor believes will play a significant role in the operation of the MCAS project.

Time Allocations

On the Staffing Form contained in Appendix K, the contractor must indicate the time allocations (in full-time equivalent person days) for the contractor, subcontractors, and vendors for each of the eleven major task areas listed below and described in Section 4. Within each major task area, the contractor must specify the name and time allocation for any staff person assigned to the MCAS project for 1/4 FTE or more.

- 1.0 Management, Design, and Planning
- 2.0 Item Development
- 3.0 Test Construction
- 4.0 Test Administration
- 5.0 Scanning and Imaging
- 6.0 Scoring of Student Responses
- 7.0 Standard Setting
- 8.0 Analysis
- 9.0 Reporting of Results
- 10.0 Publications
- 11.0 Professional Development

Separate forms must be completed as appropriate and submitted for each fiscal period for the following:

- All tests for grades 3-8, and ELA and math tests for grade 10
- Locally-scored high school MCAS discipline-specific science tests
- Locally-scored high school MCAS U.S. History test
- Local writing component
- Vertical scaling of ELA and math tests

For the purpose of adequately describing the qualifications and activities of personnel proposed for this project, the Department requires the contractor to make a distinction between subcontractors and vendors in this section of its response. As a general rule, an outside party performing a task that requires a background and training in education, assessment, or psychometrics should be identified in this section as a *subcontractor*. An outside party performing any other task should be identified as a *vendor*.

If the contractor proposes to assign all or part of any task to a subcontractor, specific names, qualifications, and time allocations must be included in this section.

Organizational Charts

The contractor's response must also include the following two organizational charts:

1. overall structure of the contractor's organization
2. organization of the MCAS project team, including lines of communication or interactions with other units within the organization and with any subcontractors

4. Corporate Capabilities and Related Experience

The contractor must demonstrate its capacity to conduct the full scope of activities described in each section of this attachment and its plans to scale up, if necessary, to handle a large-scale contract. This section of the contractor's response may include information on the contractor's total organizational capabilities, and must describe the contractor's qualifications to manage a custom, standards-based, large-scale assessment program with high stakes for students, schools, and districts. The response must also include descriptions of other large-scale assessment contracts, past and present, carried out by the contractor. References will be required at a later time for contractors considered finalists, but may be provided in this section.

The response must also demonstrate the corporate capabilities and related experience, as specified above, of each subcontractor.

The response must also include the contractor's most recent financial report for purposes of judging financial capability and stability.

5. Budget

Using the Line Item Budget and Task Budget forms provided in Appendices L and M, the contractor must provide a budget for each fiscal year of the contract (refer to Table 3) plus a

summary of each type of budget across all fiscal years. Responses that do not include these required forms will be considered non-responsive.

Table 3 Contract Dates by Fiscal Year		
Contract Year	State Fiscal Year	Calendar Dates
1	FY '04	Upon approval - June 30, 2004
2	FY '05	July 1, 2004 - June 30, 2005
3	FY '06	July 1, 2005 - June 30, 2006
4	FY '07	July 1, 2006 - June 30, 2007
5	FY'08	July 1, 2007 - June 30, 2008
6	FY '09	July 1, 2008 - December 31, 2008
Summary Budget	FY '04 - '09	Date of Approval - December 31, 2008

Responses must separate the costs of contractors' overhead and fees from other costs on each of the budget forms. The basis and rationale for calculating major cost items must be explained in an accompanying budget narrative.

In addition, Table 4 indicates the kind of budget that is required for the each of the tasks described in Task 12.0, Additional Tasks (of the Section 4, Scope of Work).

Table 4 Type of Budget Required by Task			
	Task Number	Task Budget (Appendix M)	Modified Line Item** (Appendix Q)
Locally-Scored H.S. Discipline-Specific Science Tests	12.2	√	
Locally-Scored H.S. U.S History Tests	12.3	√	
Retests (Nov., March, July)	12.1	√	
Local Writing Component	12.4		√
Vertical Scaling of English Language Arts and Mathematics Tests	12.5		√
Technology Enhancements	12.6		√
Other			

** The following line items plus a budget narrative must be included in the modified line item budget for each year of the contract. Use the Modified Line Item Budget form in Appendix Q.

- 1) Labor
 - 2) Other Direct costs
 - a) Office Operations (general supplies, telephone, photocopying, postage, misc., etc.)
 - b) Shipping and Receiving
 - c) Documents and databases (including reproduction and printing)
 - d) Data processing
 - e) Meetings/Conferences/Workshops
 - f) Travel
 - 3) Overhead and Fees
- Total

All subcontracting arrangements must be detailed in the MCAS Major Task Area Budget (Appendix M).

Wherever the contractor proposes specific alternatives or optional activities, the response must detail such costs separately in the same manner as that used for the required tasks specified in this RFR.

6. Appendices and Work Samples

Each response must include the following appendices:

- a. a copy of the contractor's corporate Affirmative Action Plan
- b. pre-award assurances of Equal Employment Opportunity
- c. appropriate work samples demonstrating the quality of proposed deliverables
(Contractors are encouraged to include *a limited number* of selected samples of test materials and reports produced for other similar large-scale assessment programs.)
- d. other documentation, as necessary, to support the contractor's response to this RFR.

7. Liquidated Damages

Because of the serious consequences attached to MCAS results for students, schools and school districts, it is imperative that all test materials, reports of results, and databases of results are complete, accurate, and delivered on time. To that end, the award of the contract for this RFR will be contingent upon the contractor agreeing to the attached Liquidated Damages Agreement unless the contractor proposes a different agreement that is acceptable to the Department of Education. (Please refer to Appendix R for a copy of the Liquidated Damages Agreement.)

SECTION 3. APPLICATION PROCEDURE

Contractors must respond to each of the six sections detailed in “Section 2: Response Guidelines.” In order to facilitate the Department’s review of responses, contractors must also adhere to the following response format specifications. Responses that do not follow these format specifications will not be considered.

1. All secure materials submitted as part of the contractor’s response must be labeled “secure.” However, please note that the Massachusetts Public Records Law requires that the only materials included with a response to an RFR that can be kept secure, even when correctly labeled, are materials such as actual test booklets.

Responses must be accompanied by a cover letter signed by an agent or officer of the contractor authorized to bind the contractor to the response. The cover letter must include the following information:

- name of proposed contractor
 - name, title, affiliation, address, e-mail address, and telephone and fax numbers of contact person
 - name, title, affiliation, address, and telephone and fax numbers of person authorized to bind the contractor to the response
 - name, title, affiliation, address, and telephone and fax numbers of proposed project Director
 - contractor agreement to comply with all the stipulations of this RFR
 - dates during which the response shall be considered valid and binding on the contractor
 - list of all secure materials submitted as part of the response
2. Respondents must notify the Department of their intent to bid in writing by mail or e-mail (jnellhaus@doe.mass.edu) by September 5, 2003.
 3. All inquires concerning the RFR must be submitted in writing and directed to VCrocker@doe.mass.edu. The Department will receive questions between September 8 and September 22. All responses to inquiries will be posted by September 26 or earlier on the Comm-PASS Internet Site at <http://www.comm-pass.com>.
 4. Responses must be received by Student Assessment Services, Massachusetts Department of Education no later than **5:00 p.m. EDT on Friday October 17, 2003**. An original and eight copies of the response and all accompanying materials must be received by that time. Responses must be submitted via mail or delivery service to
Jeffrey Nellhaus, Associate Commissioner for Curriculum and Assessment
Massachusetts Department of Education
350 Main Street
Malden, Massachusetts 02148-5023

SECTION 4: SCOPE OF WORK/CONTRACT DELIVERABLES

This section of the RFR describes the major tasks expected of the contractor and provides information on work requirements, including contract deliverables. The contractor must consistently cite and reference all tasks, requirements, and deliverables in its response. In addition to describing specific methods and plans for undertaking each task in this section, the contractor's response must indicate other tasks or subtasks not otherwise explicitly cited in this section that it considers critical to the successful operation of MCAS.

Throughout the course of the contract awarded pursuant to this RFR, the contractor's performance will be evaluated by the Department based upon the evaluation criteria detailed in Appendix N.

1.0 Management, Design, and Planning

Since effective management and planning are critical to the successful operation of the MCAS project, the contractor will assist the Department in the ongoing operation of MCAS, including the design and planning of future components and directions of the program as specified in this RFR.

- 1.1 The contractor will assign a Project Director and assemble a project management team to oversee and coordinate the efforts of the contractor and all of its subcontractors. The Project Director will serve as the primary liaison with the Department.
 - 1.1.1. Within two months of the initial award of the contract and prior to the beginning of each fiscal year (7/1 – 6/30), the contractor will submit a detailed project plan and schedule for the coming fiscal year for review and approval by the Department. The plan and schedule will become the basis for managing the operation of the project and a tool for evaluating the performance of the contractor. The contractor's response must demonstrate its capacity to develop and use a project plan and schedule.
 - 1.1.2. The contractor will provide written monthly operations and budget status reports to the Department.
 - 1.1.3. The contractor's project management team will participate in weekly status meetings with the Department. These meetings will be conducted via telephone and scheduled for one hour. The contractor will be responsible for providing documentation of these meetings within 24 hours of the meeting.
 - 1.1.4. The contractor's project management team will participate in and support monthly management meetings with the Department. Dependent upon the activities scheduled for the upcoming month(s), additional Department or contractor staff may be required to participate in these meetings in person or via telephone. These single-day meetings will be held at the Department of Education or other suitable site in the Greater Boston area. The contractor will be responsible for all costs associated with these meetings.
 - 1.1.5. The contractor will participate in and support quarterly management meetings of the Department and contractor project management teams, other contractor management staff responsible for services provided to the Department, and

representatives of contractor's senior management. Two meetings will be held at the contractor's site and two meetings will be held at the Department of Education or at a site designated by the Department of Education in the Greater Boston area. Each meeting will be scheduled for one day immediately following a monthly management meeting (Task 1.1.4). The contractor will be responsible for all costs associated with these meetings.

- 1.1.6. The contractor will provide the Department with weekly schedules for the Project Director and Project Manager to facilitate efficient communication between the Department and contractor.
 - 1.1.7. The contractor will establish a procedure to ensure the availability of 24-hour/7-day contact between the Department and Project Director in the event of an emergency.
- 1.2 The contractor will attend and support meetings with technical and policy advisory committees and other advisory committees established by the Department.
- 1.2.1 The contractor will attend and support meetings of the Department's six-member Technical Advisory Committee (TAC), which assembles for two-day meetings three times per year. Two meetings per year will be held in Boston. The third meeting may be held at another site in Massachusetts or at the contractor's site. At a minimum, the contractor will be represented at the meetings by the Project Director, the contractor's manager of psychometric services, and the lead psychometrician assigned to the MCAS project. Dependent upon the agenda, additional contractor staff in relevant areas (e.g., item development, test construction, scoring) may be required to attend and participate. In addition to regular meeting costs, the contractor will be responsible for travel costs for committee members and participants, including airfare, lodging, local transportation, and meals not provided during meetings. The Department will be responsible for the payment of honoraria to committee members.
 - 1.2.2 The contractor will attend and support meetings of a Massachusetts 15-member Statewide Advisory Committee that assembles for quarterly half-day meetings in the Greater Boston area. In addition to regular meeting costs, the contractor will be responsible for reimbursement of committee members' mileage expenses at 28 cents per mile and, as necessary, reimbursement to members' school districts for the costs of hiring substitute teachers to cover members' classrooms during meetings. (Contractors' responses should base substitute reimbursement projections on 5 of 15 members and mileage reimbursements on 750 miles.)
 - 1.2.3 The contractor will attend and support meetings of various 10-member ad hoc advisory committees or focus groups established by the Department. The contractor should budget for up to 6 one-day meetings per year to be held in the Greater Boston area. In addition to regular meeting costs, the contractor will be responsible for reimbursement of committee members' mileage expenses and, if appropriate, reimbursement to members' school districts for the costs of hiring substitute teachers to cover members' classrooms during meetings. (Contractors' responses should base reimbursement projections on 5 of 10 members at \$100/day.)

- 1.3 At the request of the Department, the Project Director will attend and participate in up to four meetings of the Massachusetts Board of Education each year. Meetings of the Board of Education are half-day meetings held at various locations throughout Massachusetts.
- 1.4 At the request of the Department, the Project Director will attend and participate in up to six meetings of various educational and policy groups within Massachusetts.
- 1.5 The contractor will establish and adequately staff an MCAS Support Services Center that operates under the supervision of the project management team. The MCAS Support Services Center will provide year-round, toll-free telephone support to school and district personnel. The staff of the Support Services Center will be trained to answer questions related to the administration of the MCAS tests and the reporting of MCAS results. During test administration and reporting periods, the Support Services Center will operate with additional staff from 7:00 a.m.-5:00 p.m. (Eastern Time), Monday through Friday. During the remainder of the year the Support Services Center will operate each school day from 8:00 a.m.-5:00 p.m. (Eastern Time).

The contractor will ensure that the MCAS Support Services Center is adequately staffed and trained to provide the level of support necessary during test administration and reporting. Specifically, the contractor's response must describe procedures and staffing that will ensure that all phone calls are answered, and that callers are not put on hold for longer than five minutes. (The current MCAS Support Services Center employs two full-time staff year-round, with extended hours during the testing period. Extended hours begin two weeks prior to the testing period and continue for two weeks following the testing period.)

During the test administration and reporting periods, the contractor will be responsible for submitting to the DOE daily reports of calls logged into its system. During the remainder of the year, reports will be submitted weekly.

The contractor's response must include a description of the software and procedures that will be used to log and track all communications with schools as well as the tools and procedures used to ensure effective communication among the Support Services Center, the project management team, and internal staff. The contractor's response must describe the proposed method for staffing and operating the Services Center, and may also include discussion of additional methods of efficiently communicating with schools and districts.

- 1.6 For any contractor located more than 100 miles from Malden, Massachusetts, the contractor will establish an office in the Greater Boston area. The office will be staffed by either the Project Manager or Project Director and support staff as needed. Since the Test Development Director will be required to spend more than 100 days each year participating in assessment meetings, the contractor should consider locating the Test Development Director at the Greater Boston office as well.

2.0 Item Development

The contractor is responsible for the development each year of new items and item-specific scoring guides for each of the MCAS tests. For existing MCAS tests, annual item development is needed to replace common test items released to the public and to generate new items for field-testing. For new MCAS tests developed under the contract awarded pursuant to this RFR (mathematics at grades 3, 5, and 7; and reading at grades 5, 6, and 8), the initial item development task will spread across two years (2004 and 2005). This will require the development of a sufficient pool of items to provide common and matrix-sampled linking items for the first operational administration of the test, and to provide field test items to serve as the pool of replacement items for successive operational administrations.

One week after each test administration, the contractor will send all test items, with related art and/or graphics, to the Department in a searchable format via CD-ROM for the Department's item bank and for use in the Department's Internet-based applications. The contractor must agree that all test items, ideas for items, and related test materials developed under this contract are and will remain the exclusive property of the Department of Education.

The specific tasks below describe major milestones and/or deliverables in the item development process. These tasks, however, do not reflect the entire scope of the item development process. As indicated by the staffing requirements listed in this section, item development is a full-time, year-round process requiring ongoing intensive interaction and coordination between the contractor and the Department.

- 2.1 Planning and Documentation. As part of each year's project plan (Task 1.1.1), the contractor will document all item development activities and procedures scheduled to be conducted during the coming fiscal year and the status of item development. This documentation will include procedures used to ensure compliance with item development specifications, test security, and other quality control measures.
- 2.2. The contractor will annually develop enough reading passages and items so that, after the Department of Education's final review, there is sufficient material to populate all forms of each year's tests with reading passages (as applicable) and common, matrix-equating, and matrix field-test item positions (as applicable), according to the specifications found in Appendices B and I. (The number of items required for matrix-equating varies. See footnote, Appendix I.)

The Department of Education will make the final decisions regarding the acceptability of reading passages, items, scoring guides, and ancillary test materials (such as mathematics reference sheets).

In responding to this RFR, contractors must describe their item development quality assurance procedures and how they will ensure that all items delivered to the Department of Education

- a. are aligned to the *Massachusetts Curriculum Framework* standards
 - b. will enable accurate and reliable evaluation of student performance according to the MCAS performance level standards
 - c. are clearly and precisely worded
 - d. are supported by high-quality artwork and graphics (where applicable)
 - e. are constructed to conform to the *Standards for Educational and Psychological Testing*
 - f. contain/represent content that is unequivocally correct
 - g. are free of bias, stereotyping, and insensitive language
 - h. are developmentally appropriate
 - i. will gain students' interest and promote effective classroom instruction
- 2.3 The contractor will arrange for and conduct out-of-state field-testing of writing prompts. The contractor must field test a minimum of ten writing prompts per grade each year (30 for grade 10). The contractor must describe its design and procedures for out-of-state field testing, including sampling plan. The contractor will be responsible for all costs of the field test. The contractor must describe its design and procedures for out-of -state field testing, including its sampling plan.
- 2.4 The contractor will be responsible for the development of complete scoring materials for each item, including an item-specific scoring guide for each constructed-response item (except for writing prompts, which are scored using a modified holistic scoring guide); scorer training notes; and, after field-testing, sets of benchmarked student work. The contractor must describe its methods and procedures for the development of scoring guides and related materials.
- The contractor will develop constructed-response items that can be scored reliably and scoring materials for each item that are comprehensive and accurate. The contractor's response must describe how its MCAS test development staff and scoring staff will work together to ensure the highest-quality test items and scoring materials (see also Task 6.0).
- 2.5 The contractor will appoint a full-time Test Development Director. The Director will serve as the liaison between the contractor and the Department's Project Management and Test Development staff. The Test Development Director will be responsible for directing all aspects of MCAS item/test development for the contractor. The Director will attend and serve as the contractor's lead representative at the following meetings:
- Assessment Development Committee (ADC) meetings
 - Bias Review Committee meetings
 - item selection meetings
 - form pulling (grade 10)
 - monthly and quarterly management meetings
- 2.6 The contractor will appoint a test development team that will include a full-time Lead Developer in each of the following content areas: English Language Arts, Mathematics, Science and Technology/Engineering, and History and Social Science. The Lead

Developer in each content area will be supported by grade-level developers assigned to one or more MCAS tests.

In awarding the contract, preference will be given to contractors who indicate in their responses that authors of test items will be designated content developers who will attend ADC meetings.

- 2.7 The contractor will support semi-annual planning meetings of the Department and contractor test development teams. One two-day meeting will be held at the contractor's site and one two-day meeting will be held in the Greater Boston area. The contractor will be responsible for all costs associated with these meetings.
- 2.8 The contractor will support the work of the MCAS Assessment Development Committees (ADCs). The number of meeting days required by each committee is shown in Table 5. The contractor will be responsible for the planning of meetings and all costs associated with meetings for each committee, including the following:
 - a. procuring meeting sites approved by the Department
 - b. notifying and confirming the participation of committee members
 - c. preparing and producing materials review booklets and meeting materials
 - d. coordinating with site staff prior to and during the meetings
 - e. providing continental breakfast, lunch, and light afternoon refreshments for committee members and Department staff
 - f. reimbursement of members' travel expenses (mileage and tolls)
 - g. lodging and evening meal costs for committee members who live 70 miles or more from the meeting site; lodging will be provided by the contractor to all members for summer ADC meetings (Approximately twenty percent of committee members will require lodging and evening meals for the evening preceding the first day of the meeting, and for a second evening when meetings exceed two days.)
 - h. reimbursement to members' school districts for substitute teachers on meeting days during the school year (Contractors' responses should base projections on reimbursement for 15 of 20 committee members.)
 - i. ensuring the security of all MCAS test materials prior to arrival at the meeting sites, during the meetings, and after the meetings have concluded
 - j. preparation of a report of members' meeting attendance
 - k. preparation of a report of each committee's recommendations immediately following each meeting

Prior to each ADC Committee Meeting the contractor will coordinate with the Department as follows:

1. Submit newly developed items and rubrics that conform to MCAS test development specifications to the Department no less than 10 business days in advance of the first day of the meeting. Rubrics must be included for open-response items and, for field-tested items, must be accompanied by proposed benchmark papers.
2. Confer with the Department by phone at least one week prior to the meeting to review all test items to be reviewed at the meeting.

3. Following that phone conference, duplicate the Department-approved set of bound items.

Table 5 Number of ADC Meeting Days Per Year For Each Test		
ADC Committee/Test	Fiscal Year '04	Annually After '04
Grade 3 Reading	10	10
Grade 3 Math	9	8
Grade 4 ELA	10	10
Grade 4 Math	8	8
Grade 5 Reading	11	10
Grade 5 Math	9	8
Grade 5 History	10	9
Grade 5 Science	8	8
Grade 6 Reading	11	10
Grade 6 Math	9	8
Grade 7 ELA	10	10
Grade 7 Math	9	8
Grade 7 History	10	9
Grade 8 Reading	11	10
Grade 8 Math	8	8
Grade 8 Science	8	8
Grade 10 ELA	14	14
Grade 10 Math	11	11
H.S. History	10	9
H.S. Biology	8	8
H.S. Chemistry	8	8
H.S. Physics	8	8
H.S. Technology	8	8
Totals	218	208

- 2.9 The contractor will support the work of the Bias Review Committee. The 12-member committee meets for two-day meetings four times per year, and for one additional day during the year. The contractor will be responsible for the planning of meetings and all costs associated with meetings, including
- a. procuring meeting sites approved by the Department
 - b. notifying and confirming the participation of committee members
 - c. preparing and producing meeting materials
 - d. coordinating with site staff prior to and during the meetings
 - e. providing continental breakfast, lunch, and light afternoon refreshments for committee members and Department staff
 - f. reimbursement of members' travel expenses
 - g. lodging and meal costs for committee members who live 70 miles or more from the meeting site (Contractors' responses should base cost projections on providing lodging and meals for 4 of 12 committee members.)
 - h. reimbursement to members' school districts for substitute teachers on meeting days during the school year (Contractors' responses should base projections on reimbursement of 5 of 20 committee members.)

- i. payment of \$250 honorarium per day per member
 - j. ensuring security of all MCAS materials prior to arrival at the meeting site, during the meeting, and after the meeting has concluded
- 2.10 The contractor will support the review of test items by the External Content Experts. The contractor will be responsible for the planning and costs of all work associated with the External Content Experts' item review, including
- a. recommending scholars in the content areas tested to serve as prospective reviewers
 - b. coordinating work schedules with reviewers
 - c. preparing and producing materials for reviewers
 - d. distributing materials to and receiving materials from reviewers
 - e. payment of Content Experts (Contractors' responses should budget for 25 external content reviewers for 4 days each, for a total of 100 days at \$300/day.)
 - f. ensuring security of all MCAS materials while with reviewers
- 2.11 The contractor must acknowledge that all materials developed under the MCAS contract, including test items, ideas for items, scoring guides and materials, tool kits, reference sheets, and all other materials and documents produced for the Department of Education are and shall forever remain the property of the Massachusetts Department of Education. The contractor must agree not to use these materials for any purpose other than to respond to the requirements of the contract awarded under this RFR.
- 2.12 The final step in the item development process each year is the selection of items to include on the MCAS tests. MCAS common and equating items are selected from the pool of field-tested items that have met technical specifications. MCAS field-test items are selected from the pool of newly developed and revised items approved by the Department.
- 2.12.1 The contractor will support meetings of the contractor's and Department's Test Development teams for final item review and selection. Two two-day meetings will be held in the Greater Boston area for each MCAS test. One meeting will be devoted to the selection of common/equating items and one meeting will be devoted to the selection of the remaining matrix items to be field-tested. The contractor is responsible for the planning and costs associated with these meetings, including
- a. procuring meeting sites approved by the Department
 - b. preparing and producing meeting materials, including item statistic information
 - c. coordinating with site staff prior to and during the meetings
 - d. providing continental breakfast, lunch, and light afternoon refreshments for participants
- 2.12.2 The contractor will support the Department in tracking the evolution of newly-developed items from pre-ADC review to release after testing. To accomplish this task, the contractor will provide the Department with the following information in electronic format for each test item:

- a. specific *Massachusetts Curriculum Framework* learning strands/standards the item assesses
- b. grade
- c. item difficulty
- d. item status (e.g., common, field test, equating)
- e. performance level
- f. thinking skill
- g. field test date (projected or actual)
- h. passage title and statistics (for ELA Reading/Language and Literature)
- i. graphics (with corresponding code for graphic art, when applicable)

The contractor will provide this information in hard copy and in a secure electronic database format that is compatible with the Department's Windows-based system.

3.0 Test Construction

The contractor is responsible for the design, construction, and production of all assessment and ancillary materials needed for each test administration. The design of all assessment materials will follow design guidelines (color, font, etc.) supplied by the Department. The formatting of all materials will be clear, organized, attractive, and grade-appropriate. All printed materials will be printed on durable paper that is heavy enough to ensure that printing is not visible on the opposite side of the page and will not affect scanning in consumable test books (for example, Grade 3 Reading). A list of all current test material quantities is included in Appendix D.

- 3.1 **Planning and Documentation.** As part of each year's project plan (Task 1.1.1), the contractor will document all test construction activities scheduled to be conducted during the coming fiscal year. This documentation will include detailed descriptions of all test construction procedures, including psychometric and other procedures used to ensure technical quality and security of materials.
- 3.2 The contractor will design and produce the test booklets and answer documents needed for MCAS tests in each tested content area and grade level. In general, there is a single test booklet and answer booklet for each administration period (i.e., April, May) at each grade level. The exception is at grade 10, where there is a separate test booklet for each day of the administration of the high-stakes tests in English Language Arts and Mathematics (but a single combined answer booklet). All test materials within a grade level must be coordinated by color, title, and logo. Answer booklets may be generic across test forms within a grade level. Samples of current MCAS test booklets and answer booklets are available upon request in the packet of supplemental materials.
- 3.3 The contractor will design each answer document so that students respond to no more than one open-response item on a single page and at least four-fifths of the space on the page is available for that response. Sections of the answer documents used for

Mathematics item responses must allow a quarter-page (total) for responses to short-answer items.

- 3.4 The contractor will describe the procedures that will be used to ensure security throughout the item development, test construction, and production processes. The system must enable the contractor to account for all secure test materials that have been produced
- 3.5 The contractor will design, develop, and produce all ancillary test materials needed for the administration of each MCAS test including test administration manuals (one per grade per administration period), practice tests (one per grade in English and Spanish), student questionnaires (at selected grades, e.g., 4, 8, and 10), and mathematics and science reference materials.
- 3.6 The contractor will allow five working days for Department review of any final form, document, test booklet, or answer booklet prior to printing or production. The contractor will obtain written approval from the Department before printing or producing materials.
- 3.7 The contractor will implement quality control procedures for the design, preparation, and printing of all test materials and ancillary materials. Of particular importance are procedures followed to ensure consistency across documents such as test forms, answer booklets, and test administration manuals. The quality control procedures will include appropriate review including blueline review, sign-off, and post-production sampling needed to ensure the quality and accuracy of all materials prepared and distributed by the contractor and each of its subcontractors.

The following tasks apply to the testing of students with disabilities:

- 3.8 The contractor will develop and produce Braille test forms that include only common test items and Braille ancillary materials for blind students.
 - 3.8.1 If a subcontractor will produce Braille test editions, the Department must approve the subcontractor.
 - 3.8.2 One form of the Braille test will be produced for each subject and grade. The contractor's response must describe its procedures for reviewing items for translation, translating items, formatting, and manufacturing each test edition. The response must also describe the contractor's quality control procedures for each step in the development/production process.
 - 3.8.3 Ancillary materials to accompany tests will be developed and produced.
 - a. Ancillary materials include rulers, protractors, math reference sheets, Braille paper, graph paper, practice tests, manipulatives, and all other test materials as needed.
 - b. Test administrator's manuals to correspond with each Braille test edition will be developed and produced. Manuals will include printed text of all Brailled test items and any special instructions for test administration.
 - c. A data CD-ROM of all approved common item tests will be provided to the Department immediately after blue-line approval.

- 3.9.4 A panel of Braille proofreaders will be convened. (Contractors' responses should budget annually for five readers for two days each, for a total of 10 days at \$250/day.)
 - 3.9.5 Any test item that cannot be Brailled or is considered inappropriate for blind students will be adapted for the Braille test.
 - 3.9.6 All Braille tests, special instructions, special instructions, *Braille Test Administrator Manuals*, and manipulatives will be shrink wrapped and delivered to schools at least five days prior to test administration.
- 3.9 The contractor will develop and produce large-print test forms and ancillary materials. (Contractors' responses should budget for approximately 275 large-print tests.)
- 3.9.1 Ancillary materials will include a standard-sized ruler with large numbers, large-print reference sheets for science and math, and large-print answer booklets
 - 3.9.2 The contractor's response must describe its procedures for reviewing items for enlargement, and for formatting, layout, and production of large-print tests.
- 3.10 Following each test administration, the contractor will provide the Department with ten additional copies of each Braille and large-print test to be used by visually impaired students as practice tests.

4.0 Test Administration

Test administration encompasses five major areas:

1. the design of administration-related materials to ensure a successful administration
2. production of all MCAS materials
3. shipping of MCAS materials to the schools
4. support for schools during test administration
5. receipt of MCAS materials from the schools after test administration

The contractor is responsible for all activities and costs related to test administration, including

- the development and production of administration materials
- the distribution of secure and non-secure MCAS materials to schools prior to testing• the collection of secure and non-secure MCAS materials from schools after testing, and
- support during test administration.

Prior to each test administration, the Department will provide the majority of student identification information through the Student Information Management System (SIMS) see Appendix G for a list of data elements). Student labels will be generated by the contractor based on SIMS data.

- 4.1 **Planning and Documentation.** As part of each year's project plan (Task 1.1.1), the contractor will document all test administration activities scheduled for the coming fiscal year. This documentation will include detailed descriptions of the procedures and methods that will be used to support the secure and successful administration of MCAS tests. The plan will include a discussion of the quality control procedures related to the

design, production, and shipping of test administration materials; support for schools before and during testing; and receipt of MCAS materials after test administration.

4.2 Enrollment

4.2.1 The contractor is responsible for collecting enrollment information for all districts, schools and other testing sites where students are educated with public funds. The contractor will collect enrollment information via School and District Surveys.

The District Survey will collect and confirm, if requested by the Department, the following information:

- a. contact information for the district superintendent
- b. contact information for each school principal in the district (key school building contact person).
- c. contact information for each non-school testing site operated by the district
- d. contact information for each non-public school serving students with disabilities enrolled in the district

The School Survey will collect and, if necessary, confirm the following information:

- a. contact information for school principal, including name and address of school building
- b. special requirements (e.g., times, location) for the delivery of MCAS materials
- c. number of students in tested grades enrolled in each school building
- d. number of students in tested grades requiring large-print and Braille MCAS materials
- e. number of students in tested grades participating in the MCAS Alternate Assessment
- f. number of additional administration manuals needed for individual administration of the tests to students with disabilities
- g. multiple copies of a single test form needed for small group administration of the tests to students with disabilities required by two test accommodations that allow reading the test aloud to a small group (1-5) of students

4.2.2 The contractor's response must include a description of the method proposed to administer the surveys. In its response, the contractor must demonstrate its ability to interface with the Department's Windows-based system and produce comma-delimited data files. Contractors are encouraged to propose options for the administration of the surveys that can be made more efficient by available technology. Contractors are also encouraged to propose uses of available technology that will enable school principals to confirm and/or update information provided on the enrollment surveys.

4.3 Pre-Printed Student Identification Labels

4.3.1 The contractor will prepare student identification labels to be placed on student answer booklets for each administration (at least four sets of labels per student for

the spring administration). The labels will be used by schools and students to minimize the time needed to provide information on student answer booklets and to increase the accuracy of the information provided. The labels will be used by the contractor to facilitate the linking of student materials from separate MCAS test administrations.

The student identification labels will be based on a database provided to the contractor by the Department that contains information including:

- a. student name
- b. district name
- c. school name
- d. grade level
- e. state identification number (SASID)
- f. enrollment status as of October 1

4.3.2 The contractor's response may include proposals for alternative methods of accomplishing the goals of the identification labels.

4.3.3 Because of high rates of student mobility among schools and districts during the school year, particularly in the state's large urban districts, student information provided in the fall is often outdated by the time of the spring test administration, limiting the usefulness of identification labels for schools in those districts. The contractor's response must propose alternatives, such as collecting updated student information from school districts with high student mobility or allowing districts to produce their own identification labels according to Department and contractor specifications.

4.4 Administration Support Materials

4.4.1 The contractor will design and produce all materials necessary to support the administration of the MCAS tests. Included among these materials is a scannable Principal's Certification of Proper Test Administration form on which the principal provides information such as the number of students enrolled, number of students tested, and number of answer booklets returned. Required materials include but are not limited to

- a. packing lists
- b. Materials Verification Forms
- c. Change of Enrollment Status Forms (to track students who change schools)
- d. pre-paid return shipping labels and packing materials
- e. additional packing labels to identify returned materials

4.4.2 The contractor will describe the types of materials and procedures proposed to ensure the safe tracking of materials and accurate accounting of their receipt by schools and return to the contractor. Additionally, the contractor's response must specify measures that will be used to track materials as they are returned to the contractor and during the scoring and reporting processes.

- 4.4.3 The contractor will write and produce annually a *Principal's Administration Manual*. The purpose of the manual is to
- a. familiarize principals with MCAS administration regulations, procedures, and materials
 - b. highlight any changes from previous administrations
 - c. provide accurate and concise step-by-step directions to guide principals through the receipt of MCAS materials, the administration of the MCAS tests, and the return of MCAS materials
- The manual must be produced in time to be distributed at the administration workshops (Task 4.5).

- 4.4.4 The contractor will write and produce annually *Test Administrator Manuals*. The manuals provide concise step-by-step directions and scripts to guide teachers through test administration.

4.5 Administration Workshops

- 4.5.1 At least one month prior to each test administration, the contractor will provide administration workshops in six regional locations identified by the Department. The purpose of the workshops is to familiarize school personnel with the current test administration regulations, procedures, and materials, highlight any administration changes from previous administrations, and discuss potential administration issues. Two half-day workshops (elementary/middle school and high school) will be held in each region and will include up to 250 participants each. The Department will lead each workshop presentation. The contractor's Project Director will present test administration directions at each workshop, supported by additional contractor staff as necessary.

- 4.5.2 The contractor will be responsible for all tasks and all costs associated with planning and conducting the workshops at each location, including
- a. procuring workshop sites approved by the Department
 - b. notifying, pre-registering, and confirming workshop participants from each district
 - c. preparing and producing workshop materials for participants
 - d. registering participants and distributing workshop materials to participants at each workshop
 - e. coordinating with site staff prior to and during the workshop
 - f. providing light refreshments for workshop participants
 - g. providing lunch for persons conducting the workshops
 - h. assuming lodging costs for all workshop presenters (Budget for two Department workshop presenters at three sites.)

4.6 Distribution of MCAS Administration Materials

- 4.6.1 The contractor will assemble all assessment materials for distribution to schools at least five working days prior to scheduled shipment dates. Those materials will include test booklets, answer booklets, questionnaires, manuals, and all ancillary MCAS forms.

- 4.6.2 Each school will receive a 10 percent overage of all test booklets and answer documents based on enrollment information provided. Test materials will be shrink-wrapped in clusters of pre-determined numbers (e.g., 15, 10, 5); each cluster will include an inventory control sheet.
- 4.7 Delivery of MCAS Administration Materials
 - 4.7.1 The contractor will ensure that all assessment materials arrive in a single delivery at each school building between one week and ten days prior to the beginning of the test administration period. The Contractor will notify each school principal about any changes to pre-planned shipment and delivery dates prior to the shipment of materials.
 - 4.7.2 Materials must be shipped and returned in a manner that allows them to be easily and efficiently tracked from shipment through delivery. The contractor's response must identify the proposed shipping contractor and describe the shipping and tracking processes and quality control methods. In addition, the contractor should discuss the use of available technology to enable the school principal and/or the Department to track shipments prior to delivery and/or to notify the school principal of the shipment of materials.
 - 4.7.3 Starting one week prior and ending one week after materials are returned to the contractor, the contractor will provide weekly reports of Service Center activity. The Service Center's telephone logs will identify the Service Center staff who responded to the call, the caller, a concise summary of each call, and the resolution.
- 4.8 Service Center
 - 4.8.1 The contractor will ensure that the MCAS Service Center has an adequate number of trained staff to provide the necessary level of support during the administration and reporting periods.
 - 4.8.2 Within 24 hours following the scheduled delivery date, the contractor will notify the Department of the status of all shipments and will contact schools that are missing any materials.
- 4.9 Shipping Additional Test Materials to Schools
 - 4.9.1 The contractor will establish procedures to ensure that any school requiring additional materials will have these materials shipped via overnight delivery on the same day that the request is received. The contractor's response must describe the proposed quality control methods in shipping to minimize the need to respond to requests for missing and /or additional materials.
- 4.10 Receiving Test Materials from Schools
 - 4.10.1 The contractor will ensure that all used and unused MCAS materials are returned from each school. The contractor's response must include a description of the

method proposed to account for all secure MCAS materials, including test booklets and used answer booklets.

- 4.10.2 The contractor will establish procedures to document and verify that all materials have been returned in accordance with Department requirements. The contractor's response must describe these procedures. The contractor will be responsible for contacting schools to inquire about all missing test materials (missing or incomplete shipments), to correct any discrepancies between materials shipped and materials returned, and to correct all discrepancies between school-provided packing counts and materials received by the contractor.
- 4.10.3 The contractor will notify the Department within 24 hours of unresolved discrepancies that remain after an initial attempt to call the school principal. The contractor will notify the Department of any missing or incomplete shipments of test materials by schools that received testing materials within one week of the date that materials were returned. The contractor's response must include a description of the receiving process that details and provides a rationale for the earliest possible dates beyond the completion of the test administration period that the contractor can notify the Department of
 - a. schools that have not returned any materials
 - b. schools that have returned incomplete shipments
 - c. schools with answer booklet count discrepancies
 - d. schools with missing secure test materials
- 4.10.4 The contractor will provide updates to the initial report and will resolve all discrepancies in accordance with Department requirements. The contractor must describe how all discrepancies that involve secure test materials and used answer booklets will be resolved.
- 4.11 Storage and Disposal of Test Materials
 - 4.11.1 The contractor will ensure secure storage or disposal, as required, of all assessment materials, and will document all storage and disposal plans and procedures. All original student answer booklets must be stored for seven years. Test booklets for any test not included in the Competency Determination must be stored for one year. Test booklets for any test included in the Competency Determination must be stored for four years (including grade 11, grade 12, and two years beyond high school). Non-secure test materials must be stored until all secure test materials and student responses have been accounted for by the contractor. The contractor must receive written approval from the Department prior to the disposal of any MCAS materials.
- 4.12 Retrieval of Student Answer Booklets
 - 4.12.1 The contractor will retrieve stored student test booklets to investigate data discrepancies and irregularities and to respond to parent or school requests to review student answer booklets. Parent and school requests will be channeled through the Department.

5.0 Scanning and Imaging

The contractor will be responsible for the efficient, accurate, and reliable scanning and/or imaging of all student responses, including student responses to multiple-choice test and questionnaire items, student responses to constructed-response items, student identification information, and student demographic information provided by the student and/or school principal. The contractor must provide details regarding the accuracy and reliability of the scanning technology/system. In addition, the contractor is responsible for scanning or imaging all ancillary MCAS materials, such as *Principal's Certification of Proper Test Administration* forms and other scannable administration forms.

As part of the scanning process, the contractor will capture images of all student responses to constructed-response items. These images will be stored in a manner that will allow them to be efficiently linked to and retrieved on the basis of student and school identification information, scores, and item information. These images must be accessible for the selection of sample responses for use in scoring, standard setting, and the production of publications to support the use and interpretation of MCAS results. As described in Task 9: Reporting of Results, some of these images will be compiled and returned to schools in electronic format. In addition, images of complete student answer booklets must be accessible to the Department when requested by parents/guardians, adult students, or the school principal.

- 5.1 Planning and Documentation. As part of each year's project plan (Task 1.1.1), the contractor will document all scanning and imaging scheduled for the coming fiscal year. This documentation will include detailed descriptions of the procedures and methods used to conduct all scanning and imaging related to MCAS. The plan will include a discussion of materials handling procedures and quality control procedures used to verify and ensure the accuracy of all scanning and imaging.
- 5.2 Prior to the receipt of test materials, the contractor will demonstrate to the Department that programs have been prepared to accurately scan and image all MCAS materials.
- 5.3 The contractor will scan and/or image, as appropriate, all scannable materials, including all information provided on student answer booklets and other ancillary response or administration forms.
- 5.4 During scanning and imaging, the contractor will implement procedures to ensure that all scanned responses and images are assigned to the correct students, schools, and districts.
- 5.5 During scanning and imaging, the contractor will provide the Department with weekly status reports of scanning and imaging completed in relation to scheduled tasks.
- 5.6 Following scanning and imaging, the contractor will ensure that the database is error-free and contains valid responses in all fields.
- 5.7 Following scanning and imaging, the contractor will provide the Department with a detailed report describing any materials that could not be scanned.

6.0 Scoring of Student Responses

The contractor will ensure that all student responses are accurately, efficiently, and reliably scored. The contractor's response must include

- a. detailed descriptions of proposed processes that conform to the Department's scoring specifications for scoring multiple-choice and constructed-response items
- b. a detailed discussion of the process used to recruit, select, train, qualify, monitor, and evaluate scorers
- c. detailed descriptions of the processes used to ensure that student scores are assigned to the correct students, schools, and districts
- d. a detailed description of any proposed remote scoring site, subcontractor, and/or scorer
- e. a detailed description of any proposed difference in procedure or schedule for scoring operational and field-test items

6.1 Planning and Documentation. As part of each year's project plan (Task 1.1.1), the contractor will document all scoring activities scheduled for the coming fiscal year. The contractor's response must include

- a. detailed descriptions of the procedures and methods used to conduct all scoring related to MCAS
- b. discussions of materials handling and quality control procedures used to verify and ensure the accuracy of all scoring
- c. the contractor's plan for monitoring the accuracy of scoring (e.g., training, qualification, calibration, double-blind scoring, read behind, etc.)
- d. the type/frequency of reports that the contractor will produce to monitor scoring
- e. the contractor's management/organization of the scoring process
- f. the specific standards that will be used to determine when to retrain or dismiss scorers

With respect to the standards for scoring constructed-response items, the contractor will agree to rescore all the responses scored by individual scorers whose work on any given day do not meet established standards. Such rescoring will not result in any delay in the schedule for reporting results.

6.2 The contractor's response must demonstrate the contractor's understanding of all the logistical, technological, and psychometric issues involved in scoring the MCAS tests, and include a detailed description of the contractor's scoring operations and how these operations will ensure that scoring procedures conform to MCAS scoring procedure specifications.

6.3 The contractor will describe its process for preparing all constructed-response items for scoring, including how it proposes to prepare scorer training materials, including benchmarked student work. The description must identify staff responsible for each process and for the quality of the scoring procedures.

- 6.4 Responses to multiple-choice items must be scored by machine. The contractor will develop, implement, and document procedures to score student responses, verify the accuracy of scoring, and create a database of scored student responses.
- 6.5 At grades 3, 4, 5, 6, 7, and 8, each response to short-answer and open-response items will be hand-scored by a single scorer with at least a 10% read-behind (double-blind).
- 6.6 At grade 10, each response to short-answer and open-response items on the English Language Arts and Mathematics tests will be scored by two scorers. Pairs of scores that differ by more than a single score point must be resolved by an independent reader.
- 6.7 The purpose of double-scoring responses to the grade 10 English Language Arts and Mathematics items is to ensure the accuracy of scores related to high-stakes pass/fail decisions made at the individual student level. The contractor's response must include a budget for double-scoring, but may also include a proposal and budget for an alternative method that is more efficient, but still ensures the accuracy of all pass/fail decisions.
- 6.8 Prior to the scoring of constructed-response items, the contractor will provide the Department with detailed scoring schedules that include the names and qualifications of all personnel responsible for managing operations at all scoring sites, and the names and qualifications for all personnel responsible for training and scoring leadership at all scoring sites.
- 6.9 Prior to the scoring of constructed-response items, the contractor will obtain written approval from the Department of all training, qualifying, calibration, and scoring materials. All materials submitted for approval will have been reviewed by the contractor's Scoring Services and Test Development staffs.
- 6.10 During scoring, the contractor will provide the Department with weekly status reports of scoring completed in relation to scheduled tasks. The status reports will include, as appropriate, up-to-date information on the accuracy of scoring. The contractor will use the status reports to make decisions about retaining, retraining, and dismissing scorers.
- 6.11 The contractor will ensure that the scoring of MCAS materials is conducted in a manner that allows Department staff to observe all scoring activities, including the training of scorers. The contractor must allow the Department unrestricted access to all sites during all phases of the scoring of MCAS materials.
- 6.12 The contractor will provide the Department with weekly reports that include reading rates for individual scorers by item and scorer agreement rates for each MCAS test. The contractor's response must include a sample of this proposed weekly scoring status report.
- 6.13 Following scoring, the contractor will provide the Department with a report summarizing the qualifications and demographics of all MCAS scorers by scoring site and MCAS test.

7.0 Standard Setting

Throughout the course of the contract, the contractor will conduct standard-setting meetings for the eight newly developed MCAS tests at grades 3 through 8: Mathematics at grades 3, 5, and 7; Reading at grades 5, 6, and 8; and History and Social Science at grades 4 and 7. In addition, the contractor will conduct standard-setting meetings for the locally-scored high school U.S. History test and for the locally-scored high school discipline-specific tests in science.

Standard-setting meetings for all tests will be conducted using the Body of Work method. In general, standard-setting meetings will be conducted following the first operational administration of an MCAS test. A tentative schedule for standard-setting follows in Table 6:

Table 6 Tentative Standard-Setting Schedule	
Test	Tentative Date
Mathematics (grades 3, 5, and 7)	Summer 2006
Reading (grades 5, 6, and 8)	Summer 2006
History and Social Science (grades 5 and 7)	Summer 2007
Locally-Scored High School U.S. History	Summer 2007
Discipline-Specific Tests in Science	Summer 2006

- 7.1 **Planning and Documentation.** As part of each year’s project plan (Task 1.1.1), the contractor will document all standard-setting activities scheduled for the coming fiscal year. This documentation will include detailed descriptions of the procedures and methods used to conduct all standard-setting activities related to MCAS. The specifications will include discussions of the materials handling and quality control procedures used to verify and ensure the security of all materials used during standard setting.
- 7.2 The contractor will be responsible for planning and conducting all standard-setting meetings. Each standard-setting meeting will include 25 participants selected by the Department. The Department will provide assistance in the recruitment of standard-setting participants and will have final approval of all participants. Each standard-setting meeting will be scheduled for three days. A sample standard-setting meeting schedule appears in Table 7.

Table 7 Sample Standard-Setting Meeting Schedule	
Day 1 Orientation Session (includes a working dinner)	3:00 – 9:00 p.m.
Days 2 and 3 Morning Session Lunch Afternoon Session	8:00 a.m. – 12:00 p.m. 12:00 – 1:00 p.m. 1:00 – 4:00 p.m.

- 7.3 All standard-setting meetings will be held in Massachusetts. The contractor will be responsible for all tasks and costs associated with planning and conducting each meeting, including
- a. procuring standard-setting meeting sites approved by the Department
 - b. notifying and pre-registering standard-setting meeting panelists
 - c. preparing and producing standard-setting materials
 - d. registering panelists and distributing materials to panelists prior to and during the meetings
 - e. coordinating with site staff prior to and during the meetings
 - f. providing dinner for panelists, facilitators, and Department staff on the evening of Day 1
 - g. providing continental breakfast, lunch, and light afternoon refreshments to panelists, facilitators, and Department staff on Days 2 and 3
 - h. reimbursement of panelists' travel expenses
 - i. lodging costs for participants for two nights (Contractors' responses should base projections on lodging costs for 15 of 25 panelists)
 - j. maintaining security of materials prior to, during, and following standard-setting meetings
 - k. If the contractor's response includes a proposal to conduct standard-setting meetings during the school year, reimbursement to panelists' school districts for substitute teachers (Contractors' responses should base projections on reimbursements for 20 of 25 panelists)
- 7.4 The contractor's response must demonstrate a basic understanding of the Body of Work method and reflect the costs necessary to prepare for and conduct the standard-setting meetings. Descriptions of the Body of Work method can be found in the *MCAS Technical Reports* available on the Department's website at http://www.doe.mass.edu/mcas/tech_rpt.html.

8.0 Analysis

The contractor is responsible for conducting all analyses necessary to report MCAS test results and to ensure that MCAS tests meet the highest standards of technical quality. In addition, the contractor will conduct other analyses as deemed useful by the Department for purposes related to security, data interpretation, policy formation, and administrative planning. During each year of the contract, the contractor will conduct analyses necessary to support test development, test construction, scoring, and standard-setting and validation activities.

Student scores on MCAS tests are generated using Item Response Theory (IRT) techniques. Multiple-choice and constructed-response items are analyzed jointly to produce a single score for each student in each content area.

In preparing a response to the RFR, the contractor should review *MCAS Technical Reports* available on the Department's website. The contractor's response should identify and provide a rationale for specific measurement and statistical procedures and techniques, as well as specific measurement and statistical software that it proposes to use.

- 8.1 Planning and Documentation. As part of each year's project plan (Task 1.1.1), the contractor will document all analyses scheduled to be conducted during the coming fiscal year. This documentation will include detailed descriptions of the procedures and methods used to conduct all analyses related to MCAS. The plan will include discussions of data handling procedures, decision rules, and quality control procedures used to verify and ensure the accuracy of all analyses conducted.
- 8.2 Equating
 - 8.2.1 The contractor will design and conduct analyses required to equate (or link) the MCAS tests from year to year. The contractor's response must address the need to equate tests while meeting an aggressive reporting schedule. The contractor must propose a technically sound method for accomplishing this task.
 - 8.2.2 The contractor will design and conduct analyses required to calibrate and link MCAS items across test forms within a single year. The contractor's response must reflect an understanding of the MCAS test design and propose a technically sound method for accomplishing this task.
- 8.3 Item Evaluation
 - 8.3.1 Multiple-choice Items. To support evaluation of field-tested items, the contractor will produce classical item statistics for all field test items embedded on MCAS tests. The item statistics generated will include item difficulty (p-value), adjusted pt.-biserial correlations, number of students administered the item, percentage of students selecting each response option, percentage of non-response, and measures of differential item functioning. Item statistics will be provided to the Department and will be available for use in item evaluation within four weeks of the end of the test administration period.
 - 8.3.2 Constructed-response items. To support evaluation of field-tested items, the contractor will produce classical item statistics for all field test items embedded on MCAS tests. The item statistics generated will include average item score, item-total correlation, number of students, percentage of students attaining each score point, percentage of non-response, and measures of differential item functioning. Item statistics will be provided to the Department and be available for use in item evaluation within two weeks of the completion of constructed-response scoring.
- 8.4 To support test construction, the contractor will conduct real-time analyses during test construction meetings to generate information such as test characteristic curves, test information functions, and the proportion of score points across content strands.
- 8.5 The contractor will design and conduct all analyses necessary to produce student, school, district, and state results and other information included in published reports of results. Reports are described in Task 9.5.

9.0 Reporting of Results

Beginning with the March 2005 retest administration, the contractor will produce and disseminate a variety of custom student-, school-, district-, and state-level reports of MCAS results in paper and electronic format as well as ancillary documents and data files to support the use and interpretation of MCAS results. Reports follow each MCAS test administration. The projected reporting schedule for MCAS tests administered during the 2004-2005 school year is available in Appendix F.

Although the Department wishes to maintain stability and consistency in reporting across years, the reports will be reviewed and modified as needed annually. The reports listed on the following pages and included in the packet of supplemental materials represent the reports issued during the 2002 test administration. The quantity and production specifications of the current MCAS reports are provided in Appendix C.

As described in this section, in all cases, the contractor is responsible for the production, printing, and delivery of reports and documents. In some cases the contractor is also responsible for the design of the document or report and development of content. In other cases, the Department will provide the content. The content and format of all reports and documents are subject to the review and approval of the Department. Unless specifically indicated in this RFR or exempted in writing, the Department will maintain the copyright to all reports and documents produced under this contract.

All printed reports must be durable, use high-quality materials, and be prepared in a format that facilitates their viewing and dissemination via the Department's website.

- 9.1 Planning and Documentation. As part of each year's project plan (Task 1.1.1), the contractor will document all reporting tasks scheduled to be conducted during the coming fiscal year. This documentation will include detailed descriptions of the procedures and methods used to produce all reports related to MCAS. The plan will include discussions of data handling procedures, decision rules, and quality control procedures used to verify and ensure the accuracy of all reports produced.
- 9.2 By December 1 of each year, the contractor will produce programming specifications and a set of mock-ups for all reports of MCAS results to be generated during the following testing cycle. The specifications and reports will reflect any changes to reports agreed upon by the Department and the contractor.
- 9.3 Prior to the production of reports following each test administration, the contractor will deliver preliminary student-level data files to the Department in sufficient time for the Department to perform independent analyses to confirm the aggregation of results produced by the contractor.
- 9.4 Prior to the production of reports following each test administration, the contractor will deliver preliminary copies of all types of reports to the Department in sufficient time for

the Department to confirm the aggregation and printing of results produced by the contractor.

- 9.5 Each year following the test administration, the contractor will produce and deliver the following reports, documents, and data files. All MCAS reports must contain a code to indicate the date of printing or version of the report. Unless otherwise specified, all student-, district-, and school-level reports and ancillary materials are delivered to district superintendents.
- 9.5.1 A ***Student Report for Parents/Guardians*** (two copies for each enrolled student) The report contains graphics and text to convey student summary and item-level information as well as comparative summary results for the student's school, student's district, and state for each MCAS test administered at the student's grade level.
- 9.5.2 A ***Student Label*** (for each enrolled student) The label is to be affixed to the student's records and contains summary MCAS test results.
- 9.5.3 A ***Guide to the MCAS for Parents/Guardians*** (a copy for each enrolled student) This document is a guide for parents and guardians containing detailed instructions for reading MCAS student-level reports, including examples from relevant reports, and information about the interpretation and use of their child's MCAS test results. The contractor will update the document each year to accurately reflect the reports produced that year. The contractor will translate the document into the ten languages other than English most commonly spoken in Massachusetts students' households. Each year, the Department will provide the contractor with an updated list of these ten languages as well as district-level counts for production and distribution.
- 9.5.4 A ***Data Discrepancy Report*** (for each district). The report contains school-level reports for each test with student demographic information. The report is used to rectify student assignment errors made by the contractor
- 9.5.5 A ***Student Test Item Analysis Student Report*** (for each enrolled student) The report contains item-level results and summary MCAS test results.
- 9.5.6 A ***School Test Item Analysis Report*** (for each school for each MCAS test) The report consists of an alphabetical listing of each enrolled student in the school, along with the students' item-level results and summary MCAS test results.
- 9.5.7 A ***School Test Item Analysis Summary*** (two copies for each school for each MCAS test). The report contains school-, district-, and state-level item analysis information for each MCAS test item.
- 9.5.8 A ***District Test Item Analysis Summary*** (for each district for each MCAS test) The report contains district- and state-level item analysis information for each MCAS test item.
- 9.5.9 A ***State Test Item Analysis Summary*** (delivered to the Department for each MCAS test) The report contains state-level item analysis information for each MCAS test item.
- 9.5.10 A ***School Report*** (two copies for each school at each grade level tested in that school) The report package contains a series of single-page reports with graphics and text, providing school-, district-, and state-level summary information about

student participation and results for each MCAS test administered at that grade level.

- 9.5.11 A ***District Report*** (for each district for each grade level) The report package contains a series of single-page reports with graphics and text, providing district- and state-level summary information about student participation and results for each MCAS test administered at that grade level.
- 9.5.12 A ***State Report*** (for each grade level) The report contains a series of single-page reports with graphics and text providing state-level summary information about student participation and results for each MCAS test administered at that grade level.
- 9.5.13 A ***Guide to Interpreting the MCAS School and District Reports*** (for each district and school) The *Guide* supports local educators' use of the school and district reports of MCAS test results. It describes the information contained in the MCAS reports and explains how to interpret information contained in the School and District Report Package.
- 9.5.14 A statewide ***Summary of District Performance*** (delivered to each school district and legislative district) The report contains 1-2 page summaries of performance and participation information for all school districts and the state. The report is designed for use by the public and is distributed to each legislative district.
- 9.5.15 A ***Student-Level Database*** (for each school district) This database contains student-level identification, demographic, and performance information, including all information reported in the *School Test Item Analysis Report*.
- 9.5.16 A ***Composition Database*** (for each school that administered the Composition portion of the English Language Arts test at grade 4, 7, and/or 10) The database will contain images of student compositions and will be designed to enable the school principal to search for specific compositions by factors such as student name, writing score, or performance level, as well as to print copies of student compositions.
- 9.5.17 A ***Constructed-Response Database*** (for each school administering grade 10 English Language Arts and Mathematics MCAS tests) The database will contain images of student responses to common constructed-response items on the grade 10 English Language Arts and Mathematics tests. The database will be designed to enable the school principal to search for specific responses by factors such as student name, score, or performance level, as well as to print copies of student responses. The database and printing of responses will be designed so that its item numbers reflect item numbers on other released materials.
- 9.5.18 A statewide ***Summary of Performance Database*** (delivered to the Department) This database will contain summary performance and participation information for all schools, districts, and the state. The database will be used for the release of results to the public and media.
- 9.5.19 An ***Item Analysis Summary Database*** (delivered to the Department) This database will contain the information provided in the *Test Item Analysis Summary Reports* for each school, district, and the state for each MCAS test item.
- 9.5.20 A ***Summary of Subgroup Performance Database*** (delivered to the Department) This database will contain information about the participation and performance of each reported subgroup (e.g., race/ethnicity, gender, low income, SPED, LEP) at

the school, district, and state levels. The database contains information reported in the School, District, and State Report Packages.

- 9.5.21 A ***Student-Level Database*** (delivered to the Department) This database will contain student-level identification, demographic, item response, and item-level and summary performance information for each grade level tested.
 - 9.5.22 A ***Report Database*** (delivered to the Department) This database will contain school-, district-, and state-level information included in the corresponding ***School and District Report*** at each level.
 - 9.5.23 An ***electronic copy*** of images of each ***School and District Report*** (delivered to the Department)
- 9.6 Following the spring MCAS administration, the contractor will provide the Department with a CD containing student-level item results for multiple-choice items administered on the grade 10 English Language Arts and Mathematics tests. The CD will be delivered to the Department no later than three weeks following the final date of the testing period.
 - 9.7 Each fall, the contractor will provide reporting workshops in six regional locations identified by the Department to assist school personnel in the interpretation and use of MCAS test results and to discuss potential changes to MCAS reporting for the coming year(s). Two half-day workshops will be held in each region (elementary/middle school and high school) and will include up to 250 participants. The Department will lead each workshop presentation. The contractor's Project Director will participate in each workshop supported by additional contractor staff as necessary. The contractor will be responsible for all tasks and all costs associated with planning and conducting the workshops at each location including
 - a. procuring workshop sites approved by the Department
 - b. notifying and pre-registering workshop participants
 - c. preparing and producing workshop materials for participants
 - d. registering participants and distributing workshop materials to participants at each workshop
 - e. coordinating with site staff prior to and during each workshop
 - f. providing light refreshments for workshop participants
 - g. providing lunch for persons conducting the workshops
 - 9.8 The contractor will produce up to four focused reports of MCAS results. The reports are intended for use by schools, districts, and the general public on various topics related to MCAS results as identified by the Department of Education. The reports will be disseminated via the Department website.
 - 9.9 The contractor will time the distribution of all reports to arrive at all school districts in a single delivery within a two-day delivery window. Contractors will notify each school superintendent about any changes to pre-planned shipment and delivery dates prior to the shipment of materials. Materials must be shipped in a manner that allows them to be easily and efficiently tracked from shipment through delivery. The contractor's response must identify the proposed shipping contractor and describe the shipping and tracking process. The contractor's response should include a discussion of the use of available

technology to enable the school principal and/or the Department to track shipments prior to delivery or notify the school principal of the shipment of materials.

- 9.10 Within 24 hours of the scheduled delivery date, the contractor will notify the Department of the status of all shipments and contact school districts that have not received materials.
- 9.11 The contractor will establish procedures to enable schools and districts to efficiently report data or printing errors in their reports or missing reports. The contractor's response must describe the proposed procedures and discuss proposed methods to investigate the concerns, correct the errors, issue replacement reports, and update the student database.
- 9.12 The contractor must discuss issues related to reporting timelines, and either present a rationale for maintaining current reporting timelines or propose specific strategies for shortening the time between test administration and reporting.
- 9.13 The contractor will ensure that the MCAS Support Services Center has an adequate number of trained staff to provide the level of support necessary during the reporting of results.

10.0 Publications

Throughout this section, individual line item tasks have listed specific reports and documents related to the administration of MCAS tests and reporting of MCAS test results that the contractor will be responsible for producing and disseminating. In addition to those reports, the contractor will be responsible for the design, production, and dissemination of a variety of ancillary documents. Unless otherwise specified, all documents described in the following tasks are prepared for dissemination via the Department's web site.

- 10.1 **Planning and Documentation.** As part of the project plan (Task 1.1.1), the contractor will document all publication tasks to be conducted during the coming fiscal year and provide a schedule for the preparation of initial drafts and final copies of each publication. This documentation will include detailed descriptions of the procedures and methods used to produce all documents related to MCAS. The documentation will include a discussion of data handling procedures, decision rules, and quality control procedures used to verify and ensure the accuracy of all documents produced.
- 10.2 A ***Released Test Items*** document contains all common items included in each MCAS test administration. The document also contains a brief summary of the *Curriculum Framework* learning standards measured in the content area and maps each MCAS test item to a specific content strand and learning standard. Versions containing Spanish-language MCAS test items will be published in spring 2004. The document is posted to the Department's web site immediately following the conclusion of each test administration period.

- 10.3 A **Released Retest Items** document contain the test items in English Language Arts and Mathematics administered on the November and March retests, the learning standards that are assessed, the reporting category for each test item, and the correct answers to each multiple choice and open-response item. The document is posted to the Department web site following test administration.
- 10.4 A set of **Samples of Student Work** contains the test item, item-specific scoring guide, and set of anchor papers for each released MCAS common constructed-response item. The samples of student work must be reviewed, redacted, and prepared to prevent the identification of individual students through content or handwriting. The item-specific scoring guides and anchor papers must reflect the actual materials used to score MCAS test items and convey enough information for use in local school districts. The document is posted to the Department’s website in conjunction with the release of MCAS test results.
- 10.5 A **Technical Report** documents all technical procedures related to the development, administration, scoring, and reporting of results for each MCAS test administered during the previous year. The report includes an overview of the MCAS program and all technical procedures followed (e.g., item development, scoring, standard setting, scaling, equating); a thorough description of changes to the program from the previous MCAS administration; and measures of the psychometric characteristics of each MCAS test. The document is intended for a technical audience and includes all information necessary to make an informed judgment about the technical quality of the MCAS tests. The document is released annually following spring test administration.

11.0 Professional Development

The contractor is responsible for planning, preparing, delivering, disseminating, and supporting specific professional development activities and materials for Massachusetts public school teachers and administrators. The major purposes of the professional development materials and activities is to support the interpretation and use of MCAS test results and to support and improve local assessment practices.

- 11.1 Planning and Documentation. As part of each year's project plan (Task 1.1.1), the contractor will document all professional development activities scheduled to be conducted during the coming fiscal year.
- 11.2 The contractor will plan and conduct three five-day summer scoring workshops to be held in a central location identified by the Department. Participants will score scanned images of student work on a computer. Each workshop will serve 150-200 people at each site with breakout groups of no more than 30 participants led by an individual facilitator. The contractor is responsible for preparing scoring materials for the institute, delivering student responses and related materials to each institute site, and conducting all training and scoring sessions prior to and during the institute. The contractor must provide a scoring leader and sufficient support and technical staff, and will be responsible for providing two days of staff training to the Institute. The Department will select training staff (room leaders and table leaders).

The contractor will be responsible for all tasks and costs associated with planning and conducting each workshop series, including

- a. procuring meeting sites approved by the Department
- b. notifying and pre-registering participants
- c. preparing and producing workshop materials
- d. registering participants and distributing materials to participants prior to and during the workshops
- e. coordinating with site staff prior to and during the meetings
- f. providing continental breakfast, lunch, and light afternoon refreshments to panelists, facilitators, and Department staff
- g. providing overnight accommodations for participants living 70 miles or more from the workshop site
- h. providing travel expenses to participants and training staff
- i. paying an honoraria to the following individuals at each site
 - 1) room leaders @\$500/day (For each site budget for 3 persons X 3 grades plus 4 days preparation for each leader.)
 - 2) table leaders @\$250/day (For each site budget for 5 person X 3 grades plus 1 day preparation for each table leader.)
 - 3) scorers @\$100/day

The contractor is also responsible for all tasks and costs associated with providing adequate training for its own personnel or other personnel who will conduct the workshop sessions.

- 11.3 The contractor will organize a one-day conference for up to 300 Massachusetts teachers and administrators focused on innovative ways to use MCAS test results to improve program evaluation and instruction. The conference will be free of charge to participants.

The contractor is responsible for recruiting presenters from local schools and districts. Prior to the conference, the contractors will collect materials from presenters and produce a set of conference proceedings that includes these materials. The conference proceedings will be distributed to all participants and posted to the Department website. The conference proceedings must meet the same quality standards established for other MCAS publications.

The contractor will budget \$15,000 per year for this conference, and is responsible for all tasks and costs associated with planning and conducting the conference, including

- a. procuring a conference site approved by the Department
- b. recruiting and identifying potential conference presenters
- c. notifying and pre-registering participants
- d. preparing and producing workshop materials
- e. registering participants and distributing materials to participants prior to and during the workshops
- f. coordinating with site staff prior to and during the meetings
- g. providing continental breakfast and lunch to presenters, participants, and Department staff

- 11.4 The contractor will develop and/or purchase professional development tools to distribute to all Massachusetts schools and districts. If the contractor proposes to develop tools or has already developed professional development tools that could be applied to the MCAS project, the contractor's response must include specific descriptions of such tools. All materials, whether customized for MCAS or generic, must meet the quality standards established for all MCAS materials. Final approval for the development or purchase of all tools must be obtained from the Department. The contractor will budget \$250,000 per year for this task.

- 11.5 The contractor will assist the Department in training teachers in the use of the *NCS Mentor CD-ROM* described on pp. 16 and 17.

12.0 Additional Tasks

In Section 1 of this RFR, several components of the MCAS project were described and discussed under the heading "Future Directions." The additional MCAS tests in reading and mathematics described in that section have been incorporated into the scope of work/deliverables described in Tasks 1-11. Other components are covered under this task.

The contractor's response must include a rationale for proposed methods for completing each item listed under this task as well as a detailed, proposed budget for accomplishing each item.

12.1 MCAS Retests

12.1.1 Each year of the contract, the contractor will develop and administer focused MCAS retests in English Language Arts and Mathematics to students who have not passed one or both of these tests. Focused retests are designed to distinguish between student performance that does not meet and student performance that does meet the performance threshold required to earn a Competency Determination. Retests will be administered in public high schools in November and March. Test items will be released following the administrations. If, during the course of the contract, additional content areas are added to the Competency Determination requirement, the Department will negotiate with the contractor for the implementation of additional retests.

12.1.2 The contractor will administer summer retests in English Language Arts and Mathematics for up to 500 students at 5 locations in July. Because the November retest form will be used for the summer administration, retests given in July must remain secure until after the November retest has been administered.

12.1.3 The contractor will propose options for testing students who have recently left public schools and have not yet earned a Competency Determination.

12.2 Locally-Scored High School MCAS Discipline-Specific Science Tests

The high school MCAS discipline-specific tests in biology, physics, chemistry, and technology/engineering will be designed to serve state and local assessment needs and comply with requirements for science testing under *no Child Left Behind*. The implementation of these tests will present many challenges not previously encountered within MCAS. The contractor's implementation plan for these tests will have to consider issues such as

- a. training teachers to score responses to open-response items
- b. providing efficient methods for the local scoring of responses to multiple-choice items (or central scoring and quick return)
- c. developing and disseminating scoring materials
- d. maintaining test security while allowing for local flexibility in administration and scoring
- e. efficiently obtaining student results from schools
- f. designing and implementing a system for auditing results received from schools
- g. field-testing items to replace released items

The contractor's response must address each of the issues listed above as well as other issues that the contractor believes are critical to the success of this local scoring effort and the MCAS project. The contractor's response may include a discussion of

alternatives to total local scoring, such as central scoring by Massachusetts' teachers, to improve the accuracy and efficiency of scoring.

12.3 Locally-Scored High School MCAS U.S. History Tests

The high school MCAS tests in U.S. History will be designed to serve state and local assessment needs. The implementation of these tests will present many challenges not previously encountered within MCAS. The contractor's implementation plan for these tests will have to consider issues such as

- a. training teachers to score responses to open-response items
- b. providing efficient methods for the local scoring of responses to multiple-choice items (or central scoring and quick return)
- c. developing and disseminating scoring materials
- d. maintaining test security while allowing for local flexibility in administration and scoring
- e. efficiently obtaining student results from schools
- f. designing and implementing a system for auditing results received from schools
- g. field-testing items to replace released items

The contractor's response must address each of the issues listed above as well as other issues that the contractor believes are critical to the success of this local scoring effort and the MCAS project. The contractor's response may include a discussion of alternatives to total local scoring, such as central scoring by Massachusetts' teachers, to improve the accuracy and efficiency of scoring.

12.4 Local Writing Component

Under the contract awarded in response to this RFR, the contractor will collaborate with the Department to explore options for developing and implementing a local writing component to supplement the Composition portion of the MCAS English Language Arts test. Student performance on the on-demand Composition would be combined with writing scores obtained from schools to produce writing scores at either the student or school levels. The contractor's response must include a discussion of the feasibility of implementing a local writing component, a proposed method and schedule for developing and implementing the program, and a proposed method for integrating results from the local writing component into the reporting of MCAS results.

12.5 Vertical Scaling of English Language Arts and Mathematics Tests

With the implementation of additional MCAS tests in reading and mathematics at grades 3 through 8, MCAS will include annual measurement of students in those content areas across six consecutive grade levels. The contractor will collaborate with the Department to explore the development of vertical scales to supplement the reporting of MCAS test results across grades 3 through 8 (and possibly 10). The primary purpose of the scales will be to provide schools and districts with information about students' annual progress toward meeting the state's performance standards. The scales will provide information

that will assist schools and districts in the design, implementation, and evaluation of programs to meet the needs of individual students.

The contractor's response must include a discussion of the benefits/drawbacks and appropriate use of vertical scales, and detailed descriptions of the proposed method of and schedule for developing vertical scales for MCAS tests in reading and mathematics.

The response must also include a discussion of the professional development training activities and materials required to assist Massachusetts educators in the appropriate use of vertical scales.

12.6 Technology Enhancements

Throughout the course of this contract, the contractor will collaborate with the Department to make use of available technology to improve the efficiency of the operation of the MCAS project. In responding to this RFR, contractors must indicate areas in which increased use of technology can improve the efficiency and effectiveness of the project, including but not limited to

- a. management of the project
- b. test item development and test production
- c. test administration and the processing of test materials
- d. scoring and reporting of test results

In all cases, the contractor's response must demonstrate that the proposed use of technology will maintain the security of MCAS test materials and confidential student information.

The contractor's response must include a discussion of the feasibility of providing schools with an opportunity, prior to the reporting of results, to review and make corrections on line to limited pieces of information (e.g., student's testing status, student's subgroup status) that directly impact school-and school level results.

In general, the Department will not consider proposals to replace the standard MCAS paper-and-pencil tests with computer-administered tests. However, the Department welcomes contractor responses that include proposals to integrate the use of computers into the administration of the following MCAS tests or components:

- a. grade 10 discipline tests in Science
- b. grade 10 U.S History
- c. on-demand and local writing component
- d. accommodations for students with disabilities
- e. MCAS Retests (particularly for the post-high school administration)

The Department will not consider proposals to score constructed-response items with computerized scoring rather than trained human scorers. However, the Department welcomes contractor responses that include proposals to improve the efficiency, reliability, and validity of the scoring process through the integration of local scoring.