

2014 Administration of the California Measurement of Academic Performance and Progress

Scope of Work C
Contract #5417, Amendment #10
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Task 1: Overall Program Administration

1. A. Overall Management and Schedule

The 2014 California Measurement of Academic Performance and Progress (CalMAPP) Schedule of Project Deliverables and Activities (see Timeline 1) is included as an attachment to this Scope of Work. This schedule depicts all 2014 CalMAPP deliverables and activities for the entire contract period. It includes task initiation and completion dates and is adjusted, as needed, to reflect new timelines and deliverables. The timeline referenced is a sample and is to be a working document that is updated on an ongoing basis throughout the life of the contract.

1. B. Progress Reports

Educational Testing Service (ETS) will communicate all accomplishments to demonstrate the California Department of Education's (CDE) expenditures on the CalMAPP Program by means of monthly and quarterly reports.

1. B1. Monthly Reports

The monthly progress report is presented as a detailed narrative invoice from ETS to the CDE. It is sorted by scope of work area and contains a summary section, which is the actual invoice and a section of accomplishments and deliverables that breaks down the costs in the summary section and associates the costs with a specific requirement in the scope of work. The summary includes a history of invoices previously submitted to date.

ETS will submit this report to the CDE by the fifteenth of the following month. A hardcopy original will be delivered to the CDE. In the event that this report will be delayed beyond the fifteenth of the following month, ETS will notify the CDE of the expected date of delivery by the seventh of that month.

1. B2. Quarterly Reports

The quarterly report summarizes Program activity for three months and is accompanied by a CD-ROM that contains portable document format (PDF) deliverables — or the representation of deliverables — for the previous three months. The CD-ROM's files are stored within a directory tree organized by the scope of work section and navigated using an index PDF file, an approach that simplifies the CDE's access to the documentation. ETS will deliver a quarterly report and CD-ROM to CDE staff, and make a copy of the quarterly report that CDE staff may give to State Board of Education (SBE) staff. Both the SBE testing liaisons and the CDE CalMAPP project director will have to approve the content of the quarterly report.

1. C. Management Meetings

1. C1. Weekly Management Meetings

ETS will hold weekly management meetings with the CDE to update and assure that the CDE is informed of all decisions. The weekly management meeting may include ETS managers of:

- California Technical Assistance Center (TAC)
- Statistical Analysis
- Computer Technology
- Operations
- Test Development
- Appropriate Subcontractor Coordinators

During the weekly management meetings, ETS and the CDE may decide to hold separate weekly meetings for specific topics.

For all meetings, including face-to-face and video- or audio-conferenced, ETS will facilitate the meeting, record minutes of the meeting, and track completion of assignments. The minutes will be distributed to the CDE and the entire team within 24 hours of the management meetings.

1. C2. Planning Meeting

ETS will host a two-day meeting in Sacramento, which gathers key CalMAPP Team members to meet with CDE program managers. Staff members from the SBE and from the Department of Finance (DOF) will be invited to attend the planning meeting. Those who cannot attend in person may attend via videoconference. The purpose of the meeting is to plan the upcoming year, including detailing any changes to the scope of work and timeline. ETS will provide a draft timeline in MS-Project for all to review. The outcome of this planning meeting will be an update to the draft timeline and any changes to the Scope of Work requested by SBE testing liaisons, the CDE CalMAPP program managers, and the DOF.

1. D. SBE Meetings and Technical Advisory Group Meetings

Every time the SBE conducts public meetings, ETS project managers and relevant ETS officers are expected to attend to the extent necessary. ETS project managers, psychometricians, and other ETS experts will attend Technical Advisory Group meetings as directed by the CDE.

1. E. Records and Minutes

At all meetings, including, but not limited to, management meetings and program committee meetings, ETS will take minutes, record information and document any assignments or tasks for follow up. These notes will be formatted in a format required by the CDE. ETS will keep secure electronic copies of all the records throughout the life of the CalMAPP Program. These minutes are delivered as part of the Quarterly Report deliverables CD-ROM. All minutes will be made available to the SBE upon request.

Each set of minutes will include listings of all those present and their contact information. ETS will review the contact information of attendees to determine if it has changed and update the CDE, if appropriate.

These records will be distributed to the CDE for approval in less than 10 days following each meeting. When approved, all relevant CalMAPP team members will receive copies.

1. F. Overlap of Contracts and Transition

ETS will do everything possible to assure that transition to the next contract runs smoothly.

ETS will deliver all required materials (such as reports, post-test workshops, data files, etc.) to the CDE by December 31 of the year following the last test administration as contracted. One member of the current CalMAPP Program Management Team will serve as a transition manager to assist the new contractor until the end of the calendar year in which the last administration is completed. This transition manager will work with the CDE to determine what will be provided to the CDE or directly to the new contractor, if preferred by the CDE.

The ETS transition manager will have access to key members of the CalMAPP staff from each functional area of expertise to assure that all deliverables listed above and any other reasonable requests are made available to the CDE and the new contractor on a mutually agreed-upon schedule.

The transition manager will also establish regular meetings with the new contractor during the overlap of the contracts to communicate what the new contractor may need to know about the CalMAPP Program. There is no cost to the CalMAPP contract for the provision of these transition activities.

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Task 2: Test Security Measures

2. A. Social Media Monitoring for CalMAPP Tests, Including the Smarter Balanced Assessment Consortium Field Test (FT)

ETS will proactively monitor social media and other Web sites throughout the 2014 CalMAPP test administration window and CalMAPP Smarter Balanced Field Test (FT) windows. Monitoring will begin when the first school district receives its test materials in February 2014 and will end when the last testing window has been closed in July 2014. Examples of Web sites that will be monitored include YouTube®, Facebook®, Instagram®, Google+®, and school and district Web sites. ETS will include other Web sites that may be identified during the test administration window. ETS will look for any postings—both images and text—that include secure test materials such as test questions or passages, test booklet covers, and answer documents.

ETS test development and psychometric experts will evaluate each posting identified to be test material and will make recommendations to the CDE on the impact of the items to the validity of the test administration.

2. B. Onsite Test Administration Monitoring (in Coordination with In-field District Outreach Support)

ETS will monitor the test administration process as part of the District Outreach Support activities. Monitoring will include the paper-based test administrations as well as the Smarter Balanced FT administrations.

ETS will conduct before-, during-, and after-testing audits during the 2014 test administrations. There will be approximately 100 audits. The specific number of audits will be determined after the material order deadlines and FT windows are finalized.

ETS will develop a plan with the CDE and the Consortium's FT delivery system vendor that will appropriately monitor both types of test administrations.

2. C. Security Breach Investigations

2. C1. Process for Conducting Investigations of Security Breaches

ETS will conduct an investigation of any security breach that may compromise the CalMAPP Program. The primary task will be to lead any investigation of a confirmed security breach.

An investigator from the ETS Office of Testing Integrity will be available within 48 hours to handle security concerns related to the administration of CalMAPP.

Investigations will include interviews with examiners, students (at the discretion of the district), test site coordinators, and any others who had access to the test booklets. These investigations will attempt to determine the identity of those involved in the incident, recover any missing material, and assess the extent to which the test content was compromised.

If anyone attempts to steal test materials, ETS will:

- Confirm the incident with the examination proctor and others identified in the report;
- Interview the test site coordinator; and
- Submit findings to the CDE.

The investigation of security breach reports will include:

- Time and date of investigation
- People interviewed
- Findings of interviews
- Steps taken

When requested, the ETS Office of Testing Integrity will conduct an immediate onsite investigation in response to security breaches. As required, CDE approval will be obtained prior to the investigation. Within five days of being informed of a security breach, the ETS Office of Testing Integrity will investigate and report results to CalMAPP management. When necessary, immediate reports will be provided by telephone and/or e-mail.

2. C2. Reports

Auditors will immediately report any breaches to CalMAPP management who will immediately notify the CDE. Auditors are required to file an online site visit form within three days of the site visit. The Technical Assistance Center will also follow that deadline.

The ETS Office of Testing Integrity will review each audit report and summarize the findings to arrive at an overall assessment of the test site or school district office. The assessment will be calculated by adding up the points recorded on the evaluation report. The final assessment will be reported as "Acceptable," or "Improvement Needed." The ETS Office of Testing Integrity will send the completed summary report to CalMAPP management no later than 10 working days after the test administration.

ETS CalMAPP management will then deliver a monthly executive summary for the CDE and SBE staff. The executive summary will include the following details:

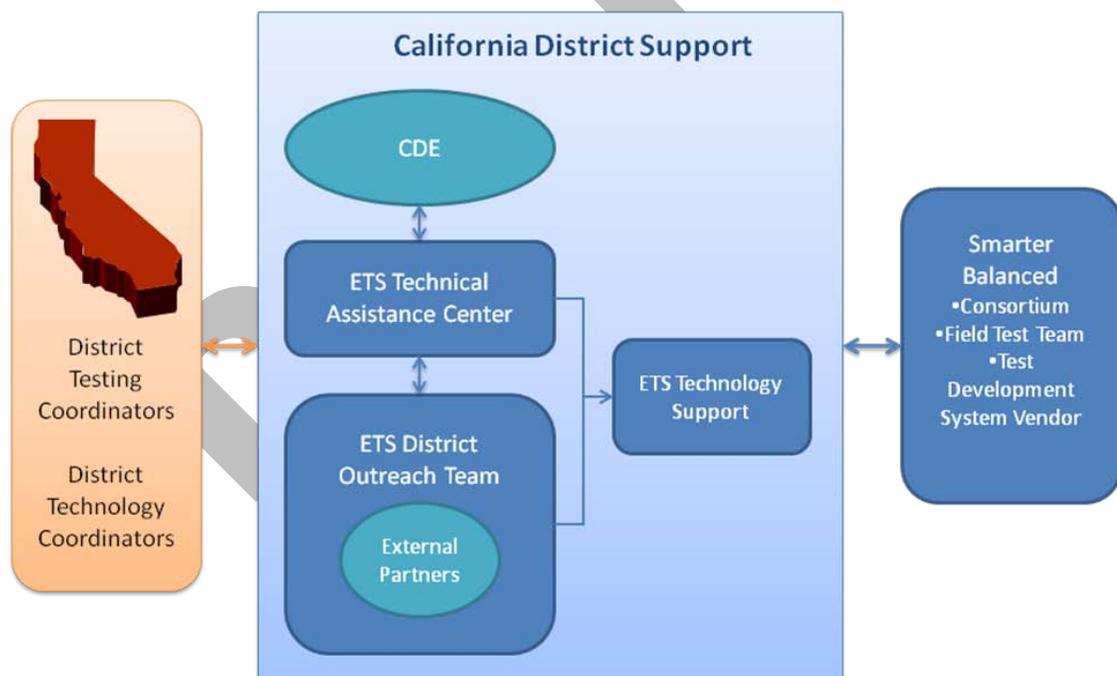
- The number of sites visited in the time period;
- A list of the sites and their audit rating;
- An indication of which sites had possible breaches; and
- A summary and outcome of the breaches

Task 3: Field Test of the Smarter Balanced Assessment Consortium Summative Assessment for English–Language Arts (ELA) and Mathematics in Grades Three through Eight and Grade Eleven

3. A. Consortium Field Test Support to the CDE and Local Education Agencies (LEAs)

ETS will provide a comprehensive support team to the CDE and local education agencies (LEAs) during the 2014 administration. The CDE and LEAs will have access to ETS program managers, district outreach team members, technical assistance center staff, and computer-based testing technology experts. ETS will coordinate the CDE and LEA support with the Consortium and its vendors for the Field Test. An overview of the district support efforts is provided in the figure below.

Figure 1. 2014 Administration of the California Measurement of Academic Performance and Progress Assessment System



3. A1. Coordinate with the CDE, the CDE Communications Contractor, and the Consortium

ETS will support the SBE and the CDE in communicating key FT deliverables, events, and procedures to school districts. In this support role, ETS will maintain direct communications with the Consortium and its vendors for the Field Test.

ETS will develop a communication plan for administration of the 2014 CalMAPP assessments that will be in conjunction with other communication activities implemented by the CDE, the SBE, and the Consortium for the Smarter Balanced FT. Specific activities may include, but are not limited to:

- Designing and hosting a Web site to present information about the administration activities for the Consortium FT and the 2014 CalMAPP paper-based tests.
- Producing Webcasts and online videos about CalMAPP that are accessible to school and district staff, teachers, parents, and the general public.
- Developing a list of “frequently asked questions” (FAQs) about the 2014 administration processes and procedures, including information about the Consortium FT.
- Coordinating and staffing communication opportunities at statewide and regional association conferences such as the CDE North/South Assessment and Accountability Meetings or the annual conference for the California Educational Research Association.

All content of the communications under the communications plan with districts and the public regarding the 2014 CalMAPP administration must first be approved by the CDE and the SBE staff before being disseminated.

3. A2. Maximize LEA Participation in the Field Test through Technical Assistance Support

California Technical Assistance Center

In order to maximize LEA participation and limit district avoidance of the FT due to technology concerns or other concerns, ETS will establish the TAC.

The TAC will be staffed with approximately 15–20 well-qualified individuals who will be trained to respond to district inquiries on FT-related topics including but not limited to intermediate-level technical support. As part of the ETS district support activities, the TAC will work with school districts to complete the Smarter Balanced Technology Readiness Tool.

ETS will develop a FAQ document and scripts for TAC staff to help answer questions. Information provided to the TAC staff will be available upon request. The TAC staff will be familiar with materials such as manuals, user guides, student/test monitor directions, as well as data privacy and test security requirements.

ETS will make available accurate, timely, and ongoing information about the CalMAPP to TAC staff. Changing information related to ETS system or test administration issues will be provided to TAC staff immediately.

Calls will be answered by the TAC with an average wait time of no more than 60 seconds. Any voicemail messages left for the TAC before regular business hours will be returned the same business day; and after regular hours, the next business day.

ETS will maintain e-mail addresses for various groups such as the District Assessment Coordinator and Technology Coordinators to allow for quick dissemination of information. ETS will have a process in place to pull subsets of the groups affected by an issue.

ETS will have documented processes to monitor the accuracy of phone and e-mail responses by TAC staff through supervisory monitoring, district or state feedback, or other methods, and provide retraining as necessary.

ETS will provide weekly customer service summary reports to the CDE. Reports will include volume, wait time, and responses/resolutions by TAC staff. The reports will be provided to the Consortium FT vendor as part of the overall coordination activities with the Consortium.

The TAC will be available from 7 a.m. to 5 p.m. Pacific Time on weekdays and will provide extended service through integration with ETS District Outreach on an as-needed basis.

Technology Support

Recognizing that stresses on district technology resources may be significant, ETS will support the technology necessary for the Field Test with a three-tiered approach.

Level one support will be accomplished through the TAC, which will manage basic to intermediate level technology related issues and questions. Level two support will be accomplished through a seamless integration of ETS's internal technical support team (xBT), a second level that will manage intermediate-plus issues. The third level will escalate to the Consortium's Test Delivery System (TDS) vendor, the American Institutes for Research (AIR). Escalation to this level will be for technology issues directly related to the TDS.

Technical issues identified during a testing window that cannot be resolved by the TAC immediately will be transferred to ETS's xBT team. If a school district is calling with a technical issue and students are in the classroom unable to test, the call is to be moved to technical support immediately for resolution or a recommendation should be provided to have students test at a later time if the problem cannot be resolved. Students should not be kept in a classroom for more than 15 minutes waiting for resolution if not agreed upon by the district.

ETS's xBT team will work with the district until a resolution is identified.

ETS will provide staff knowledgeable about online testing and system requirements to support school districts experiencing technical difficulties. In cases where the TAC staff is unable to resolve the issue, ETS will arrange for a higher skilled staff to resolve the issue and will coordinate with the Consortium's vendor as appropriate.

3. A3. Provide District Outreach During Field Test Setup and Administration

In-field District Outreach

During the in-field establishment of FT technology and other pretest activities, and during actual test administration, ETS District Outreach representatives will be present on-site at LEAs around the state to assist, monitor, mentor, and troubleshoot testing and testing preparations. For example, ETS District Outreach will assist districts in completing the Smarter Balanced Technology Readiness Tool as districts prepare for the field test.

Webcasts, Videos, Web site for CalMAPP System Administration

Prior to the test administration, ETS District Outreach will create and make available for on-demand review Webcasts and instructional videos to assist district testing coordinators and other stakeholders in training for the Field Test administration. In addition, ETS will establish an informational Web site with links to Webcasts, PDFs, videos, and other informational resources related to the 2014 CalMAPP administration.

Surveys

ETS District Outreach will monitor, measure, and quantify the effects of various FT events and activities through the use of survey tools that will be deployed to collect feedback from LEAs. ETS will use both Web-based surveys and in-person data collection methods to fully understand and demonstrate in-field test experiences in aggregate.

3. A4. Produce Ancillary Materials for the Field Test

ETS will produce all ancillary materials necessary for the successful administration of the FT. Such ancillary materials will include:

LEA Training Workshops

- Printed matter necessary for conducting LEA training workshops such as preparation checklists, outlines, manuals, graphics, and signage

FAQs

- A list of frequently asked questions for LEAs and other stakeholders

Instructions for the FT Window and Registering Students

- Written and online instructions on how to use the RSVP online tool to establish each school's testing window. If needed, instructions will be created on how to register individual students for the FT in the AIR system.

Field Test Administration Manuals

- ETS will coordinate with the Consortium vendor and the CDE to develop a test administrator's manual (TAM / DFA) and test coordinator's manual (TCM / D&TSCM) specifically for California that will provide written instructions at district, school, and classroom levels.

3. B. Field Test Participation Plan

The CDE will consult with the president or executive director of the state board to develop a plan as required by AB 484 that will allow for maximum participation in the field test and that also meets the sample size and representative requirements of the consortium. All students in grades three through eight and grade eleven will be included in the FT participation plan. In addition, a sample of students in grades nine and ten will also be selected to participate. ETS will identify and confirm the participation of the schools and content assignments.

3. B1. Prepare the School Data and Demographics (SDD) File

The SDD file is a static, universal file format using comma-separated values (CSV) and will be used in gathering information to project student participation in the spring 2014 Smarter Balanced FT. Using the field test assignments described above, ETS will generate the California SDD file with Standardized Testing and Reporting (STAR) 2013 test result data from the P2 file and the most up-to-date demographic and contact information.

Preparation activity for the SDD file includes establishing each school and grade's testing windows within one of the four Smarter Balanced FT windows:

- Window 1: March 18 – April 5, 2014
- Window 2: April 6 – April 27, 2014
- Window 3: April 28 – May 19, 2014
- Window 4: May 20 – June 6, 2014

As directed by the CDE, ETS statisticians will assign schools and grades to field testing windows based on historical information about each school's STAR testing administration(s). The initial assignments will take into account school districts that have historically administered STAR in multiple administrations to accommodate various school-year calendars. Each school will be assigned to at least two FT windows.

The initial FT window assignments will be analyzed by CDE, ETS, and other CDE contractors to assess Internet and network capacity for each FT window and region in the state. Adjustments to the initial assignments may be made after this analysis.

Districts will be informed of their FT window assignments and will be allowed the flexibility to change schools, grades, and windows to accommodate local technology configurations. ETS will coordinate this activity to ensure that the California SDD file is delivered to the Consortium within the agreed-upon timeframe.

3. B2. Prepare the Test Information Distribution Engine (TIDE) File

Prior to the Field Test administration, the Consortium vendor for the TDS, AIR, will require the submission of the Test Information Distribution Engine (TIDE) file. The TIDE file contains the student-level information that will allow AIR to set up each student in the system. The data for the TIDE file will be extracted from the California Longitudinal Pupil Achievement Data System (CALPADS). ETS will assist the CDE with the preparation of the TIDE files and will be responsible for submitting the data files to the TDS on an agreed upon schedule.

3. B3. Sample Evaluation

For each grade level and content area, ETS will evaluate representativeness of the selected analytic sample required by the consortium against population characteristics through the following performance and demographic categories: performance on the last state assessment taken by the students

- Gender
- Ethnicity
- Disability
- English-language fluency
- Social economic status

Additional demographic categories suggested by CDE may also be included in the evaluation framework provided that necessary data are available to ETS. Sample adjustment will be made if the representativeness requirement is not met.

If, for various reasons, a school selected in the analytic sample cannot participate in the Smarter Balanced FT or does not satisfy requirements to be included in the consortium's sample due to testing window restriction(s), ETS will identify replacement schools to ensure sufficient California participation in the Smarter Balanced FT.

3. C. Field Test Setup and Administration

3. C1. Assist LEAs with Test Delivery Platform

ETS will assist LEAs with the test delivery platform with the goal of maximizing participation by providing a three-pronged approach. First, tier 1 and 2 support will be provided through the TAC. The TAC will also serve as a gatekeeper for tier 3 support at AIR. The second prong will be ETS District Outreach on-site support. ETS District Outreach personnel will be expanded so that there are a sufficient number of team members who will be on-site at LEAs during testing. Third, working in conjunction with AIR, ETS will create and disseminate training materials and deliver pretest workshops and Webcasts to support the smooth installation and operation of the test delivery platform.

Support LEA Installation of the Secure Web Browser

LEAs will need to install a secure Web browser in order to run the test delivery platform. As part of LEA support for the test delivery platform, ETS will provide call center and in-person troubleshooting assistance for the installation of the secure Web browser, a requisite component of the test delivery platform.

Support LEA Installation of the Consortium's Test Delivery System

ETS will provide call center and in-person troubleshooting assistance for the installation of the TDS. This will include on-call support for both district level technology contacts and testing coordinators.

3. C2. Administer the Field Test

ETS will provide call center and in-person troubleshooting assistance during the administration of the field test. Call center support will be provided through the TAC and in-person support through the expanded ETS District Outreach team. ETS will be the single point of contact for all matters related to the support of Field Test Administration.

3. C3. Provide Post-Field Test Support

ETS will continue to provide full call center and in-person support to district personnel after the FT window has passed and until the close of the FT support period on September 30, 2014. It is anticipated that while district-initiated contacts will have diminished, users may still have post-test inquiries relating to what next steps may be, what results may be available, etc. Additionally, as part of post-FT support activities, ETS will launch a series of debriefing meetings managed by District Outreach, which will include an online survey for participants to deliver feedback to ETS.

3. D. Descriptive Report of Field Test Activities

Upon completion of the Consortium FT activities, ETS will prepare a descriptive report of the Field Test that includes information such as the number of students, schools, and districts that participated. ETS will also summarize quantitative data collected from the field through online surveys and site visits. The purpose of the surveys and site visits will be to learn what worked, what did not, and what information was gleaned from the testing procedures including discovery of district "pain points." ETS will also capture data on LEAs or schools within LEAs who chose not to participate due to technological or other constraints. The results of the survey and site visits will be summarized in the descriptive report on what LEAs experienced during the Consortium FT.

3. E. Special Studies and Projects

3. E1. Design Special Studies for a Series of White Papers

It is expected that the CDE may wish to take advantages of the Smarter Balanced FT and conduct a series of special studies, such as:

Meta analysis: The CDE may wish to conduct a meta analysis to examine PPT and CBT modes of administration for both the ELA and mathematics tests.

Other studies: There are also other studies that the CDE may wish to conduct in order to address pressing issues that California faces in transition to a new assessment system.

ETS will work with the CDE to identify topics of investigation, design specifics of these special studies, conduct analyses, and produce white papers.

3. E2. Conduct Analysis of the Impact of Transition on EAP

After both Early Assessment Program (EAP) and Smarter Balanced FTs are administered in spring 2014, ETS will analyze the impact of the transition from EAP to the Smarter Balanced grade eleven assessment. ETS will work with the CDE to design the specifics of this special study.

3. E3. Conduct Stakeholder Meetings and Research for a New Assessment Aligned to the New Science Standards

As required by Assembly Bill (AB) No. 484, the Superintendent shall make recommendations to the State Board of Education regarding the assessment of the newly adopted science standards, called the Next Generation Science Standards (NGSS). The recommendations shall be developed after consultation with stakeholders regarding the grade level and type of assessment.

To start the process leading to the recommendations, ETS will conduct a kick-off meeting with the CDE. At that meeting, the CDE and ETS will discuss and develop a plan to initiate the examination of the newly adopted science standards in relation to the testing population. The plan will identify the groups that will be invited to participate in stakeholder meetings, as well as describe the methods that will be used to collect stakeholder information. For example, the CDE and ETS may implement an online survey to collect opinions about assessing the new science standards. Simultaneously, the CDE and ETS may conduct meetings throughout the state with representatives from stakeholder groups which will include, but are not necessarily limited to, California science teachers, individuals with expertise in assessing English learners and students with disabilities, parents, and measurement experts.

ETS will coordinate, recruit, and facilitate the stakeholder meetings. A report will be submitted to the CDE that describes the meetings. The report will include a summary of the recommendations from the stakeholder groups that the Superintendent may include in the recommendations to the SBE. It is anticipated that the Superintendent's recommendations will be released for public comment as part of the SBE review process.

Upon approval of the Superintendent's recommendations by the SBE and to the extent funds are available, the CDE may direct ETS to investigate and collect information about item types and stimuli that may be considered for the new science assessment. For example, ETS may determine how similar or different the state science items will be from the Consortium and other state science assessments, considering design issues such as whether to use the same item types or whether California will require special additions such as virtual laboratories. This process will engage the CDE, Assessment Review Panels (ARPs), and other stakeholders for feedback and guidance.

Task 4: 2014 CalMAPP Assessments (CST Science, CMA Science, CAPA, STS, and EAP)

AB 484, signed into law on October 2, 2013, establishes the continued administration of the following tests. These tests will be administered during the 2014 CalMAPP system administration (task 4 is exclusive of the Smarter Balanced FT):

- California Standards Tests (CSTs) for Science in grades five, eight, and ten
- California Modified Assessment (CMA) for Science in grades five, eight, and ten
- California Alternate Performance Assessment (CAPA) in ELA and mathematics in grades two through eleven and science in grades five, eight, and ten
- Standards-based Tests in Spanish (STS) for Reading/Language Arts (RLA) in grades two through eleven
- EAP for grade eleven
 - Augmented CST for ELA (Grade 11)
 - Augmented CST for Algebra II
 - Augmented CST for Summative High School Mathematics

LEAs are required to administer the CST and CMA science tests to all students in grades five, eight, and ten and the CAPA to all eligible students in grades two through eleven. LEAs may administer the voluntary EAP tests to grade eleven students. Also as an option, LEAs may administer the STS for RLA to Spanish-speaking English learners who meet the eligibility requirements.

4. A. Assessment Support to LEAs in Coordination with the Consortium Field Test

ETS will provide support to LEAs for the administration of the paper-based assessments. School district support on the paper-based tests will be coordinated with the support provided for the Consortium FT.

4. A1. Help Desk

In addition to supporting school districts during the Consortium FT described in Task 3, the TAC will provide personalized service to district CalMAPP coordinators on program-related issues, which may include, but are not limited to:

- Setting up test administration windows
- Ordering the paper-based tests and related ancillary materials
- Troubleshooting pre-identification files
- Tracking test materials and score reports

ETS will use a short online survey to assess operator performance as well as customer satisfaction. This survey is confidential and voluntary. The level of satisfaction with the service provided is rated on a scale of 1 to 5 where 1 = poor and 5 = excellent.

ETS will maintain a log of its interactions with LEAs on paper-based testing issues in the same database described in Task 3.

TAC representatives will attend district coordinator events such as the pre- and post-test workshops.

4. A2. Web Site

ETS will replace the existing Web site with a new Web site. The site will conform to the CDE's design, accessibility, writing and content, and applications standards as specified in the CDE Web Toolkit. The Web site provides a portal for the resources a district CalMAPP coordinator needs to administer the 2014 CalMAPP tests for CST science, CMA science, CAPA, STS RLA, and EAP.

ETS will, through the Web site, provide district CalMAPP coordinators with timely updates of relevant information. In addition, ETS will respond promptly to requests by the CDE for changes to content and links. The ETS Editor will maintain the site content, links, and documents.

All changes to the Web site will require CDE approval before implementation.

ETS will review the Web site to ensure that it conforms to CDE design, accessibility, information architecture, writing and content, and application standards as specified in the CDE Web Toolkit, as well as to evolving Web standards.

In addition to CDE review, ETS will solicit formal feedback through the district feedback meetings to continually improve the functionality of the Web site. A built-in online survey component will allow district CalMAPP coordinators to provide input into the design and content of the Web site. In addition, the TAC will also relay feedback from school district calls pertaining to the Web site.

4. A3. Collection and Monitoring of LEA Information

District Coordinator and Superintendent Contact Information

The CalMAPP Management System will use the County-District-School (CDS) Code Master File to populate its database. School districts will receive a Superintendent's Designation of District CalMAPP Coordinator form from ETS. The District Superintendent will complete and sign the form and return it to ETS by U.S. Mail or fax. The prior year's district CalMAPP coordinator will also receive a copy of this communication in order to assure receipt and action from the Superintendent. ETS will track the receipt of a completed form for the district along with any updates to the data in the Order Management System. Any changes to the assigned district CalMAPP coordinator made during a testing year will require a new Superintendent's Designation of District CalMAPP Coordinator form signed by the District Superintendent. The TAC will enter the receipt date of these documents into the Order Management System, triggering district access to the system. District CalMAPP coordinators will not be able to access the Order Management System until this form and a Security Agreement have been received from the district.

Security Agreements

As part of Scope of Work A in Amendment 9, district and test site coordinators received from ETS the Test (including Field Tests) Security

Agreement for District and Test Site Coordinators (the “Security Agreement form”) in July 2013, together with the Superintendent’s Designation of District Testing Coordinator form. These Designation forms and Security Agreements will continue to be valid for the new 2014 CalMAPP administration. The district CalMAPP coordinator will return a signed Security Agreement via mail or fax. The TAC will then record the receipt date of this form. Upon receipt of this form and the Superintendent’s Designation of District CalMAPP Coordinator form, the district CalMAPP coordinator will receive a user name and temporary password to access the Order Management System. ETS will conduct follow-up telephone, fax, and e-mail communications in order to obtain completed forms from all school districts.

Charter School Designations

ETS will use the CDS code files to update the Order Management System to be coordinated with the Pearson Management System. In turn, Pearson will provide information to ETS on the testing status of each charter school including information on whether Pearson has received test materials back from charter schools.

As part of Scope of Work A in Amendment 9, all charter schools identified in the CDE’s CDS master file received a letter and a Charter School Designation form similar to what regular districts received in July 2013. ETS will maintain a log of all charter schools to whom forms were sent and of all charter schools returning completed forms, along with other testing status information provided by each charter school. ETS will conduct follow-up telephone, fax, and e-mail communications in order to obtain completed forms from all charter schools.

Shipping Information

The Order Management System will store the shipping address along with an operational calendar and operational hours for each district (including charters). Other data related to shipping (for example, whether the facility has an unloading dock) will also be communicated to the shipping company in order for them to have the appropriate equipment available when making deliveries.

The school district will also have the option of providing a secondary shipping address that may be used for the delivery of supplemental orders and reports. For all deliveries other than the initial shipment of materials, the school district will have the ability to select whether to receive a shipment at the primary or secondary shipping address.

District CalMAPP coordinators will have the ability to update shipping addresses at any time. The new address is then effective immediately for shipping.

Test Material Orders

The Order Management System will handle orders in one of the following ways:

- District CalMAPP coordinator will enter online screen data.

- File submission—Districts will either submit online or send via CD-ROM files containing order numbers in a predefined and published interface file format.
- District CalMAPP coordinator will use U.S. mail/fax/e-mail to submit a material order form to TAC staff, and then enter the order information directly into the Order Management System. The district CalMAPP coordinator will verify the information when TAC staff returns a copy of the data entry form to review the numbers and confirm the accuracy of the data entry.

Any additional materials requested can be entered as a supplemental order. Verified orders will be released for packaging at the appropriate time. All supplemental orders will be released and shipped within a 48-hour (or better) timeframe.

4. A4. Conducting LEA Training in Coordination with the Consortium Field Test Training

ETS will present the following LEA training for the paper-based tests:

- Ordering Webcast
- Pre-ID, Extended Pre-ID Webcast
- Pre-Test Workshops and Webcast
- CAPA Train-the-Trainer Workshops and Webcast
- Post-Test Webcast

These training events will be coordinated with the training events planned for the Consortium FT to provide the maximum training opportunities to LEAs.

The workshops and Webcasts will offer a train-the-trainer model that provides suggested methods, materials, information, and practice so that district CalMAPP coordinators and County Office of Education (COE) trainers can present their own workshops to site coordinators, who in turn will train teachers and other administrators. The objective of all these workshops is that tests are administered correctly and results are interpreted and used properly.

In addition, separate CAPA pretest workshops will employ a train-the-trainer model for the administration of the CAPA, with practice using manipulatives, stimulus cards, giving cues and scoring according to the rubrics, either for Level I or for Levels II–V. Consistency in the administration of the CAPA helps assure reliability of the assessments. ETS will issue certificates of completion for the training and templates for district coordinator trainers to issue to CAPA examiners.

Workshop Locations

The workshops, when presented live, will be held in a variety of locations across the state. ETS works with County Offices of Education, which provide facilities for the workshops at no cost to the state.

Description of Materials to Be Used in the Presentation

ETS will have videos made for pretest and for CAPA administration. ETS will also produce a Webcast of the pretest and CAPA workshops. The videos will

be available to LEAs as streaming or downloadable videos on the Web site.

All workshop materials will be approved by the CDE prior to their use.

4. B. California Item Bank

ETS currently provides and maintains the electronic item bank for several of the California paper-based assessments including the California High School Exit Examination (CAHSEE), CSTs, CMA, CAPA, STS, and the California English Language Development Test (CELDT). The California Item Bank will not be used to house the Consortium assessments or any newly developed assessments such as the NGSS-based tests.

The consolidated item bank will house all CST, CAHSEE, CMA, CAPA, STS and CELDT items and associated statistics by assessment. While ETS will retain ownership of its proprietary software, the item bank and the customized version of the software will be owned and copyrighted by the CDE. The enhanced item banking software will support the full functionality described below.

For the 2014 administration, ETS will update the existing CST, CMA, CAPA, and STS items with the following:

- Passages, stimuli, and items that are part of suspended CST, CMA, and STS tests will be flagged to indicate that these test materials have been released.
- Copyright permissions to third party materials for active passages and stimuli will be obtained as necessary to meet the contract requirements. Copyright permissions statuses will be updated accordingly.
- The statistics for the items administered in 2014 will be updated upon completion for the analyses.

The California Item Bank will not include FT items from the Consortium or items for any newly developed assessments.

ETS will provide the item banking application using the LAN architecture and the relational database management system, SQL 2008, already deployed.

The software interfaces with standard MS-Office tools such as Access, Excel, and Word, with output of reports in MS-Excel and Adobe PDF. The application itself will use standard commercial software tools.

ETS will provide updated versions of the item bank to the CDE on an ongoing basis. ETS will work with the CDE to determine the optimum process if a change in databases is desired.

4. B1. Item Requirements

Data maintained in the electronic item bank will include the following:

- **Unique item identifiers.** Each item will have a unique identifier that is established when the item is first written and is consistent with the item identification system currently in use by the CDE and ETS. This identifier stays the same for all drafts of the item. In addition, inherited legacy items will retain their previous item code in a separate field within the database. Only the current draft of an item exists at any point in time in the item bank.

- **Graphics.** Graphics will be stored in standard formats such as .jpg, with math equations created through use of PDF files. If requested, they will also be delivered in .gif or .tif file formats. Graphics will be maintained in their native format and will be re-scalable. Graphics files will be stored separately and accessed through the item bank application via file pointers.
- **Item Data, Reading Passages and Copyright.** Specification data associated with each item such as grade, assessment level, and content/expectation classifications will be included in the bank. All item text and graphics, including item stem (with braille versions where appropriate), distractors, and links to artwork and passages; item-format data such as response type (multiple-choice and constructed-response, for example), answer key, and scoring rubric/sample responses; links to item writers and item reviewers; and item review comments or results will be included. Copyright information including permissions, expiration date, and type of usage will be included for all passages. All copyright permissions and expirations will be reported to the CDE for review.
- **Item Statistics.** As field-test and operational forms are administered, ETS will load the statistics into the item bank. The item bank will provide for the maintenance of data as requested and approved by the CDE for all administrations of each item. Examples of data elements included are:
 - *test form data* such as form designation, position on form, administration date, field-test/operational test designation, and anchor/linking designation
 - *classical statistics for multiple-choice items*, such as n counts, p -value, biserial, point-biserial, biserial and/or point-biserial by distractor, distribution of responses by distractor, omit, not-reached, and double-grid for multiple-choice items
 - *classical statistics for constructed-response items*, such as mean, standard deviation, and score distributions
 - *IRT statistics*, such as difficulty, discrimination, guessing, standard error, and model fit
 - *DIF statistics*, such as focal and reference counts, DIF values, and flags for each focal group
 - These will be loaded into the item bank, quality-controlled through summary statistics reporting and manual inspection of sample records, and delivered to the CDE according to the schedule for each assessment.
- **Item status.** The item bank will have both an availability indicator and an item status with an associated date and comment area. The availability indicator identifies whether the item is available for use or not and the status further describes the current state of the item in the process. The status of the item or passage will track its current state in the process, from development through review, field testing, operational use, and release. Rejected items, released items, and items that do not meet statistical specifications will be clearly identified so they are not inadvertently included on subsequent test forms. Statuses and availability are updated programmatically as items are presented for review,

reviewed and accepted or rejected, placed on a form for field testing, presented for statistical review, and used operationally. Rejection and release of items requires approval and is monitored and quality controlled.

4. B2. Capabilities

The item bank will provide the capabilities that a test developer or psychometrician might need to maintain a testing program:

- **Item Card.** The item banking software will provide a variety of standard reports in addition to the export of data that is already in place in the software today. An item card report will be produced that will model the standard item card that is printed for assessment review panel meetings. The basic information printed will be the unique item identifier, stem and distractors. In addition, other components can be selected to print with the item such as a standard set of item statistics, a listing of the associated graphics, manipulatives for CAPA items, and associated passages. A separate passage report will also be available. The exact layout and components will be decided upon in conjunction with the CDE. This feature will be constructed so that additional reports can be added when desired.
- **Item Comments.** Users of the software will be able to add and view comments on individual items. Item comments are available in the current item bank and are populated by ETS with Assessment Review Panel comments for items that are presented for review. In addition, the CDE can add comments to an item. This is the only editable area in the application where data are stored in the item bank.
- **Item Search/Selection.** The item banking software will allow the CDE to search for and select items by all specified criteria including content, test administration, statistical characteristics, and Boolean combinations of data comparisons on all fields in the item bank. Once a group of items is selected, the user will be able to view item data in various ways. Selected items will be displayed on screens approved by the CDE.
- **Form Development, Analysis, and Transfer.** Since items are selected while creating a form, the item bank system will provide running tallies of items and their match to the blueprint, statistical summaries (for example, distributions of p -values, point-biserials, keys, cognitive levels and fit), and IRT information, standard error, and test characteristic curves. The curves can be analyzed based on the total number of items in the test or any portion thereof. The CDE will be able to create new forms that conform to appropriate test specifications/blueprints using the form planners, which can be exported to MS-Excel by one user, transferred, and imported back into the bank or the replicated bank for use by another.
- **Assessment-specific Requirements.** The California Item Banking system will be able to handle differences between assessments while housing them in the same database application. The software will be able to house classifications and blueprints in different formats, report statistics and statistical fields between assessments in different ways, and display data available in one program but not another, such as manipulatives.

The underlying database structure is common to all, although not all assessments may use all data fields. This will allow for differences between items developed for different testing programs including but not limited to standards, frameworks, reported statistics, manipulatives, and item classifications. The application and how the data are used and displayed will be completely configurable. Because of the differences in classification and the uniqueness of each individual assessment, items will not be able to be viewed across assessments. Rather, they are unique and available only within one assessment. The combination of multiple assessments, unique items within an assessment, and the ability to access all assessments individually comprises the consolidated item bank.

- **Item Bank Content Summary.** The software will provide summary analyses and printed reports meeting the CDE's specific needs including identifying the number of items in the bank by classification data such as test, domain, content area, grade/level, reporting category, and standard.

4. B3. Item Bank Delivery

In addition to CST items, the consolidated Item Bank will contain items from the CMA, CAPA, STS, CAHSEE, and CELDT Programs. CELDT is also a stand-alone application that was populated via an external ETS-developed process and can be continued in that fashion. Updates to the database, application, and images will be delivered to the CDE or their authorized agent via SFTP.

4. B4. Item Bank Update and Delivery Schedule

Monthly deliveries of data will be scheduled according to test development, administration, statistical analysis and form development schedules for each of the assessments. Updates to assessments will be combined across programs as much as possible. ETS will be responsible for both refining the application during its initial deployment and maintaining the software and the database over the life of the contract. In addition to database updates, subsequent versions of the item bank software that incorporate needed changes identified by the CDE will be delivered. A release methodology will be employed to document and track all updates. This will allow data updates and software changes to be implemented as a single release.

An item bank log will be created that tracks all software changes related to the item bank in a single document by assessment. This document will also contain the release number of when the software change was implemented. In addition, a release document will be prepared that will designate the data updates occurring in each release, along with the software changes that will be delivered. This document will be published to the CDE with each update of the software.

ETS will provide routines and database updates so that only database changes and additions are included in updates. Additional quality control procedures will also be developed to assure that the databases are the same after the replication of changes at ETS and the CDE.

4. B5. Quality Control

ETS will employ extensive quality control procedures, involving both automated reasonability checks and counts and careful manual inspection, to make certain

all data are accurate and complete. Quality control processes will also be run against all images to assure that all items have an image in the bank and that all art required by the item is present in the bank. When graphics are modified, all items containing that modified graphic will be reassembled and updated in the item bank.

In addition to testing for specific changes to the database and software before delivery of updates, ETS will execute a regression test to assure that there are no unforeseen problems as a result of changes made. This same test plan will be created in conjunction with the CDE and ETS test development staff. This test plan will be updated to include software changes as they occur. ETS will provide the results of the testing to the CDE for review.

4. B6. Preparation of Summary Reports

ETS will provide the CDE with summary analyses and reports based on data in the item bank. Any data in the item bank is available for reporting and ETS Item Banking staff will work with the CDE to identify the data requested, report format, and timeline. A report request will be designed for CDE use to outline the basic request and timeline. ETS will then have a document from which to begin preliminary design and use as a basis for discussion so that the specific needs are documented and understood in order to deliver the desired outcome.

4. B7. Year-End Data Delivery

The year-end data delivery will be handled in the same fashion as a normal database update and would be a scheduled release and part of the delivery schedule described in Task 4.B6. At this time, all items and statistics would be updated in the item bank. All documentation including data loading procedures, data delivery specifications, item bank table relationship and field definitions, and user directions will be included in addition to the normal database delivery. Other data formats for export will be provided on request.

4. B8. Product Licenses

ETS will secure a perpetual run-time license for all the software that is used in the California Item Banking system and will provide that with the application so that any user with MS-Office can run the application. Those third party licenses will be provided to the CDE during the term of the contract so that the CDE can run the application with MS-Office. The CDE owns the customized version of the software that was designed specifically for the CDE with state funding. In order to modify the code or table structures within the system's currently licensed software, the CDE must purchase developer licenses. These licenses are not transferable and cannot be purchased by any party other than the system owner (CDE). The CDE owns the customized version of the software as developed; however, ETS has a patent pending for the underlying proprietary software that has been previously developed and is owned and copyrighted by ETS. Should this contract transition to a vendor other than ETS, the CDE can continue to use the customized system on a perpetual basis but because of the underlying patent, the competitive vendor cannot resell or reproduce the system.

4. B9. Scalable Application

The application is scalable to include as many authorized users as necessary with a maximum of 40 concurrent users. Users will be allowed to have only one

instance of the application open at a given time, but they will be able to move between assessments based on the access granted by their User ID.

4. B10. Compatibility with CDE Environment

Before implementing any changes to hardware, software or network environments, ETS will obtain approval from the CDE to assure that the changes are compatible with the CDE environment.

4. B11. Item Bank Security

The measures ETS takes for assuring the security of electronic files are as follows:

- Electronic forms of test content, documentation, and item banks are backed up electronically, with the backups kept offsite to prevent loss from system breakdown or a natural disaster.
- The offsite backup files are kept in secure storage with access limited to authorized personnel only.
- To prevent unauthorized electronic access to the item bank, advanced network security measures are used.

The electronic item banking application will include a login/password system to authorize access to the database or designated portions of the database. In addition, only users authorized to access the specific database will be able to use the item bank. Users will be authorized by a designated administrator at the CDE and at ETS. SBE staff or liaisons will be provided access upon request.

4. C. Test Materials Construction, Production, and Packaging

4. C1. Test Materials Construction

The following test booklets will be produced for the CalMAPP Program:

- Grade 5 CST Science test booklet
- Grade 8 CST Science test booklet
- Grade 10 CST Science test booklet
- Grade 11 CST ELA test booklet (only for EAP use)
- CST Algebra II test booklet (only for EAP at grade 11)
- CST Summative High School Math test booklet (only for EAP at grade 11)
- Grade 5 CMA Science test booklet
- Grade 8 CMA Science test booklet
- Grade 10 CMA Science test booklet
- Grade 2–11 CAPA Examiner’s Manual
- Grade 2–11 STS RLA test booklets

The test booklets will consist of test forms that are repeated from previous administrations.

Test Book Development Process

The development of test booklets is a collaborative process among ETS, an operations subcontractor, and Pearson. The process includes the following steps:

1. Print File to Pearson
2. Page Proofs
3. Page Proof Revisions
4. Second Page Proof Revisions
5. Production Phase

Print File to Pearson

ETS will provide Pearson with print files for all scannable test booklets. In addition, ETS will provide bookmaps for each test booklet, and will specify which pages are common or variable across test book versions.

Page Proofs

Once Pearson receives the print file from ETS, the following steps occur as part of the page proof process:

1. Demographic pages are added to the test booklet and the appropriate variable and common pages are put together to create the test booklet.
2. Pearson then sends the document to their Proofreading Department with the standard proofing checklist attached. As part of this process, the directions in the test booklet are checked for format, grammatical correctness and proper use of conventions.
3. Proofreaders review the document using the bookmaps and item matrices for comparison and mark any corrections or revisions that need to be made.
4. The Pearson Forms Project Director reviews the revisions and makes any additional required edits.
5. The Pearson Forms Designer updates the draft with all marked revisions.
6. The process of reviewing and revising is continued until the document is determined to be “clean and final.”
7. After the review, the Pearson Forms Designer creates the digital file complete with items and embedded graphics.
8. Page proofs of the test booklet will be printed and delivered to the CDE for its review. Project schedules include five business days for the CDE to complete a review, make revisions on the page proofs, and return the proofs to Pearson to complete the workflow process.

Page Proof Revisions

When Pearson receives the page proofs, their design team incorporates the necessary changes to the test booklet. Pearson then sends the test booklet

to their proofreaders, who compare it to the page proofs received from ETS. If necessary, the Forms Designer makes further changes and the test booklet is then returned to the proofreaders.

Second Page Proof Revisions

After the page proof revisions are complete and verified by Pearson's Proofreading Department, they will be delivered to ETS for final review and approval.

During this process, the Pearson Forms Department will continue to provide page proofs to ETS until the final test booklet design is approved. Upon approval, the Forms Designer will create a digital copy, check it against the page proof, and send it to the printers. The document will go through a final verification process when the printer produces and sends the blueline of the document to the Forms Department, where accuracy and print image integrity will be verified.

4. C2. Test Materials Production

A document will be released and declared "clean" only after all review criteria have been satisfied. Only then will Pearson's printing division receive approval to print.

Pearson uses the following detailed production processes to produce quality documents:

1. Press sheets are checked during the print run to verify thorough ink coverage, color and overall print quality.
2. Operators select sample documents for color proofing and quality testing at predetermined locations throughout the print run for testing.
3. Forms are carefully inspected for squareness of cut, exact positioning of tracks, codes, text and response positions, and the quality of printing.
4. Forms are released for subsequent activities only after they meet quality control standards.
5. After releasing the documents, the printed signatures move to the bindery area for binding, wrapping, and packaging in accordance with project specifications.
6. During binding, bindery personnel establish in-process checks to further verify quality control.
7. A final internal review is performed before documents are shipped to customers.

The non-scannable test booklets will be printed by ETS. The page proof process will be similar as with Pearson with the CDE receiving final laser following ETS certification.

Designing and Constructing Answer Documents for the CSTs, CMA, CAPA, and STS

Pearson will design and print answer documents to correspond to the test booklets. The school and grade ID sheets will identify the school code, grade, teacher name, and other information needed for aggregating student data.

Depending on the specific requirements dictated by grade and subject area, the scannable answer documents are single sheets, four-page folders, 12-page answer booklets, or self-contained test booklets (the STS for RLA test booklets in grade two and grade three test booklets). All answer documents can be precoded by either printing the specific information directly onto the document or by applying a machine-readable label containing the appropriate information.

As a sample, the quantities of answer documents and school and grade identification sheets required for the 2014 administration of the CST science, CMA science, CAPA, STS, and EAP are provided in Table 2. The numbers provided are based on the testing volumes from the 2013 STAR administration plus sufficient print overage. The print quantities will be provided to the CDE in accordance with the sample format provided in Table 2 below for review utilizing the revised estimate of anticipated test takers as provided to ETS by CDE.

Table 1. Printing Quantities for Answer Documents and School and Grade Identification Sheets

Document	No. of Pages	Estimated 2014 Print Quantity
Grade 5 CST/CMA Answer Folder	4	640,000
Grade 8 CST Answer Folder	4	620,000
CST Grade 10 Answer Folder	4	660,000
Grade 11 CST/EAP Answer Folder	4	610,000
CAPA Answer Folder	4	60,000
Grade 8 CMA Answer Folder	4	50,000
Grade 4 STS Answer Folder	4	10,000
Grade 5 STS Answer Folder	4	6,000
Grade 6 STS Answer Folder	4	5,000
Grade 7 STS Answer Folder	4	5,000
Grade 8 STS Answer Folder	4	4,000
Grade 9 STS Answer Folder	4	4,000
Grade 10 STS Answer Folder	4	4,000
Grade 11 STS Answer Folder	4	4,000
School and Grade ID Sheet (SGID) (header sheets)	2	571,700

Pearson's Forms Department will provide ETS with a mockup design layout of the scannable documents before any composition begins. This will allow all parties an opportunity to make major changes to the forms without affecting schedules and without incurring significant costs.

Once agreement has been reached on the general layout of the documents, the materials will be composed in accordance with the determined specifications. The use of specialized forms design software minimizes the effort involved in traditional methods of form development and, in the event that changes are required, reduces the time required to generate revised proofs.

After each form is created, Pearson staff will thoroughly inspect each document to verify that it matches the text and specifications received from the CDE and ETS. When all corrections are made, proofs will be sent to the ETS for review. A duplicate copy of each proof will be sent to Pearson's software development team for technical review of scannability, oval placement, and spine code assignment.

Once the proofs are approved by ETS and by Pearson's software development team, the printing plates will be made and the documents will be printed at one of Pearson's printing facilities.

Immediately after printing, sample documents are selected for testing from predetermined locations throughout the print run. These forms are carefully checked for accuracy of cut, exact positioning of timing tracks, codes, text and response positions, and the quality of printing. Forms are released for subsequent activities only after they have met all quality standards.

Answer documents may be revised to accommodate information necessary for the program. Pearson will work with ETS to develop and revise answer documents.

Single Record for Each Student

Answer documents will be designed to produce a single complete record for each student, which will include demographic data and all test scores for that student.

All answer documents will contain uniquely numbered lithocodes that are both scannable and eye-readable. The lithocodes will allow all pages of the document to be linked throughout processing, even after the documents have been separated into single sheets for scanning.

For those CAPA cases where there is more than one answer document for a student (e.g., there is an Examiner answer document and an Observer answer document), lithocodes will link their demographics and responses within a document while matching criteria will be used to create a single record for all of the students' documents. Pearson will use the matching criteria listed as follows:

Ten percent of the CAPA tests are scored more than once (two answer documents received). The answer document indicates whether the test was scored by the examiner or the observer. The two answer documents will come in under the same school and grade identification sheets and need to be matched.

1. First — SSID ID number
2. Second — First name, last name, date of birth, gender

Producing Pre-ID Answer Documents

School districts will have the option to pre-identify student answer documents for each of the tests (CST, CMA, CAPA, STS, and EAP). By using the Pre-ID process, districts will reduce time dedicated to hand-marking basic student information such as first name and last name. Districts may submit student demographic information in the Pre-ID files; however, the demographic information submitted as part of Pre-ID and Extended Pre-ID Data Corrections will not be used for reporting purposes. Instead, CALPADS data will be used for reporting and is described further in Tasks 4.G and 4.H. Districts that elect to submit demographic data as part of Pre-ID will be encouraged to use CALPADS for creating the Pre-ID file.

The following is a description of the process that will be used to produce the Pre-ID answer documents.

1. ETS will transmit Pre-ID files and enrollment orders for Pre-ID documents to Pearson 42 calendar days prior to the first test date. The enrollment order will indicate whether the school district chooses Pre-ID documents or labels.
2. Pre-ID files will be sent to Pearson by administration and test type (CST, CMA, CAPA, STS, and EAP).
3. ETS will transmit Pre-ID files and enrollment orders to Pearson 21 Calendar days prior to the first test date.

Depending on the method of pre-identification selected, school districts will receive their pre-identified student answer documents with their other testing materials, including additional non-pre-identified answer documents (10 percent overage for every school and five percent for every district) for those students not identified on a Pre-ID file. As part of a separate shipment, districts will receive any pre-identified student labels ordered.

Forms Design and Production for Students with Disabilities for the CSTs, CMA, CAPA, STS, and EAP

Universal Design Principles

Tests will be administered in a manner that maximizes participation of students with special needs and allows for accommodations to the extent required by law, in accordance with the Individuals with Disabilities Education Act, 20 U.S.C §1400 et seq. (IDEA).

The goals of Universal Design are to increase the number of students with special needs who are able to take the tests without special accommodations and to make accommodations easier to implement.

Braille Version of All Test Forms and Answer Documents

ETS test development, editorial, and production staff will implement the requirements of the CST, CMA, STS, and EAP assessments regarding braille tactile graphic materials and materials for the other special versions, including the following guidelines for braille tactile graphic materials:

- ETS test developers will create all items so that graphic material does not contain clues or omit necessary information, nor will the graphics contain material that is unnecessary for responding to the prompt.
- ETS will review the descriptions of graphics and illustrations to maintain concise and meaningful information. These descriptions will be included as transcriber's notes throughout the test and will also be included in the teacher's notes to the braille edition.
- ETS will practice the protocol of placing keys or legends that supplement reading graphics at the top left of the tactile graphic or on the left-hand facing page.
- ETS will use horizontal braille labeling on graphics.
- The ETS assessment specialists and special versions editor will maintain charts and graphs on one page when possible.
- Test developers will also be involved in the process of developing the accommodated versions.

- To make a determination as to the appropriateness of items for visually challenged students, ETS will seek the recommendation of those individuals experienced in braille. First, test developers will provide the test form to the braille vendor for review.
- The brailer's recommendations to the test developer may consist of:
 - Identifying items that should not be brailled due to the inappropriateness of the content for a visually impaired student
 - Suggestions for the scripting of art or graphics related to an item
 - Suggestions for minor modifications to art or graphics for braille reproduction

The braille version will use contracted braille for CST sciences, CMA sciences, and EAP, and will use uncontracted braille for STS grades two through eleven.

Contracted braille is a combination of braille letters and short-form words. Uncontracted braille will only be used if any portion of the test requires the test-taker to spell words and for all STS tests.

The test developer will work with the brailer to make final recommendations for a braille test form. Special consideration must be given to the number of items recommended for omission. Test development and psychometric staff will review the impact on the test specifications and score reporting requirements for subtest scores.

The quantities of the braille-print test booklets for each administration will be estimated based on usage from previous administrations, and take into account any other factors that could influence volumes.

ETS will produce sufficient quantities of braille test booklets and supporting answer documents to support the initial orders, any supplemental orders, and any samples necessary to support review and archival processes.

Procedures for Producing a Large-Print Version of the Test

For large-print forms, test developers will identify those items that must be particularly attended to by the staff responsible for producing the large-print forms. Test developers will provide directions to production staff, relaying information about Mathematics items that involve measurements that cannot be enlarged, about art or graphics that may be affected by enlargement, and about the spacing of materials that affects performance on items. The goal is to avoid introducing factors that affect item performance, thus maintaining the validity of all items. The large-print version will be produced in a font format that is equivalent to 20-pt. Arial.

As an application of Universal Design Principles, the large-print edition is not just a larger edition of the operational form, but is adjusted to accommodate the needs of students. A template will be created that adjusts the amount of white space, leading, and other factors that affect the accessibility of the form for students.

As with the braille forms, ETS will produce quantities sufficient to meet those initial orders, estimated supplemental orders based upon past experience, and any samples necessary to support review and archival processes.

Procedures for Producing Test Coordinator Instructions and Test Examiner Directions

ETS will provide detailed district CalMAPP coordinator instructions and examiner directions to support the test for each of the special test versions—braille and large-print.

Included in all manuals will be clear and concise directions for administering the tests. ETS will continue its current practice of producing a single coordinators manual and examiners manual that encompasses both the standard and special versions.

Instructions in the manuals for use in administering braille editions of the test to students will mirror the standard administration directions as much as possible. However, they will reflect any special instructions for administration specific to the braille version of the assessment.

The directions for administration specific to the large-print edition will be similar to those used for the regular-print, operational version of the test.

CDE Copies

ETS will assure that all the materials detailed below will be produced in the proper quantities and formats, and delivered to the CDE within the prescribed timeframe (within four weeks of completion of materials production). Copies for the CDE will be produced as part of a normal quality-monitored production run, packaged and delivered via an approved, secure and traceable shipper to the designated CDE recipients. ETS will deliver to the CDE:

Two sets of all versions of test booklets, including:

- Two sets, booklets with built-in reference sheets
- CAPA Examiner's Manual
- Two copies of all answer documents
- Two sets of rulers
- Two sets of CAPA stimulus cards
- One copy of all braille test booklets
- Ten copies of each *DFA*
- Twenty-five copies of all District and Test Site Coordinator Manuals

Additional copies of all of the listed materials will be available for the CDE's needs and will be provided to the CDE at their request.

Ancillary Test Materials

To increase the efficiency of communications between the LEAs and schools during the test administration, and to encourage that tests be administered in a consistent manner, ETS will review with the CDE all CalMAPP Program documentation and update the materials based on the needs of the CDE and district CalMAPP coordinators, academic standards, and other requirements and criteria.

All documents will adhere to the style and usage standards of the *APA Publication Manual*, the *CDE Style Manual*, and the *CDE Correspondence Guide*, and refer to the Terminology List when necessary, so that materials sent to LEAs use the same terminology and language as that used for the tests.

ETS will continue to produce test administration support materials for:

- *Directions for Administration (DFAs)*
- *District and Test Site Coordinator Manual*
- *Post-Test Guide Technical Information*
- Guides for the Order Management System (electronic only)
- *CAPA Examiner's Manual*

Directions for Administration

For the remaining CST, CMA, STS, and EAP tests, ETS will produce one *DFA* for each grade as well as one manual for high school–level testing.

DFAs include instructions for completing demographic information and placing linking labels. They also include information for the security and the return of test materials.

District and Test Site Coordinator Manual

The *District and Test Site Coordinator Manual* instructs district and test site coordinators in the administration of the tests. The manual contains procedures and forms that are specific to the coordinators' roles in the CalMAPP Program and serves as a complete reference guide.

Post-Test Guide Technical Information

The current *Post-Test Guide Technical Information for District and Site Test Coordinators and Research Specialists* supplements the post-test workshops. It will be written to enhance understanding of the reports that are generated from scoring and analyzing results on the remaining CST, CMA, CAPA, and STS tests, and to instruct in the derivation and use of the test results.

Order Management User Guide

ETS will also produce documentation that shows district CalMAPP coordinators procedures for using the Order Management System, an outline system that allows districts to order materials and submit Pre-ID files. In particular, the user guide will show the coordinators how to set up test administrations, how to order materials, how to submit Pre-ID files, and how to correct Pre-ID information during the testing window. This user guide will be available as PDF files only and can be downloaded from the Web site.

CAPA Examiner's Manual

ETS will produce a manual for the administration of the CAPA exams, the *CAPA Examiner's Manual*. One manual is used whether CAPA Level I, Level II, Level III, Level IV, or Level V is administered.

The *CAPA Examiner’s Manual* describes the CAPA Program, qualifications for administration, determination of CAPA levels, and instructions for examiners’ scoring of the test. It also describes:

- Recording responses
- Using stimulus cards for certain test questions
- Using manipulative lists for certain test questions
- Guidelines for administration
- Adapting tasks

ETS psychometricians will produce the stimulus cards and manipulative lists needed to administer CAPA.

Minimum Quantities of Paper Products

For efficiency and consistency, ETS will produce standard manuals and instructions as all-inclusive documents to support both standard test versions and special versions (large-print and braille). The ancillary materials will have clearly delineated sections to support the unique instructions for delivering these assessments.

Table 2. Proposed Minimum Quantities of Ancillary Paper Materials

Material	To Each LEA	To Each School
<i>DFAs</i>	2	1 per 20 tests
<i>District and Test Site Coordinator Manuals</i>	1	1
<i>Post-Test Guides</i>	1	–
<i>CAPA Examiner’s Manuals</i>	0	By request

Directions for Administration

There will be one copy of the instructions per 20 test takers. A 10 percent overage will be added to all school orders, as well as a five percent overage for districts, and an additional amount to be held in reserve to support supplemental requests. In addition, the posting of electronic versions should support any extraordinary needs.

District and Test Site Coordinators Manuals

ETS will provide two per district and one per school, with some overage to support additional requests by administrative personnel. The electronic versions posted on the Web site are print-ready and capable of supporting any extraordinary demands.

CAPA Examiner’s Manuals

The *CAPA Examiner’s Manual* will be produced at a much lower ratio than 20:1, reflecting the population dispersion of candidates for this assessment. Since the *CAPA Examiner’s Manual* contains test questions, district CalMAPP coordinators will order one for each examiner.

Ancillary Materials Production Specifics

All ancillary materials will be printed, and converted into PDF and/or HTML

files. *DFAs*, *Coordinator Manuals*, and the CAPA manual will be posted to the Web site by February 1 of each year; hardcopy versions will be shipped with testing materials. Only nonsecure materials or materials that have been edited to remove secure sections are posted. Posted materials, such as *DFAs* and the nonsecure *CAPA Examiner's Manual*, will be accessible using Web-braille.

Printing Quality Control Procedures

An ETS Printing Quality Control Specialist will be onsite through all stages of production to assure the quality of all products.

The general process requires all ETS print vendors to perform a quality check on all materials produced at all stages of print manufacturing. The quality checks are performed at the Prepress, Press, Bindery, and Packaging/Shipping stages. ETS will use a required Quality Control Check List to assure the vendors' adherence to quality procedures.

Scorable Materials Production

Pearson will produce scannable documents using standardized processes set by ISO (International Organization for Standardization), that promote efficiency and improved quality. Adherence to the process standards set by ISO means that forms and printing equipment are kept to a high level of precision.

Prior to shipment from the printing facility, the Quality Department will approve all samples. Any form that does not meet the scanner reflectivity tolerance guidelines is rejected. Forms that fail to meet these quality control criteria are reprinted.

4. C3. Packaging

Pearson will package test booklets, scorable documents, and *DFAs*. ETS will distribute *Coordinator Manuals* at workshops and ship the manuals to districts that do not send representatives to workshops.

With the exception of Pre-ID labels, all test materials for a test administration window will be shipped at one time. All materials will be packaged for each school and shipped to the district. Pre-ID labels will be sent as separate shipments to allow districts more time to submit pre-identifying information.

Because many districts have multi-track calendars that require testing in more than one test administration window, it will be necessary to make more than one shipment to some districts.

The materials list is a requirements document that specifies anticipated page counts, order quantities, distribution quantities, and processing quantities for each item type by year.

Distribution rules will be used to calculate material quantities and overages, to provide 10 percent overage for every school testing and give five percent overage for every district, based on the districts' total order for each grade.

Boxes will be packaged by assessment and grade for each test site, and sent to the district. For example, CST materials are boxed separately by grade from the CAPA test materials. As STS and CMA test materials are required, they will be

packaged separately from other assessment materials by grade. The contents of each shipment will be clearly labeled.

Box 1 of each district- or county-office shipment will include:

- Return freight kits for scorable and nonscorable materials
- Directions for inventorying the materials and for notifying the TAC of any missing materials or shortages
- A set of packing lists for all school shipments within the district or county office
- A packing list for the district or county overage materials listed in the order in which they are packed
- A pallet detail report for those shipments that include two or more pallets

Box 1 of each school shipment will include:

- Return freight kits for scorable and nonscorable materials
- A packing list with materials listed in the order in which they are packed

The boxes will be labeled numerically to correspond with the packing list (Box 1 of 20, Box 2, Box 3, Box 4...Box 20 of 20), so that materials for a particular assessment and grade level can be identified upon receipt at the test site.

Box Specifications

Pearson will use specifications for box construction so that the boxes used for shipping test materials are extremely sturdy and durable. Pearson will use double-walled, reusable boxes to both withstand the rigors of handling by the carriers during distribution to districts, and to protect the test materials when they are shipped back to Pearson for processing.

California school districts receive many shipments of materials during the school year. Although the boxes are labeled with program information, it is critical that the district CalMAPP coordinator be able to locate Box 1 of each shipment as soon as possible. Box 1 contains the packing list and other important information needed to facilitate handling.

Using suggestions from districts, Pearson packages all materials for Box 1 in a white, double-walled box. The white box will be easily recognized in the shipment as Box 1.

Special Services to Districts

Where possible, Pearson provides:

- Accommodations for special needs and space
- Pallet jack or other equipment necessary for districts without a dock or proper equipment
- Alternate carrier arrangements so that testing materials reach the more remote areas of the state on time

Pearson will use the special comments section on the enrollment order to capture requests for proper delivery (no dock, need assistance, etc.). If there are any questions about the comments entered on the enrollment order, the

TAC will follow up with the district CalMAPP coordinator before test materials are shipped for that district.

Additional Orders

When districts need additional materials, requests for additional materials will be processed as long as shipments to other districts are not delayed. Having the additional orders fulfilled using the main packaging and distribution system will allow Pearson to consistently and effectively respond to requests for additional materials.

Errors and shortages in orders will be filled and shipped to districts within two business days of notification.

Packaging and Distribution System

Pearson will utilize the state-of-the-art Oracle Packaging and Distribution system. Oracle's Packaging and Distribution system uses barcode-identified packaging components. Barcodes will identify item type, boxes, orders, pallets, and shipments.

Prepackaging Process

Once the test material specifications are finalized with the CDE, ETS will order ancillary testing materials, such as reference sheets, special versions, and non-scannable test booklets from its certified vendors. Pearson will complete internal purchase orders for the scannable documents, and printing will begin according to the project schedule.

All test booklets for the CalMAPP Program will have a barcode printed on the back cover of the booklet, which identifies the booklet type (grade level and subject matter, if applicable). Each booklet type will be spiraled and shrink-wrapped in packages of fives and twenties prior to moving the materials to the packaging line. Booklet types for the low volume tests will be packaged in singles and fives.

Upon receipt of the printed materials, Pearson will perform the following steps:

1. Count materials to confirm receipt of all items ordered.
2. Enter quantities into the Oracle Packaging and Distribution system.
3. Transfer materials to the production floor for packaging.

Prior to moving a project into production, the following steps will occur:

1. A project specification form will be created. The form will contain all information required for Oracle Packaging and Distribution. The form will reside in the project team's central repository.
2. A packaging and distribution schedule will be built to verify that all testing material will be received in districts according to the project requirements.
3. For each site, a transportation file will be created, which consists of requested quantities of each material type along with calculated overages.

Project-specific system tests will be conducted to verify that the system is

functioning accurately. The test routines will run end-to-end from the order-entry stage through the final packaged product.

Customized items such as Pre-ID answer documents, Pre-ID labels, inbound and return labels, school and grade ID sheets, school master file sheets, and Pre-ID rosters will be created during the prepackaging process.

4. D. Pre-Identification and Ordering

4. D1. Pre-Identification

The Order Management System allows district CalMAPP coordinators to set up test administrations, order test materials, submit and update Pre-ID data.

Organization System Access

A major user of this system is the TAC, the staff of which provides assistance and information to district CalMAPP coordinators on a daily basis. The TAC will collect updated designation and security forms. After receiving these forms for a district (or independent charter), the TAC activates the coordinator's User ID.

Simultaneously, the TAC is collecting and logging the updated designation and security forms from the districts.

When both forms are logged as received, the district CalMAPP coordinator user access is activated by the application. An e-mail will be sent to the district CalMAPP coordinator user with his or her username and temporary password. The text of the e-mail will be approved by the CDE.

Test coordinators for independent charters will have the same system access as a district CalMAPP coordinator.

The requirement for a signed security agreement as well as the forced password change helps make the Order Management System site secure.

District and Administration Calendars

District CalMAPP coordinator users will use the Test Administration Setup module to set up their multiple-choice and EAP writing administration test dates. District CalMAPP coordinators enter the instructional day calendars representing the district's schools; one calendar per administration. Non-instructional dates will be saved and updatable until the district CalMAPP coordinator has approved the initial order for the administration.

After district users have entered new administration calendars, ETS will provide a batch file to CALPADS with all administration dates, status and date time stamps. If any updates or deletion of administrations dates are entered by districts, ETS will provide this information in a batch file to CALPADS with all administration dates, status and data time stamps.

Pre-Identification Process

CDS Master File

As described above, the CDE will deliver a baseline version of the CDS Master File in early July prior to the administration year. Subsequent CDS Master File updates will be merged into the database during the administration year, so that CDS data used for Pre-ID edits is consistent with the CDE file on record. Historically, the

maintenance of the CDS data is complex. Different groups within the CDE are involved in the maintenance of the file and the data are dynamic, so deliveries of updates are staggered. Charter school status is the most dynamic aspect of the CDS Master File maintenance, but there are also cases each year where school districts merge or split. There are also schools added and deleted each year. At the same time, the TAC is collecting more recent and accurate information from the districts, and the Order Management System retains relevant data from the previous administration year. As a result, the merging of CDS updates with information in the management database requires a combination of programmatic and manual synchronization efforts.

Only district CalMAPP coordinators and TAC representatives are permitted to submit and modify Pre-ID data in the Order Management System. The user must select the district for which Pre-ID data management is being performed. The district CalMAPP coordinators must accept the terms of Pre-ID service before they can manage their Pre-ID data.

Procedures to Be Used to Load the Pre-ID Information onto a Secure, Interactive, Internet-Accessible Database

The user will be able to submit Pre-ID data using a preformatted student file. The layout of the file, as well as the format and permissible values of each field, is specified by the CDE. Districts that elect to submit student demographic data will be encouraged to use CALPADS to populate their Pre-ID files.

The Order Management System accepts Pre-ID files in fixed ASCII, comma delimited, or MS-Excel formats. For MS-Excel, ETS provides a template.

When the user elects to submit a Pre-ID file, the application will provide the user with a "browse" mechanism to locate the student file locally for submission.

Once the file is submitted, the Management System will do the following to process the file:

- Determine the file's record format and database mapping rules; if the file does not pass prevalidation edits, the user will be informed to make corrections and resubmit.
- Perform validation edits for all fields in each student record in the file; invalid records will be stored in the resolution table until corrected by the user.

A submitted file can be deleted so that a new file can be submitted. ETS recommends that a district CalMAPP coordinator make global corrections to a file offline and then resubmit the file. However, ETS does support correction capabilities in the Management System.

Validation Process that Assures Valid and Complete Codes

Pre-ID Edit Rules

The Pre-ID edit specifications document will be approved by the CDE.

The Pre-ID process will support a multi-level approach to edit checks and error resolution in order to communicate errors to the district CalMAPP coordinators while maximizing the ability to process and print Pre-ID data.

There are three types of fields: critical, intermediate and minor. The CDE-approved edit specifications will document the field type for each field.

County-District-School (CDS) codes and names will be checked for consistency with the CDS Master File. Unrecognized CDS codes will be rejected.

The following rules will apply:

- All failed edits will be summarized in the error summary log. The summary of errors will be organized by the type of field: critical, intermediate, and minor. There will also be a detailed report itemizing errors by record number and field.
- For a given record, if any edit fails on one or more critical or intermediate fields, the records will be put in the resolution table instead of in the normal database tables. The resolution table stores the data as uploaded.
- For a given record, if all edits pass for all critical and intermediate fields, the records will be accepted and stored in the normal database tables.
- For records in the resolution table, the user has the ability to edit them online. When the record is selected for editing, all failed edits will be noted on the screen. Invalid values that the edit page could not display are converted to blanks and highlighted.
- For the file submission as a whole, the district CalMAPP coordinator will also receive edit results relating to file-level thresholds for errors/omissions for certain key fields.
- For records still in the resolution table at the time of the Pre-ID cutoff:
 - A batch job will move them into the normal database table if only intermediate and minor edits have failed. Invalid characters in those intermediate and minor fields will be converted to blank values.
 - If, however, a record in the resolution table has a failed edit in a critical field, the record will remain in the resolution table and will not move to the normal database tables.
 - Once that batch job completes, another batch job pulls all the accepted records from the normal database tables whose Pre-ID cutoff time has passed and extracts them for document or label printing.
 - ETS will create and provide a batch file to CALPADS from the Order Management System with all district administration dates, status, and date time stamps.

With this strategy, Pre-ID records can still be processed through districts uploading their Pre-ID records from CALPADS to the CalMAPP Management System. Districts will be able to make post-test demographic data corrections through CALPADS.

Procedures to be Used to Notify LEAs that Data are Incomplete or Include Invalid Entries

The system will accept the file and communicate to the user the need to return to the site later (well within the required two working days) to view the results of file processing. If the district has provided the system their e-mail address, ETS will also send an e-mail to inform the district that file processing is complete. If not, the district will be alerted that they do not have an e-mail address to communicate to them. This will not stop the processing of the file.

TAC will assist district CalMAPP coordinators with their Pre-ID file submissions on an as-needed basis. TAC staff will be trained to coach users through the process and

have the ability to log in on behalf of the district CalMAPP coordinators as needed. A Pre-ID User Guide is also approved by the CDE and published on the Web site to guide users through the process.

Procedures to be Used to Supply LEAs with Pre-Identification Labels

Districts will have the option to pre-identify students for each of the test administration types (CST, CMA, CAPA, STS, and EAP), using pre-identified documents or labels. The following is a description of the process that will be used.

- Districts will submit enrollment and Pre-ID files to ETS by administration and test type (CST, CMA, CAPA, STS, and EAP). The enrollment order will indicate whether the district chooses Pre-ID documents, labels, or no Pre-ID.
- ETS will edit the files using approved edit criteria, and will compare the enrollment order counts to the Pre-ID counts.
- Clean files will be transmitted to Pearson via secure FTP. Pre-ID files and enrollment files for pre-identified documents are due to Pearson 42 calendar days prior to the first test date. Pre-ID and enrollment files for Pre-ID labels are due to Pearson 21 calendar days prior to the first test date. Districts also have the option of submitting a late Pre-ID file for labels.
- Pearson will edit the files' critical fields for valid values, and will work with the TAC to resolve any Pre-ID or enrollment edits. If necessary, the files will be updated and re-transmitted.
- Clean enrollment orders will be loaded into the order system where distribution rules will be used to calculate material quantities and overages.
- Depending on the method of pre-identification selected by the district, the Pre-ID file will be used to produce adhesive barcode labels or to preprint student demographic information on answer documents.
- After printing, Pre-ID adhesive labels will be assembled alphabetically by grade and delivery name on the Pre-ID file and sent as a separate shipment from other testing materials to the district. Districts will receive Pre-ID labels within five to ten working days of ETS having received an accurate pre-identification file from the district. The district or school will be responsible for applying the Pre-ID label and matching the correct student to the label.
- For those districts choosing pre-identified answer documents, after printing and packaging, their documents will be sent with the rest of their testing materials. The pre-identified documents will be sorted alphabetically by grade and delivery name on the Pre-ID file.

The Pre-ID data will be applied to the student record after scanning, and will aid in the matching of student documents at those grade levels where students are assessed on more than one document.

Capacity to Modify Pre-Identification Files and Student Data Files

District CALMAPP coordinators also have the ability to insert, update and delete Pre-ID records interactively in Order Management System Web pages. Updates and deletions can be made to records entered online or via the batch upload process.

The online edit errors are presented to the user interactively on the edit resolution page. Fields in error are highlighted for easy identification.

4. D2. Ordering

Process for Verifying that a Fully Executed Security Agreement Has Been Received from Each District CalMAPP Coordinator Prior to Ordering

As described above in Task 4.D., the ordering process does not start until a fully-executed security agreement and designation form has been received.

Once the test administrations have been set up and the corresponding dates have been calculated, the district CalMAPP coordinator is ready to order test booklets, answer documents and ancillary materials for the test administration. The ordering capability is available to districts in November, in conjunction with the CDE-approved ordering user manual and ordering workshops.

Before entering orders, the district CalMAPP coordinator will confirm or update the shipping address and enter his or her working day calendar. Updates to the calendar will be allowed until the district CalMAPP coordinator has approved an order for any administration.

This working day calendar will be applied to all test administrations for the district or independent charter. Delivery and return dates will then be calculated, as well as cutoff dates.

Process for Obtaining Orders for all Testing Materials Needed for the Administration of the Tests

The district CalMAPP coordinator will select the administration for which to submit orders and then select the schools for which to submit orders. The system will then present a Web page for the district CalMAPP coordinator to enter enrollment quantities by grade and course for each school. After submitting the quantities, the district CalMAPP coordinator will be required to approve the order. After district CalMAPP coordinator approval of the order, the TAC will approve the order. Then, at the appropriate time to meet the calculated delivery start date, the order will be fulfilled and shipped to the LEA. The fulfilled order shipment will include 10 percent more materials than ordered at the school level and another five percent more material (than the sum of orders across all schools in the district) sent to the district. These overages are not applied to braille and large-print materials.

Process for Tracking and Logging Orders

The TAC will monitor the ordering status of each district using a dashboard capability in the Order Management System. The TAC will focus on districts with orders that need attention. The TAC makes every effort to get all orders input by the state-regulated deadline in December, but will continue to work with districts to get orders submitted even after the deadline.

District CalMAPP coordinators can make requests for supplemental orders through the TAC. ETS will make sure that districts have everything that they need on testing day. While there are cutoff dates for ordering and Pre-IDs to encourage timely response on the part of the districts, the TAC will be very flexible in supporting last-minute requests.

During the approval process, TAC staff will compare current order quantities against the previous year's order quantity to assure reasonableness of the order. The quantities ordered from the previous year will be summarized by district, school and grade in a spreadsheet.

Process for Billing LEAs for Excessive Orders of Materials

In order to encourage districts to order only the test materials that they need, ETS will implement an excessive order billing policy as allowed by the contract. The algorithm will calculate the total cost of materials ordered by the district based on the prices and quantities of each product. Ninety percent of that value is the minimum cost of materials that the district must use in order to avoid the excessive ordering charge. The algorithm will then calculate the total cost of materials used by the district. If the minimum cost of materials to be used exceeds those actually used, but more than \$100, the district is charged the difference.

4. E. Delivery and Collection of Materials

4. E1. Delivery

As described in Section 4.C. of this SOW, Pearson will utilize the state-of-the-art Oracle Packaging and Distribution system to manage inventory control and maintain accuracy in the packaging and distribution of the test materials.

Using this system, Pearson will provide districts with a set of shipping documents that includes:

- A packing list for the district overage materials
- A packing list for each school's materials
- A pallet map that shows the identity and pallet assignment of each carton

If a district or school should misplace any of the documentation during inventory check-in, Pearson will send replacement documentation via e-mail to prevent delays in distribution of materials.

Inventory Control Procedures

Using the Oracle Packaging and Distribution system, school district orders will be entered into a database, and order information will be formatted for the packaging processes by a proprietary order-entry program. As each order is posted on a barcode-scanner screen, packaging staff will scan bar-coded items and assign the materials to a unique carton.

Handling Shipments for LEAs that have Multiple Test Administration Periods

Because many districts have multi-track calendars that require testing in more than one testing window, it is necessary to make more than one shipment to some districts. ETS and Pearson will work with the districts to deliver test materials to the district in response to their testing dates.

Assigning Unique Identifiers to Every Test Booklet

All test booklets for the CST sciences, CMA sciences, CAPA, STS, and EAP will have a barcode printed on the back cover, which identifies the booklet type (grade level and subject matter if applicable). Each booklet type will be shrink-wrapped in packages of fives and twenties prior to moving the materials to the packaging line. Each package will have a barcode label applied to it, which will be used to pack and log the number of documents of each type sent to each district, by test site. As secure materials are returned from each district Pearson will verify that all test booklets were returned. Procedures are described below for notifying LEAs of

discrepancies between the quantities of secure materials that were originally shipped and the quantity of secure materials received by Pearson for processing.

Procedures and Tracking Processes

Pearson will meet the CDE requirements for multiple-choice materials to arrive in the districts 10 to 20 working days before the first testing day of each administration, and writing test materials to arrive in the districts 5 to 10 working days before the writing test administration.

4. E2. Collection of Test Materials

Procedures for Picking Up All Scorable and Non-Scorable Secure Materials from LEAs

In order to expedite the return process, Pearson will assign each district a carrier to contact for pickup when materials are ready for return shipment. Because the Program Management Team knows each district's carrier assignment, ETS has access to each district's return-shipment tracking numbers. The tracking number allows the monitoring of return-shipment activity. Pearson will maintain contact with the carriers to address emergencies or other situations, such as bad weather or district-specific needs.

Scorable and non-scorable materials must be returned within five working days after the last day for each test administration period. Pearson will closely monitor the return of materials and will notify the TAC of any districts that have not returned their materials. The TAC will contact the district CalMAPP coordinators and work with them to facilitate the return of the test materials. ETS will collaborate with the County Offices of Education to work onsite with districts to return materials in a timely manner.

In the packaging process, Pearson will include freight return kits for scorable and non-scorable materials for use by the District and Test Site Coordinators. The freight return kits will contain color-coded labels identifying scorable and non-scorable materials. The label will also contain bar-coded information identifying the school and district. When test site coordinators pack their materials for return to the district, they are required to apply the appropriate labels and number the cartons (such as 1 of 2, 2 of 2). Upon receipt of the materials in the district, the district CalMAPP coordinators are required to complete the "total shipment from this district" information on the label.

The use of the color-coded labels streamlines the return process at Pearson. All scorable materials will be delivered to their scanning and scoring facilities in Iowa City, IA. The non-scorable materials, including test booklets, are returned to the Security Processing Department in Pearson's Cedar Rapids, IA facility.

Processing of Returned Materials

Upon receipt of the test materials, Pearson will utilize a precise inventory and test processing system in addition to quality assurance procedures to maintain an up-to-date accounting of all the testing materials within their facilities.

As Pearson receives test materials, they remove the materials from the shipping cartons and carefully examine each shipment for a number of conditions, including physical damage, shipping errors, and omissions.

As Pearson batches materials for scanning, they also do a visual inspection to compare the number of students recorded on the School and Grade Identification Sheet (SGID or Header Sheets) to the number of answer documents in the stack.

Pearson's image scanning process provides the ability to capture security information electronically and to do the following:

- Compare scorable material quantities reported on header sheets to actual documents scored.
- Follow up on any missing shipments or quantities appearing to be less than expected with a phone call by the Pearson Program Management Team to the school district. TAC staff will contact the district for further resolution.

All secure materials will be checked into the Pearson Cedar Rapids facility by scanning the barcode label on each of the returned cartons. The materials in each box will be counted and returned to the original box for storage. The quantity of test booklets received by Pearson, including the scanned counts of STS Grades 2 and 3 scorable documents, will be compared to the quantity that was assigned and sent to each district and school.

Notifying LEAs of Discrepancies Between the Quantities of Secure Materials

Pearson will send reports detailing secure materials received back from the districts or schools to the TAC. Follow up with the districts is handled by the TAC. Pearson will provide the CDE with an electronic file showing the final resolutions of discrepancies no later than September 20 of each year. The format of the file used for the 2007 through 2014 test administrations will be similar to the file format currently used.

Procedures for the Secure Destruction of Secure Materials

After secure materials (including test booklets and examiner's manuals) are processed, they will be returned to their original boxes for storage, and palletized and placed in Pearson's secure warehouse facilities in Cedar Rapids, IA. Once all resolution is complete, Pearson will request approval from ETS and the CDE to salvage the materials. Pearson understands the importance of security, including during the salvaging process.

4. F. Test Processing, Scoring, and Analysis

4. F1. Quality Control Checks

Before any test documents are scanned, Pearson will conduct a complete check of the scanning system. Pearson's Software Quality Specialists (SQS) will create a test deck for every test and form. Each test deck will consist of 25 answer documents gridded to cover response ranges, demographic data, blanks, double grids, and other responses. Mock students will be created to verify that each gridding possibility is processed correctly by the scanning program. The output file created will be thoroughly checked against each answer document after each stage to verify that the scanner is capturing marks correctly. When the program output is confirmed to match the expected results, a formal sign-off process will take place. A scan program release form will be signed and the scan program will be placed in the production environment under configuration management.

Quality Control of Image Editing

Prior to submitting any operational documents through the image editing process, Pearson will create a mock set of documents that will test all of the errors listed in the edit specifications. The set of test documents are used to verify that each image of the document is saved so that an editor will be able to review the documents through an interactive interface. The edits will be confirmed to show the appropriate error, the correct image to edit the item, and the appropriate problem and resolution text that will instruct the editor on the actions that should be taken.

Once the set of mock test documents is created, the following procedures are completed:

- Scan the set of test documents
- Verify that the images from the documents are saved correctly
- Verify the appropriate problem and resolution text displays for each type of error
- The image edit system submits the post-edit program.
- If the post-edit identifies errors that still require correcting, make changes and resubmit the post-edit program.
- Print a listing of the post-edit file, the correction card file and the original scan file.
- Check correction cards against the post file for corrections made. The post file will have all keyed corrections and any defaults from the edit specifications.

In addition to the quality control checks carried out in Scanning and Image Editing, the following manual quality checks will be conducted to verify the answer documents are correctly attributed to the students, schools, districts, and subgroups:

- Building counts are compared to the District Master File Sheets
- Document counts are compared to the School Master File Sheets
- Document counts are compared to the SGIDs
- All districts/buildings are compared to the CDE CDS Master File

If any discrepancies are identified in the steps outlined above, the Pearson product line staff will follow up with the school districts for resolution.

The Order Management System will create expedited results files for districts and extracts for Web reporting and corresponding student data files from the scored data.

All production software programs associated with the Order Management System are subject to the following quality assurance processes prior to production deployment:

- CDE-approved requirements and specifications
- Software configuration management strictures so that the software that is developed is the same as the software that is tested and ultimately deployed

- Software testing by a development group and then by a separate testing group, including regression and performance testing
- Defect tracking so that defects can be resolved efficiently
- Operational Readiness Reviews, where ETS Scoring, Reporting and Technology stakeholders assess deployment readiness of software releases prior to deployment approval

Aggregated results to be published on any paper or online reports will also be checked by the Data Quality Services department of Scoring, Reporting and Technology in conjunction with the Research Division's quality control process.

Prior to processing operational answer sheets and executing subsequent data processing programs, ETS will conduct an end-to-end test. ETS will prepare approximately 700 test cases covering all tests and many scenarios designed to exercise particular business rule logic. ETS will grid answer sheets for those 700 test cases. They are then scanned, scored and aggregated. The results at various inspection points will be checked by Research and Data Quality Services staff. Additionally, a post-scan test file of approximately 50,000 records will be scored and aggregated to test a broader range of scoring and aggregation scenarios. These procedures assure that students and districts get the correct scores.

4. F2. Handling of Answer Documents

All secure materials will be checked into the Cedar Rapids facility by scanning the barcode label on each of the returned cartons. The materials in each box will be counted by scanning the barcode that identifies the material type on each of the documents. After the contents of the box are scanned, they will be returned to the original box for storage. The quantity of test booklets, including the scanned counts of STS Grades 2 and 3 scorable documents received at Pearson will be compared to the quantity that was assigned and sent to each district and school. Pearson sends reports detailing materials received back from the districts/schools to the TAC. Follow-up with the districts is handled by TAC. Pearson will provide the CDE with an electronic file showing the final resolutions of discrepancies no later than September 20 of each year.

4. F3. Test Processing

Timeline for Test Processing, Identify Personnel, and any Subcontractors Involved in the Process

ETS Program Managers will be responsible for monitoring all test processing activities assigned to Pearson and work with Pearson Test Administration Coordinator and Subcontractor Project Coordinator for CalMAPP to verify that all Pearson tasks are completed on time and according to requirements. Both will rely heavily on other personnel in their organizations to complete test processing successfully.

District CalMAPP coordinators will return all multiple-choice scorable and nonscorable materials to the Scoring and Processing Centers no more than five working days after the completion of testing for each administration. All test materials will be returned via ground delivery to Pearson.

Once the scorable materials have been scanned, edited, and scored, and have cleared the clean post process, the results will be submitted to ETS to

post on the secure FTP site used for the contract. ETS will provide a detailed timeline for test processing.

Editing All Answer Documents

One opportunity for demographic data to be edited will be provided after online editing by district CalMAPP coordinators.

As part of the edit process, name, grade, birth date, and gender will be edited by Pearson's online editors when multiple grids for a field have been filled in, or the data are invalid (e.g., date of birth is out of range). In these cases, the editor is presented with the image clip of the data in question and makes a determination if the student truly did make multiple grids or perhaps hand-coded the name or date correctly, but gridded the incorrect corresponding ovals.

4. F4. Electronically Capturing and Storing the Answer Documents

After the answer documents have been scanned, edited, scored, and cleared the clean-post process, they will be palletized and placed in the secure storage facilities at Pearson. The materials will be stored until October 31 of each year, at which time Pearson will request permission to salvage the materials. After receiving CDE approval, the materials will be salvaged in a secure manner.

Due to the volume and size of the answer documents processed, it is more cost-effective to store the paper documents for the life of the contract than it is to image nearly five million answer documents per year. Pearson will store answer documents in original paper form.

4. F5. Scoring and Quality Assurance for the CSTs, CMA, CAPA, STS, and EAP

Scored Answer Documents

All district names, school names, and CDS codes will be verified and confirmed with the CDS Master File provided by CDE.

Develop and Produce Scoring Protocols and Programs for all Items and Other Scoring Materials

ETS will write scoring procedures and specifications that will help assure an error-free method of processing and scoring test materials. These include:

- **General Reporting Specifications**—Defines various terms (for example, number of students enrolled, number of students tested, number of students with valid scores) and documents how to differentiate answer documents when no test items are marked
- **Score Key and Score Conversions**—Describes the process of scoring and converting scores
- **Aggregation Rules**—Describes how and when a school's results aggregate to the district level and then to the state level
- **What If...**—Describes unusual and/or irregular situations and conditions discovered on receipt of used testing materials and provides the action(s) to be taken
- **Edits**—Describes edits, defaults, and solutions to errors encountered during the data capture stage

- **Reporting Cluster Names and Item Numbers**—Describes the names of the reporting clusters for each section of the test and which items make up that cluster

To program the scoring system, any new or changed procedures and specifications will be reviewed by the CDE; when both parties are satisfied that they are correct, the CDE will issue formal approvals. Where there is no change to specification or procedure, ETS will use and provide certification for the previously approved procedures and specifications.

4. F6. Process to Provide All Scoring Specifications

The previous year's scoring specifications will be used as a baseline for next year's scoring specifications. To ascertain changes made to these specifications, ETS will review all pertinent documentation including changes to the answer documents. Meetings will be held with CDE staff as needed to discuss the revised specifications. During these interactions, a working, updated template of the specifications will be submitted electronically to the CDE. When both parties are in agreement to the finality of the specification, the CDE will issue a formal approval of the scoring specifications.

Scoring keys will be verified through at two locations. Pearson will verify their scoring internally. ETS will independently verify its scoring of the data and then compares the two results. Any discrepancies will then be resolved.

The entire scoring system will initially be tested using a test deck that systematically varies expected cases and cases that occur rarely in real data. Following this, classical item analyses will be run on an early sample of data to further verify the scoring of actual data to provide an additional check of the keys.

When sufficiently large number of students are scored, longitudinal data from complete districts will be analyzed for reasonableness of results for all tests. This analysis is repeated with the "P1" file (100 percent of the data) to look at state trends and trends for the largest districts. These results will be provided to the CDE and jointly discussed. Any anomalies in the data will be investigated further and again jointly discussed days later. When satisfactory explanations for the results are obtained and both the CDE and ETS are comfortable with the results, the scores will be released.

4. F7. Process for Excluding Student Scores from Summary Reports

ETS will provide specifications to the CDE that document when to exclude student scores from summary reports. These specifications will include the logic for handling answer documents that, for example, indicate the student tested but marked no answers and was absent, was not tested due to parent/guardian request, or did not complete the test due to illness. The CDE will review the specifications and, when both parties are satisfied that the specifications are accurate, the CDE will issue formal approvals. ETS will then use these approved specifications to program the reporting system.

4. F8. Analyses and Studies that Will Be Conducted to Ensure the Reliability of CAPA Scoring

CAPA tasks are scored using a 5-point rubric (Level I) or a 4-point (Levels II-V) holistic rubric approved by the CDE, which are designed to include specific behavioral descriptors for each score point to minimize subjectivity in the rating

process and facilitate score comparability and reliability. Student performance on each task is scored by one primary examiner, usually the child's teacher, or by another licensed or certificated staff member who is familiar to the student and who has completed the CAPA training. To establish scoring reliability, approximately 10 percent of students receive a second independent rating by a trained observer who is also a licensed or certificated staff member.

To assure the reliability of CAPA scoring, student scores will be subjected to several types of reliability analyses:

- Internal Consistency Reliability
- Standard Error of Measurement
- Interrater Reliability

The CAPA scores will also be analyzed exploring the methodology used for estimating the reliability of performance level classification decisions described in Livingston and Lewis (1995), and implemented using the ETS-proprietary computer program RELCLASS-COMP (Version 4.14).

4. F9. Analysis of Test Results for the CSTs, CMA, CAPA, and STS

Analyses Necessary to Document the Reliability and Validity of Results for Individual Students

To verify the reliability and validity of student scores, the following analyses will be conducted:

- Verify that tests were built with item-total correlations that are sufficiently high to produce reliable scores at the student level, given the length of the test.
- Compute internal consistency reliability coefficients for major subpopulations to make sure that the tests are functioning similarly in each group.
- Compute classification consistency coefficients at all cut points.
- Longitudinal comparisons of data in the aggregate should be made at both early (just after equating) and late (at P1) points in the process to verify the reasonableness of the scores for comparable groups.
- Verify that the content of the constructed test forms meets blueprint specifications.

4. F10. Pre-equating Procedures to Assure Comparability of Scores

Intact test forms from previous STAR administrations from different years will be reused for the 2014 administration. To assure the comparability of the assessments from year to year, pre-equating based on item response theory (IRT) is used to link the operational forms back to the base year. Item IRT parameters were calibrated and placed on reference form scale in previous administrations. If intact test forms are reused, raw-score-to-scale-score conversion tables from the previous administration of test forms will be applied to the reused forms. In the cases where a few item are replaced due to reasons such as social media security breach, scoring tables are developed through true-score equating using item parameters that have already been placed on scale in previous administrations.

4. F11. Pre-equating of Braille Tests

Braille test forms are reused along with the regular test forms. The same scoring tables that are used in the previous administration of the braille forms will be used. When there are replacement items, the pre-equating procedure used for the regular tests are used to develop the scoring tables for braille tests.

4. F12. Steps, Procedures, and Software that the CDE Can Use to Replicate Pre-equating Procedures

ETS pre-equating procedures can be replicated by an independent party or the CDE using item parameters that were placed on the base scale. The procedure for finding the equated number correct score on the test forms could be readily programmed by publicly available software such as SAS or R. The scaled item-parameter estimates and the raw-to-scale conversion tables would be made available to the contractor conducting the replication.

4. G. Reporting Test Results to LEAs

4. G1. Overall Reports

Preparation of Reporting System

Pearson will create detailed report test plans based on the agreed-upon customer requirements. The report test plan consists of test cases representing varying combinations of districts, schools and grades. Each of the test cases is structured to produce a specific circumstance that will be validated on the reports. Test cases are reviewed and augmented for each test administration to verify that software system conditions are accurate.

For report quality control, four general areas are evaluated including:

- Comparing report formats to input sources from the CDE-approved samples
- Validating and verifying the report data by querying the appropriate student data
- Evaluating the production print execution performance by comparing the number of report copies, sequence of report order, and offset characteristics to the CDE's requirements
- Proofreading of reports at Pearson prior to any district mailings and then sending of the reports to the ETS and the CDE for review

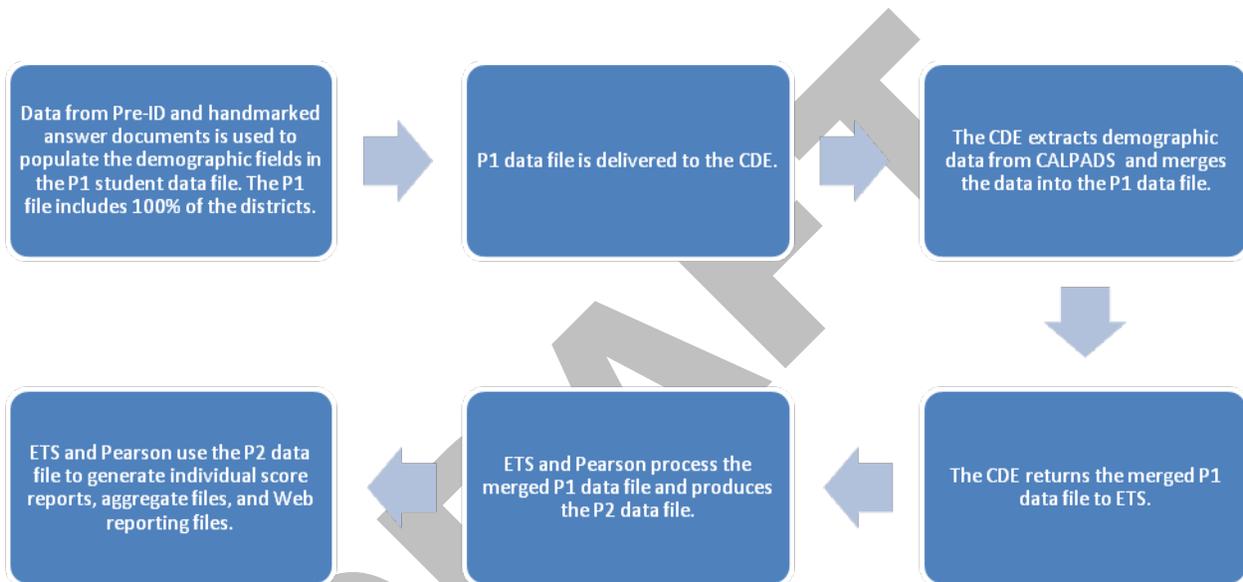
Beginning in 2014, ETS will submit unchanged examples of reports along with a certification of accuracy. ETS also will submit examples of changed reports with a requested CDE review period.

All reports will be required to include a single, accurate CDS code, a charter school number if applicable, a district name, and a school name. All elements will conform to the CDE's official CDS code and name records. From the start of processing through scoring and reporting, the CDS Master File is used to verify and confirm accurate codes and names. Pearson receives updated CDS Master Files from the CDE throughout the year.

Merging Demographic Data from CALPADS

When the P1 data file (100 percent of all districts testing) is available, ETS will coordinate with the CDE to extract and merge the most up-to-date student demographic data from CALPADS. Test records will be matched to CALPADS data primarily through the Statewide Student Identification (SSID) number. ETS will work with the CDE to develop mutually agreed-upon processes for handling test records that cannot be matched to CALPADS data. The resulting data file, P2, will be used as the data file for producing the score reports and data files for the CDE and LEAs. Figure 2 below shows the process for merging CALPADS data into the student data file.

Figure 2. Process for Using CALPADS Demographic Data for the 2014 Reporting of CST Science, CMA Science, CAPA, and STS RLA



Reviewing Pilot Reports

After the reports are validated against the CDE's requirements and when the P2 data file has been created, a set of reports for pilot districts will be provided to the CDE and ETS for review and approval. Pearson will send paper reports on report form, foldered as they will look in production. The CDE and ETS will review and sign-off on the report package within five to seven business days.

Upon the CDE's approval of the reports generated from the system test, Pearson will proceed with the first production batch test. The first production batch is selected to validate a subset of districts that contain examples of key reporting characteristics representative of the state as a whole. The first production batch test incorporates customer-selected school districts and provides the last check prior to generating all reports and mailing them to the districts.

4. G2. Report Production/Printing

Pearson will:

- Print each page as original, thus producing easy-to-read reports that do not smudge
- Utilize a sophisticated report collation process combined with high-speed laser printing technologies to print all report types in continuous print streams

Pearson will print, package, and distribute the following reports for the CalMAPP Program.

- Student Report
- Student Record Label
- Student Roster with Results, by Grade (Master List)
- Summary, by Grade (Master List Summary)
- Subgroup Summary, by Grade
- Electronic Student Data File

The Materials List described in Section 4.G6. breaks out the reports by test type, and provides assumptions regarding the number of copies per report, the level of aggregation and the report recipient. In addition to the number of copies per report cited in the Materials List, districts can order additional copies of reports on the Processing Form when documents are returned for scoring. Pearson will provide a reprint capability for all reports to support such requests.

4. G3. Report Packaging

Each shipment of reports for schools, districts, and counties will include a specific letter enclosed with the package describing what they are receiving in their shipment. All reports will be assembled by grade, school, and district. School sets of reports will be assembled and shipped to the district for distribution to schools.

For those districts that test in multiple test administration windows, report packages for the early administrations will include:

- Student Data File
- Student Reports
- Student Record Labels
- Student Roster with Results (Master List)

For those districts that test in a single test administration window, and for the last administration of a multiple test administration window district, report packages will include:

- Student Data File
- Student Reports
- Student Record Labels
- Student Roster with Results (Master List)

- Summary (Master List Summary)
- Subgroup Summary

CST, CAPA, STS, and CMA results will be incorporated into the Student Data File, Student Roster, and Subgroup Summary reports. EAP results will be incorporated into the Student Data File. EAP results will not be included in the Student Roster and Subgroup Summary reports.

The following packaging processes will be followed to provide districts with clearly organized shipments:

1. All reports will be assembled and placed in report folders. One color of folder will be used for district reports; another color will be used for building reports. Assembly clerks will check a district's printed reports against the internal reports packing list, before placing the reports in folders. Confidential student reports will be grouped in accordance with the information provided on the packing list and placed in folders.
2. Reports will be boxed and labeled by school, with the boxes for all schools within each district shipped to the district CalMAPP coordinator for distribution within the district. The district reports will be boxed separately.
3. Enclosed in each shipment of reports will be a specific letter describing what the district is receiving in the shipment.
4. A pallet map will be included with each report shipment for districts that receive more than one pallet of reports.
5. Prior to shipment, quality control specialists will perform a final quality check of reports and check for complete units of work, correct assembly, and the correct use of mailing labels.

4. G4. Report Delivery

Pearson will work with ETS and the CDE to design reports and reporting systems that provide accurate results to all stakeholders in a timely manner.

Pearson will distribute all paper reports so that school districts receive them by the date determined by the SBE. All reports for districts authorized to test during July and August will be received by the districts no more than five weeks after receipt of answer documents at Pearson for each test administration.

For those districts that test grade levels in multiple testing windows/administrations, they will receive individual student reports as processing and scoring is completed for each test administration. Summary reports for the multi-administration districts will be received within approximately eight weeks of the delivery of the last administration to Pearson or by the reporting date as determined by the SBE.

Pearson will implement the following improvements to the current reporting system:

- Student Reports will be shipped with the rest of the school districts' report shipments, and not as separate shipments, which is currently the case.
- Both copies of the student report will be originals and will be in color.

- All report designs will be improved to include features that have been communicated to be important to the end users. These enhancements are further described in Section 4.G6.

A single entity (Pearson) will be responsible for all report production and distribution, eliminating a series of hand-offs that currently exist with the reporting vendor for Student and Teacher reports.

Box 1 of each district shipment, which contains the letter explaining what is included in the shipment and the summary reports for the district, will be white so that it will be easy for the district CalMAPP coordinator to easily distinguish this box from other boxes in the shipment.

Trained shipping personnel will determine the most reliable and rapid means of delivering each shipment of reports. Each district's reports will be entered in the shipping manifest system as they are shipped. Pearson's barcode technology combined with distribution partners' (UPS, for example) tracking systems will allow Pearson to provide instant updates about the location and status of report packages should any problems arise. Upon receipt of reports at the district, district personnel signatures will be required to provide for secure delivery.

Pearson will transmit status records to ETS at the following points, so that they are also able to track where a district is at a given point in the reporting process:

- Reports printed
- Reports shipped
- District complete

4. G5. Synergy with the CSU EAP Program

ETS proposes to coordinate between the CalMAPP Program and the California State University Early Assessment Program (CSU-EAP) to provide timely reporting of EAP results to districts and students to the extent that such coordination does not negatively affect the execution of the CalMAPP contract. The EAP results will also be utilized by the California Community Colleges (CCC). ETS will provide proposals on the following activities to CDE and SBE staff for review and approval:

- Use of CalMAPP Pre-ID data to provide parent address information for CSU EAP student reports;
- Provide CSU-EAP results as a separate student report; and
- Coordination of CSU-EAP test development activities with CalMAPP test materials construction activities to facilitate the printing and shipping of CalMAPP testing materials.

The above activities may necessitate an interagency agreement between CDE and CSU. ETS will not proceed with any activities requiring an interagency agreement until the written agreement is secured.

All such activities must first be reviewed and, where necessary, approved by SBE liaisons and staff and the CDE before being implemented. In no case will the CalMAPP Program bear the contractor costs for such activities. In addition, in no case will such activities impede the administration, scoring, and/or timely reporting of CalMAPP results or the fulfillment of any obligations under the

CalMAPP contract. If such activities jeopardize the timeline of the CalMAPP contract, CalMAPP -funded activities will be discontinued.

4. G6. Production and Distribution of Paper Score Reports

Table 4 provides a matrix of the reports by test type and provides assumptions regarding the number of copies per report, the level of aggregation, and the report recipient. Reporting for EAP will be determined by the CSU and will be separate from the CalMAPP reporting described below.

Table 3. Report Matrix

Report	No. Copies	School	District	County	State	Aggregation Level
Student Report						
Traditional School	2 *	1	1			
Independent Charter	2 *	2				
Student Record Label						
	1	1				
Student Master List						
	1	1				
Student Master List Summary—CST and CMA for grades 5, 8, and 10; CAPA; and STS RLA						
School	2	1	1			School
Independent Charter	2			1		School
District	2	1	1	1		District
County	2			1	1 †	County
State	1				1	State
Subgroup Summary						
Reports for the following Subgroups:						
<ul style="list-style-type: none"> • Male/Female • Disability/Not Disabled • Economically Disadvantaged/Not Economically Disadvantaged • English Learners/EO, I-FEP, and R-FEP • English learners in CA public school less than 12 months • English learners in CA public schools 12 months or more 						
School	2	1	1			School
Independent Charter	2	1		1		School
District	2		1	1		District
County	2			1	1 †	County
State	1				1	State
Student Data File						
School Electronic Student Data File	1	1				
Independent Charter						
District Electronic Student Data File	1		1	1 †		
State Electronic Student Data File	1				1	

* 1 copy for parent/guardian and 1 copy for current teacher

† County Offices of Education only for schools operated by the county

NOTE: Independent Charters are treated as districts for aggregation purposes.

‡ State copies of county reports are to be electronic copies on CD-ROM

Sections 4.G7 and G8 below describe the plans for producing SBE-approved reports, including proposed design enhancements resulting from Pearson's research study and ETS's prior experience with design of the CalMAPP student and teacher reports.

4. G7. Student Reports

Pearson will design and produce the following types of individual student reports for the CalMAPP Program:

- CST
- CAPA
- STS
- CMA

ETS will coordinate with the CSU EAP on a separate report for EAP results.

All student reports will be designed to print on both sides of a single sheet of 8.5 inch x 11 inch paper.

The proposed student reports include all of the same data points that are in the current student reports, including: scale score and performance level for each subject tested, percent correct by reporting cluster, and percent correct by content area compared to state Proficient range. Information on additional resources will also be provided.

Enhancements to the student report include the following:

- Better use of space improves overall viewing and ability to understand report.
- Identifying information such as student name is more predominant.
- Performance by content area is presented in bar chart format, which is more easily understood by parents.

In addition to percent correct, the number correct for each content area is provided.

The student address will be on the left side of the report to accommodate the use of left-windowed envelopes by districts.

A POSTNET barcode was added above the student address. The barcodes will be printed with the addresses by Pearson, and will allow districts to qualify for postage lower rates and take advantage of faster, more efficient mail processing.

The STS Student Report will follow the same content and design rules used to create the CST Student Report, but will be in Spanish except for the California content standards in ELA, which will not be translated.

Pearson will provide two copies of student reports to each district. One copy will be packaged for the district and the second copy for the school at which each student was tested. Both copies of the report will be provided in color. Color schemes will be chosen so that the district report can be easily photocopied as a black and white copy.

An adhesive Student Record Label for each student will also be provided to each district, packaged by school with the reports. The student record labels are printed five per sheet, one label per student, and include the student's overall test results. To comply with Section 60607(s) of the California Education Code, schools are required to affix this label to the individual student's permanent school records.

Student Record Labels will include:

- Student identifying information, such as student name, grade enrolled, grade tested, test date, date of birth, school, and district where the test was taken
- Accommodations and/or Modifications, if applicable
- Tests and subjects taken
- Scale score
- Performance level

The design of the student report will retain the look and feel of the current student report. It will incorporate feedback from districts, SBE, its staff and liaisons, and CDE as part of the report specifications review process. Any changes to this report agreed to by December 31 of a given year will be incorporated into the following year's student report.

4. G8. Summary Reports

Under ETS's direction, Pearson will produce and disseminate the summary reports listed below.

Below is a description of each report.

Student Roster with Results, by Grade (Master List). One copy of this report will be produced for each school, to provide school administrators with a single list of all students and their scores for a grade, or year-round schedule within a grade at a school.

Student names will be printed in alphabetical order within each grade, by last name, first name, and middle initial. Each student's CST scores will be printed. If scores are not available, a reason code will be printed. Subsequent lists will be printed that include the names of all students assessed with CMA, CAPA, and/or STS, as the programs are phased in and if there were any students assessed with these tests at the school. These lists will also be in alphabetical order by student last name.

The report will print in landscape versus portrait format, and included "star icons" to reflect student performance proficiency levels visually, so school administrators can easily scan the report and get a picture of individual student performance. Key data such as student information, use of accommodations or modifications, scale score, performance level, and reporting cluster percent correct will be provided.

Summary by grade (Master List Summary). The Summary by grade report will be provided at the following levels of aggregation: school, independent charter, district, county, and state. It will summarize performance of a group of students within a grade for the aggregate level, on the CSTs, CMA, CAPA, and STS.

Subgroup Summary, by grade. A subgroup summary by grade at the following levels of aggregation will be provided:

- School
- Independent charter
- District

- County
- State

The report will allow schools and districts to look at results based on the following demographics:

- Disability status
- Economic status
- Gender
- English-language fluency
- Ethnicity
- Race (new federal reporting requirement)
 - Ethnicity by economic status (2008 and 2009 administrations)
 - Ethnicity subgroups will include: African American, American, Indian Alaska Native, Asian, Filipino, Hispanic or Latino, Pacific Islander, White, and Decline to State.
 - Economic Status analysis will include Economically Disadvantaged, Not Economically Disadvantaged, and Unknown.
- Ethnicity by Economic Status results in the Subgroup Summary, by grade, reports. The analysis will be reported for all levels—school, district, county, and state.

The report will be sorted by subgroup in the order specified by the CDE.

Overall performance levels will be broken down by specific demographics for the CSTs, CMA, CAPA, and STS. Pearson will work with ETS and the CDE to provide a Subgroup Summary report design that has the same look and feel as the other revised reports, while maintaining the content of the report.

In addition to providing hard copies of all reports, Pearson will provide to CDE an electronic file via a CD-ROM for the following reports:

- Summary, by grade reports (County and State)
- Subgroup Summary, by grade reports (County and State)
- Electronic student data files are described in Task 4.G13.

All summary reports will be produced and delivered according to the following requirements:

- School-level reports will be produced by grade and will include the number of students tested, the number of valid scores, the average scale score, and standard deviation of the scale score.
- District summary reports will be comparable to the school-level reports. Districts will receive summary reports no later than the reporting deadline in the California *Education Code*.
- County-level reports comparable to the school and district reports will be produced. County offices of education will receive county-level reports no later than the reporting deadline in the California *Education Code*.

- A State-level report comparable to the school, district, and county reports will be produced. The CDE will receive state-level reports no later than the reporting deadline in the California *Education Code*.
- To be consistent with AYP reporting, ETS shall report on the row above each percentage provided on the Web results page, the number of student scores used to calculate the percentage shown. This “number of student scores” shall also be reported on all district summary paper reports.

4. G9. Plan for Distributing Reports to LEAs

Reports will be distributed to districts, independent charters, counties, and the state. District shipments will include school reports, boxed separately by school. Each report shipment will be entered in the shipping manifest system as it is shipped. Pearson will use barcode technology to provide instant updates about the location and status of report packages should any problems arise. Upon receipt of reports at the district, a district signature will be required to provide for secure delivery.

4. G10. Printing, Packaging, and Distributing Reports

Pearson will print, package, and distribute the reports listed in this section.

4. G11. Updating the CDS Master File

As changes to school and district information arise, the CDE will update the CDS Master File and provide an updated file to ETS and Pearson. Pearson will use the CDS Master File for the start of processing through scoring and reporting to verify and confirm that accurate codes, names, and addresses are being used.

4. G12. Procedure for LEAs to Notify ETS that Complete and Accurate Reports/Files Were or Were Not Received

Each shipment of reports for schools, districts, and counties will include a letter describing how the reports are packaged to assist the district with report distribution. All reports will be assembled according to grade, school, and district. School sets of reports will be assembled and shipped to the district for distribution to schools.

If for any reason, a district receives what they believe to be incomplete or inaccurate reports or files, these procedures will be followed:

1. The district contacts the TAC to report the potential error.
2. The TAC requests that Pearson investigate the potential error.
3. If it is found that ETS or Pearson have caused an error, Pearson produces revised reports and/or files, clearly indicating “revised” with the revision date on the reports, and ships the revised materials to the district.
4. ETS submits a report to the CDE and the district detailing the resolution of each inaccurate or incomplete report.
5. If the error is caused by ETS or Pearson and district notification is received no later than July 26, it will be corrected for the student data file and Internet Report posting.

6. Aggregate or student data files found to be incorrect due to ETS or Pearson error will be corrected and reissued to the CDE at no additional cost.

4. G13. Electronic Student Data Files

In addition to the paper reports, electronic student data files on CD-ROM will also be provided for:

- Districts
- County Office of Educations, for those schools operated by the county
- Independent charter schools

Student data for the tests (CSTs, CMA, CAPA, and STS) will be provided on a single data file versus separate data files, as space permits. The sort order will be by CDS and by test. Electronic student data files will be sent with other report packages, such as student and summary reports.

The electronic report package for the state will include:

- Summary, by grade
- Subgroup Summary, by grade
- PDFs of all county Summary reports

4. G14. Interpretation Guides

ETS will provide interpretation guides in English for the CST, CMA, CAPA, and STS Student reports. In addition, ETS will produce a Spanish-language version of the STS interpretation guide.

The language will be as simple and straightforward as possible. The report will be one page, two-sided. It will begin with a statement of purpose with caveats and end with a short glossary.

These parts of the report will be directly translated:

- Superintendent's letter
- How to use
- Lists of resources

In addition, these parts of the report will be explicated:

- Student identification
- Scores and performance levels
- Content areas
- Information on standards
- Resources

After the CDE has approved the wording of the interpretation guides, they will be formatted in print-friendly MS-Word, PDF, and HTML and posted on startest.org.

Translations of the interpretation guides into other languages will be determined by the CDE outside of this contract.

4. G16. Reporting and Correcting Errors

Any time there are changes to the data that require reports to be reprinted, the TAC staff will call Pearson to print and ship revised reports. All of the reports will be clearly identified as “revised” with the appropriate revision date.

Reporting Errors

In any such event, ETS staff will take the following steps:

- Initially analyze the situation
- Inform the CDE immediately
- Further analyze the impact of the error
- Discuss solution options with the CDE
- Deliver an expedient resolution that best mitigates program risk.

4. H. Reporting Test Results to the CDE

The following reports and files are to be delivered to CDE by the reporting date specified in the California Education Code after each test administration and to SBE if requested. The column labeled “State” in Table 5 shows the reports and research files to be delivered.

Table 4. Delivery of Summary Reports to CDE

Report	No. Copies	Distribution			
		School	District	County	State
County Student Master List Summary Report	2			1	1#
County Student Master List Summary EOC Report	2			1	1#
County Sub-Group Summary Report	2			1	1#
State Master List CST Summary Report	1				1#
State Student Master List Summary EOC Report	1				1#
State Subgroup Summary Report	1				1#
State Student Data File	1				1@
Internet Report	1				1@
Internet Research Files***	1				1@

@ Electronic copies preferred

Paper and electronic reports

*** Multiple formats

State summaries are generated by grade and include all students in the state. The state also receives summary reports for each of the 58 counties and the California Division of Juvenile Justice Schools.

4. H1. Student Privacy

ETS will deliver the Internet site in accordance with these requirements.

- Data where a student’s identity could be ascertained is suppressed and is represented by asterisks

- Reporting of all performance levels and provides a combined proficiency level which totals the sum of the Advanced and Proficient performance levels
- Allowance for the selective inclusion of either all five performance levels or the combined proficiency level on Web pages

4. H2. Reporting Web Site

Requirements for the Reporting Web Site

ETS will work with the CDE to comply with the CDE's Internet standards. CDE will continue to host the Reporting Web site.

The site will be able to support 100 simultaneous users without significant design-related performance problems. To handle peak-demand or other times when the site is performing sub-optimally, static versions of all the Web pages are also supported. ETS will monitor actual Web site performance and work with the CDE to assure that the site meets performance specifications.

The design of the Reporting Web site will be data driven, so the user can very efficiently select the desired parameters to see the desired reporting of results. The database will use MS-SQL Server technology. While there are many combinations of summary reports that will be accessible, the summary data will be precalculated. While this may limit the dynamic nature of the site, it will prevent inappropriate summaries and interpretation of results by users.

The software application behind the Reporting Web site will allow the site administrator to load new iterations of data into the database and to generate new research files based on the refreshed data. As the data gets refreshed, notes added by the CDE from the previous iteration will be preserved.

Summaries by counties, districts, schools, and the state will be provided. The site will support CSTs, CMA, CAPA, and STS.

4. H3. Delivery Aggregate Summary Data Files that are Synchronous with the Delivery of the Student Data Files

The Web site will provide for aggregate summary data files that are synchronous with the delivery of the student data files. These aggregate summary data files include aggregations by schools, districts, counties, and the state. Independent charters are represented as separate districts within a county. The summaries will also be by individual assessment and by grade within each assessment. The summaries will include statistical data for the various assessments reflecting performance levels, quarters, or CAPA levels. These data will include the number of test takers, the average scale score, and derived scores as appropriate.

4. H4. Requirements for the Aggregate Summary Data

ETS will deliver report pages and research files that include aggregate summary data. The summary data and the Internet site will support the cluster reporting. This cluster reporting will include such information as average percent-correct and mean-scale score reported by grade (or by course for non-grade specific courses). ETS will work with the CDE to define this new requirement more precisely in order to optimize value to the CalMAPP Program constituencies.

4. H5. Summary Data

The Reporting Web site will support the demographic subgroups listed in Table 6:

Table 5. Supported Demographic Subgroups — Internet Reporting

Demographic Category	Subgroups
All Students	
Gender	<ul style="list-style-type: none"> • Male • Female
English Learner 12-Month Status	<ul style="list-style-type: none"> • Students identified as “less than 12 months” • Students identified as “12 months or more”
Special Education Services	<ul style="list-style-type: none"> • Students with Disabilities • Students with No Reported Disabilities
Economic Status	<ul style="list-style-type: none"> • Economically Disadvantaged Students • Non-Economically Disadvantaged Students
Special Program Participation	<ul style="list-style-type: none"> • Migrant Education • Indian Education • Gifted and Talented • EL in ELD • EL in ELD and SDAIE • EL in ELD and SDAIE with Primary Language Support • EL in ELD and Academic Subjects through Primary Language • Other EL Instructional Services • None
Ethnicity	<ul style="list-style-type: none"> • Not Hispanic or Latino • Hispanic or Latino
Race	<ul style="list-style-type: none"> • Black or African American • American Indian or Alaskan Native • Cambodian • Chinese • Japanese • Korean • Vietnamese • Laotian • Asian Indian • Other Asian • Filipino • Other Pacific Islander • Hawaiian • Hmong • Guamanian • Samoan • Tahitian • Other Pacific Islander • White
Race by Economic Status	<ul style="list-style-type: none"> • Race for Economically-Disadvantaged • Race for Not Economically-Disadvantaged

Demographic Category	Subgroups
Parent Education	<ul style="list-style-type: none"> • Not a High School Graduate • High School Graduate • Some College (Includes AA degree) • College Graduate • Graduate School/Post Graduate • Declined to State

ETS will include the ethnicity by economic status data in the CalMAPP Summary Data submitted to CDE for Web reporting purposes. For Web reporting purposes, the ethnicity subgroups will include: African American or Black, American Indian or Alaskan Native, Asian, Filipino, Hispanic or Latino, Pacific Islander, and White. Economic Status analysis will include Economically Disadvantaged and Not Economically Disadvantaged.

4. H6. Research Files

The Internet reporting application supports the following Research File requirements:

- State-level research file that contains all county, district and school results for all demographic subgroups
- State-level research file that contains all county, district and school results for the “all students” demographic subgroup
- State-level only research file that contains results for all demographic subgroups
- Limited research files that contain all data for selected counties, districts and schools
- A research file containing all CAPA data
- When available, research files containing all STS data
- When available, research files containing all CMA data
- A research file containing all reporting cluster results data
- Suppression of results where the reported group totals 10 or fewer students or where the number of student reports in any individual cell may allow identification of an individual student
- Compressed (zipped) research files formatted as fixed-length ASCII and comma-delimited (including column names) files
- Provide Access 2000 (or a more recent version of Access) database shell that can be used to import comma-delimited research files along with all instructions for use of the database shell.
- Provide a load utility that will facilitate the easy importation of comma-delimited research files into the database shell.
- ETS will deliver Web-based data to the CDE in the XML format. The specifications for this data file will be part of the report specifications process.

4. H7. Administrative Functionality

ETS will incorporate extensive administrative functionality into the Internet design to include:

- **Notes.** Allow for the inclusion of “notes” that may be dynamically added to any selected report page. For example, notes may be added to one or all schools in a district and to one or all of the subgroups. Notes must be capable of being retained when report data are updated.
- **Embargo Reports.** Allow for the selected exclusion of Internet report pages. For example, all cluster reports may be excluded, or the extended proficiency CST report page may be embargoed for subgroup reports at the school level while the combined proficiency report (combined total of proficient and above students) is accessible. In addition, all state reports are embargoed until the site is opened to the public.
- **Research File Generation.** Allow for the generation of new research files when new aggregate data are loaded to the site. Which files are generated and the sequence of that generation must be part of the research-file generation function.

4. H8. CDE Web Delivery Requirements

ETS will deliver Web-based data to the CDE in the XML format. The specifications for this data file will be part of the report specifications process.

The key to successful deliveries of the Internet reporting application and data files is to plan for preliminary iterations. This strategy allows CDE data management staff to be involved in early review of the site and the data. By delivering early, issues are identified and remedied earlier, before the critical public deadlines.

ETS proposes the timeline shown in Table 7 for site development and data deliverables:

Table 6. Proposed Timetable for Site Development and Data Deliverables

Month	Deliverable
January	ETS works collaboratively with the CDE to document business requirement changes and other changes for the Internet reporting application.
February	ETS updates specifications.
March	ETS makes modifications to the site, including initial content/text changes provided by the CDE.
April	ETS deploys the site in the ETS user acceptance environment for the CDE’s first review of the site. ETS loads the prior years’ data into the site (updating the format and content of the data files as necessary).
May	ETS deploys a second release of the software, based on CDE feedback as well as internal testing results.
June	ETS deploys a third release of the software to the user acceptance environment as needed and posts early production test results (referred to as the V1 deliverable in the current contract). ETS also delivers aggregate and corresponding student data files to the CDE. ETS also delivers the application to the CDE for installation to meet the required July 1 deadline.
July	ETS deploys additional releases in the ETS user acceptance environment as necessary to correct defects and make final text/content changes from the CDE.
August*	ETS delivers data files and software to the CDE by the agreed-upon deadline. The aggregate and student data files delivered in August represent the P1 deliverable. ETS will also load the P1 data to the user

	acceptance site to stay synchronized with the CDE. P1 data include all districts that completed testing but prior to merging with demographic data extracted from CALPADS.
September*	ETS delivers P2 aggregate and student data that now include all districts merged with CALPADS demographic data. ETS will also load P2 data to the user acceptance site to stay synchronized.

*Delivery dates will be finalized based on the reporting dates determined by the SBE.

Provision of Web-based data in XML format

ETS will deliver Web-based data to the CDE in the XML format. The specifications for this data file will be part of the report specifications process.

ETS will make every effort to assure that all Web development will comply with the IT Compliance clause of the CalMAPP contract.

4. H9. Secure File Transfer

Due to the confidential nature of test results, ETS uses secure File Transfer Protocol (FTP) and encryption for all student data files. In addition, ETS uses Zip technology to reduce the disk space requirements on all files. This method applies to all data file transfers.

4. H10. Student-level Files

ETS will deliver student-level data files on dates set by the CDE.

ETS will deliver one or more snapshots of Pre-ID data to the CDE on a schedule to be specified by the CDE.

ETS will deliver student data files and corresponding aggregate files on the delivery schedule agreed upon with the CDE.

ETS will deliver student data files in three formats: a compressed layout with demographic information only, a layout with item response data and demographic information, and a file that contains all student data available.

4. I. Technical Reports and Other Analyses

4. I1. Technical Report

ETS will develop, maintain, and provide to the CDE and the SBE all documentation needed to assure the technical quality and continuity of the CSTs, CMA, CAPA, and STS including, but not limited to Technical Reports. The Technical Report will document all aspects of developing the CSTs, CMA, CAPA, and STS.

All narrative reports submitted by ETS will include an Executive Summary, the full text, and appendices containing all relevant data tables. In addition, the Executive Summary will be written to stand alone as a document suitable for public distribution. All final narrative reports and all electronic deliverables will be provided in MS-Word, PDF, and HTML format for distribution and possible posting on the CDE Web site. All tables and technical appendices will also be submitted in MS-Excel spreadsheet versions.

The Technical Reports will be assembled for each testing program (CSTs, CMA, CAPA, and STS) from the equating and P2 file data and will be delivered to the CDE at the end of the contract. The CDE will have 20 working days to review

each Technical Report. One bound or bindered paper copy of each Technical Report will be submitted to the CDE along with one CD-ROM that contains the electronic versions of each Technical Report in MS-Word and PDF formats.

The Technical Reports will be organized and clearly labeled to facilitate cross-reference to the *Standards for Educational and Psychological Testing*¹. Sections of the Technical Report will be written by specialists in their respective areas of concentration.

To support the CDE in providing evidence of meeting the requirements of the federal Elementary and Secondary Education Act (ESEA), ETS will provide Technical Reports that clearly identify critical elements for Peer Review addressed within the scope of the reports. In addition, ETS will work hand-in-hand with the CDE to develop evidence obtained over more extended periods; for example, the development of validity evidence to support each testing program.

Tables and figures will be included in the Technical Reports as needed to summarize and clarify analysis results and development procedures. Further data analyses for the purpose of assuring the validity of test scores, federal peer review, programmatic review, program evaluation or any additional inquiries regarding the operation of the CST, CMA, STS, and CAPA assessment programs will be readily provided by ETS. ETS will also discuss additional research studies to support the program. Results of any additional analyses conducted at the request of the CDE or the SBE will be included as well.

ETS will include the ethnicity by economic status analysis. Ethnicity subgroups will include: African American or Black, American Indian or Alaskan Native, Asian, Filipino, Hispanic or Latino, Pacific Islander, White, and Decline to State. Economic Status analysis will include Economically Disadvantaged, Not Economically Disadvantaged, and Unknown.

4. I2. Student Information Report for Apportionments and API

This Student Information Report data are readily found in the student data file. ETS will deliver this summary report to the CDE with each iterative deliverable of aggregate and student data for each administration year. ETS will coordinate with the CDE on the format of this deliverable.

¹ American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. 1999. *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.

Task 5: System and Support Preparation for Optional Assessments Available for LEA Purchase

ETS will design, build, and prepare for operation an online system specifically for making available the optional for-purchase tests to school districts. This system will be completely separate from the Order Management System will operate as a stand-alone system.

Support for the optional assessments will be available through the TAC and ETS District Outreach. District users wishing to obtain the optional for-purchase assessments will be able to log on to the system and, for a flat nominal fee, will be given unlimited access to the PDF version of the test materials for in-district printing. For an additional fee, district-level users will be able to requested printed copies of the optional for purchase assessments that will be shipped to them. ETS will work with the CDE to determine other fee-based ancillary services, such as scoring and reporting, may also be offered to LEAs that administer the suspended STAR tests.

The optional for-purchase assessments system will also house the module allowing districts to indicate their intent to purchase a second subject Smarter Balanced FT. Users will log on, indicate the schools, grades, and tests where a second-subject FT will be administered, supply a purchase order, and submit a Pre-ID file to indicate the students who will be given the second subject Smarter Balanced FT.

Documentation for the for-purchase tests will be made available to school districts on the existing startest.org Web site, which ETS will continue to host and support.

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Proposed Budget Summary for SOW C

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STAR 2014 Administration Original Budget

Amendment 10 Budget for the 2014 Administration

SOW A Task	Description	Budget
Task 1.	Program Administration	\$929,629
Task 2.	Program Support Services	\$3,919,908
Task 3.	Test Security Measures	\$55,000
Task 5.	California Item Bank	\$440,910
Task 6:	Item and Task Development	\$2,408,993
Task 7.	Designing and Constructing Test Forms, Answer Documents, and Special Versions	\$4,401,924
Task 8.	Pre-Identification and Ordering	\$1,602,109
Task 9.	Test Materials Production & Packaging	\$8,476,198
Task 10	Delivery and Collection of Test Materials	\$3,616,849
Task 11.	Test Processing, Scoring, and Analysis	\$18,721,328
Task 12.	Reporting Test Results to LEAs	\$6,447,342
Task 13.	Reporting Test Results to CDE	\$79,469
Task 14.	Technical Reports, Other Reports, Analyses, and Data	\$257,155
		<u>\$51,356,814</u>

Continuation of Original Budget Tasks		
SOW C Task	Description	Budget
Task 1	Program Administration	\$1,552,944
Task 4.A	Program Support Services	\$488,362
Task 2	Test Security Measures	\$153,107
Task 4.B	California Item Bank	\$87,945
--	Item and Task Development	\$0
Task 4.C	Designing and Constructing Test Forms, Answer Documents, and Special Versions	\$1,349,390
Task 4.D	Pre-Identification and Ordering	\$785,054
Task 4.C	Test Materials Production & Packaging	\$3,635,029
Task 4.E	Delivery and Collection of Test Materials	\$1,016,537
Task 4.F	Test Processing, Scoring, and Analysis	\$6,230,540
Task 4.G	Reporting Test Results to LEAs	\$1,426,892
Task 4.H	Reporting Test Results to CDE	\$79,469
Task 4.I	Technical Reports, Other Reports, Analyses, and Data	\$186,197
	SUBTOTAL	<u>\$16,991,466</u>

Use of Original Budget Savings to Fund Smarter Balanced Field Test Tasks and Special Studies and Projects

Summary

Existing Contract Budget	\$51,356,814
Continuation of Existing Contract Costs	\$16,991,466
Existing Contract Savings to fund Smarter FT*	\$34,215,348
TOTAL AMENDMENT 10 PROPOSED BUDGET	<u>\$51,206,814</u>

SOW C Task	Description	Budget
Task 5	Preparing System and Support for Optional Assessments Available for LEA Purchase	\$914,692
Task 3.A.1	Coordinate with the CDE, the CDE Communications Contractor, and the Consortium	\$628,595
Task 3.A.2	Maximize LEA participation in the Field Test through Technical Assistance Support	\$2,844,270
Task 3.A.3	District Outreach During Field Test Setup and Administration	\$4,103,535
Task 3.A.4	Training and Communication Materials for the Field Test	\$1,108,250
Task 3.B	Field Test Participation Plan**	\$125,268
Task 3.C & Task 3.D	Field Test Setup and Administration, Descriptive Summary of Field Test Activities**	\$21,861,058
Task 3.E	Special Studies and Projects	\$2,629,680
	SUBTOTAL	<u>\$34,215,348</u>
	TOTAL	<u>\$51,206,814</u>

*Remaining funds shall be programmed in accordance with legislation enacted in the 2013–14 legislative session. The State Department of Education (SDE) shall use remaining funds pursuant to existing law (Budget Act of 2013).

**Funds allocated for Task 3.B Field Test Participation Plan, Task 3.C Field Test Setup and Administration, and Task 3.D Descriptive Summary of Field Test Activities includes costs only for student participation beyond the representative scientific sample funded by the consortium. For pricing purposes, student participation beyond the scientific sample was assumed to be approximately 2.7 million students in grades three through eleven.

NOTE: The budget is subject to change pending the final field test sampling plan.